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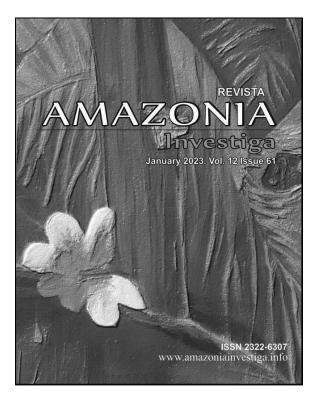
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## **CONTENIDO**

Page
Transforming editorial and peer review processes for a digital age
Discourse of resistance in contemporary Ukrainian fiction: satire and anti-colonial motives in
Maria Miniailo's Stolen Spring
Theoretical bases of professional culture of future specialists in accordance with global challenges
of the information society
Research on the functional semantic field of spatial orientation in russian and chinese
languages
The education role in the development of the information society: Progressive ideas of the world's
leading countries
Forming ecological culture in educational applicants within the context of modern
education
The importance of musical and aesthetic education of young people in modern society51
Current trends in school reform in the Republic of FINLAND
"Russian World" as a political and cultural weapon of modern Russia
Monitoring of the life quality of population in Europe and Ukraine in the war conditions80
Workplace harassment in psychosocial risks and teleworking in times of health crisis92
Internet journalism in modern society: an overview of mechanisms for resisting media
manipulation
Professional training of future psychologists in the information space in higher education
institutions
The role of information technologies in education
Verification of communicative types in the judicial public space of media discourse in the USA,
Kazakhstan and Russia as a psycholinguistic marker of fact-checking
Initiatives and the process of the development of regional students' cross-cultural communication
skills
The practice of the ECtHR in economic and civil law and process: international legal
experience
The peculiarities of «welcoming the guests – 好客 » in Kazakh and Chinese
linguoculture
Impact of communication competencies, job requirements and Academic performance on
students' career development at the University of Hail, Saudi Arabia
Examining the perceptions of executives regarding accounting information system (AIS).
Evidence from listed companies in Saudi stock exchange (TADAWUL)184
Decision-making attractors in the conditions of war (the modern Russian-Ukrainian war
example)
Categories and methods of civilizational approach in modern philosophical and historical
discourse
The main ways to solve the problems of document management in higher education (the
Ukrainian case)
Organizing the germans' emotional world through the prism of the opposition ORDNUNG vs.
CHAOS: Ambivalent emotion concepts
Means of gamification of learning during martial law
Criminological dimension of counteracting corruption crime in Ukraine248
State policy in the sphere of environmental protection: the regulatory aspect255
The challenges of taxation in the digital economy: analysis of the Ecuadorian tax system262
Alternative ways of organizing distance practical classes for future music art teachers276
Full-scale military invasion of the Russian Federation of Ukraine as a factor of social
transformations in higher education

The efficiency of language teaching through integration in future philologists' foreign l	language
competence formation	297
The use of automated information systems in the investigation of criminal offences	307
The impact of gamification on the motivation of primary schoolers under martial law	317
Digital services of regional centers for scientific and technical information in China	330
Peculiarities of translation of comparative constructions in English-language popular	science
discourse	342
Digital transformations in culture and art: new opportunities and challenges	348



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#### **Editorial**

#### Transforming editorial and peer review processes for a digital age

Written by:

Magda Julissa Rojas-Bahamón

https://orcid.org/0000-0003-4882-1476

Ph.D. Education and environmeetal culture. Professor IE Jorge Eliecer Gaitán. Investigation Group: Primmate - Recognized by Ministry of Science, Colombia.

Diego Felipe Arbeláez-Campillo

https://orcid.org/0000-0002-9041-9563

CEO editorial Primmate SAS, Colombia.

Research Group: Languages, Representations and Education, Universidad de la Amazonia, Colombia,

We live in a world where information is generated and disseminated at an unprecedented pace, and science, as a key driver of human progress, is not immune to this phenomenon. In this context, it is crucial that the editorial and peer review processes in scientific journals adapt to ensure agile and efficient communication of scientific advances. In this editorial, we will discuss the need to modernize these processes and propose possible solutions to accelerate the dissemination of knowledge in our society.

#### The Current Situation

Currently, the review and publication process of a scientific article can take months or even years (Huisman & Smits, 2017). This delay in communicating results can have a negative impact on research and development, especially in rapidly evolving fields such as biomedicine, intelligence, artificial and environmental sustainability (Gibson, 2019). Slowness in the dissemination of knowledge can hinder scientific progress and limit the community's ability to address pressing global problems (Brembs et al., 2013).

A historical example of a similar adaptation is the development of scientific communication during the Scientific Revolution in the 17th century. Gutenberg's invention of movable type printing allowed for rapid and massive distribution of information, leading to an increase in the production and dissemination of knowledge (Eisenstein, 1980). In the same way, we must adapt to the current digital age to ensure that science remains a driver of progress and wellbeing.

The Need for Change It is evident that the editorial and peer review processes in scientific journals need to be updated to meet the demands of a constantly evolving world (Björk, 2015). Researchers, institutions, and research funders must come together to demand a more agile and efficient approach that allows for rapid dissemination of scientific results (Fyfe et al., 2017). By doing so, not only will scientists' benefit, but society as a whole will also be ensured that knowledge is available in a timely manner and used to address global challenges.

A clear example of the acceleration of scientific processes occurred in 2020. In this year, the COVID-19 pandemic generated unprecedented increase in the production and dissemination of scientific literature. According to data from the Web of Science database, by December 2020, more than 100,000 articles related to COVID-19 had been published (Zhou & Chen, 2021). This rapid growth in scientific literature was possible thanks to global collaboration among researchers, the adoption of open research approaches, and the streamlining of review and publication processes (Horbach, 2020). The speed in the production and dissemination of scientific information related to COVID-19 allowed the scientific community and decision-makers to quickly address the challenges posed by the pandemic and develop effective prevention, diagnosis, and treatment strategies (Kupferschmidt & Cohen, 2020).

#### **Proposed Solutions**

Adopting faster and more transparent peer review systems: By adopting an open peer review



approach, in which the names of reviewers and authors are known to all parties (Ross-Hellauer, 2017), the quality and speed of reviews can be improved, fostering accountability and collaboration among researchers (Wicherts, 2016).

Reviewer Bank: Implementing a "reviewer bank" can be an effective strategy for streamlining the peer review process in scientific publishing. This bank would consist of a database of experts in various disciplines and fields of research who would be willing to participate in manuscript review and actively collaborate in assessing the quality of research. A well-structured and managed reviewer bank would allow scientific journal editors to quickly identify the most suitable and competent reviewers to evaluate a specific manuscript, thereby reducing the time required to find experts and accelerating the overall review process. In addition, this reviewer bank could offer training, resources, and recognition to its members, incentivizing active participation and ensuring quality and efficiency in the peer review process.

Implementation of Artificial Intelligence: Artificial intelligence and machine learning tools can streamline editorial and peer review processes by identifying relevant articles, assigning suitable reviewers, and detecting potential issues in publications (Callaway, 2020). Incentives for reviewers: It is essential to recognize the work of reviewers and offer incentives for performing high-quality reviews within shorter timeframes (Kovanis et al., 2016). These incentives may include public recognition, academic or professional credits, and access to additional research resources (Squazzoni et al., 2017).

Encouraging training and collaboration among reviewers: Training in effective review techniques and promoting collaboration among reviewers can improve the quality and speed of peer review (Pöschl, 2012). Additionally, establishing collaboration networks among researchers and experts in different fields facilitates the review process and allows for a more fluid exchange of knowledge (Stossel, 2006).

A current example of this process is the Publons platform developed by Clarivate. This tool contributes to the promotion of collaboration among reviewers in the peer review sphere. By allowing reviewers to maintain a public record of their contributions and receive recognition for their work, Publons fosters accountability,

knowledge sharing, and the formation of networks among reviewers from different fields and disciplines.

Performance metrics for scientific journals: Implementing metrics that assess the speed and efficiency of editorial and review processes can motivate scientific journals to improve their practices (Mongeon & Paul-Hus, 2016). These metrics could also be used by researchers, institutions, and funders to select suitable journals for the publication of their work (Wouters et al., 2015).

Modernizing the editorial and peer review processes in scientific journals is a pressing necessity in a constantly evolving world (Horbach & Halffman, 2018). Adopting more agile and efficient strategies can accelerate the dissemination of scientific knowledge and boost progress in various research areas (Peters et al., 2016). It is crucial that the scientific community, institutions, and research funders unite in this effort to ensure that science remains a driver of development and well-being for humanity (Rennie et al., 2003).

#### **Bibliographic references**

Björk, B.-C. (2015). Have the "mega-journals" reached the limits to growth? PeerJ, 3, e981.

Brembs, B., Button, K., & Munafo, M. (2013).

Deep impact: Unintended consequences of journal rank. Frontiers in Human Neuroscience, 7, 291.

Callaway, E. (2020). AI curates papers with a little help from its human friends. Nature, 582(7811), 137–138.

Fyfe, A., Coate, K., Curry, S., Lawson, S., Moxham, N., & Røstvik, C. M. (2017). Untangling academic publishing: A history of the relationship between commercial interests, academic prestige

Horbach, S. P., & Halffman, W. (2018). The changing forms and expectations of peer review. Research Integrity and Peer Review, 3(1), 8.

Horbach, S. P. (2020). Pandemic publishing:
Medical journals drastically speed up their
publication process for COVID-19.
Quantitative Science Studies, 1(3),
1056-1067.

Kupferschmidt, K., & Cohen, J. (2020). Race to find COVID-19 treatments accelerates. Science, 367(6485), 1412-1413.

Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: A comparative analysis. Scientometrics, 106(1), 213-228.



- Peters, D. P., Ceci, S. J., & Plotkin, J. B. (2016). The future of empirical science: New tools for a new age. Behavioral and Brain Sciences, 39, e111.
- Pöschl, U. (2012). Multi-stage open peer review: Scientific evaluation integrating the strengths of traditional peer review with the virtues of transparency and self-regulation. Frontiers in Computational Neuroscience, 6, 33.
- Rennie, D., Flanagin, A., & Godlee, F. (2003). The Future of Peer Review. BMJ, 327(7414), 564-567.
- Stossel, T. P. (2006). The art of peer review. The Scientist, 20(3), 12.
- Squazzoni, F., Bravo, G., & Grimaldo, F. (2017). Long- and short-term determinants of the recall of scientific items: Insights from the

- Web of Science and Scopus data sets. Journal of Informetrics, 11(2), 356-365.
- Voytiuk, T. (2022) The invasion of Russia put more than three hundred million people at risk of starvation – Borrell. Suspilne Media.
- Wouters, P., Sugimoto, C. R., Larivière, V., McVeigh, M. E., Pulverer, B., de Rijcke, S., & Waltman, L. (2015). The Metric Tide: Literature Review (Supplementary Report I to the Independent Review of the Role of Metrics in Research Assessment and Management). Digital Science.
- Zhou, P., & Chen, H. (2021). The swift increase of COVID-19-related literature: Patterns, themes, and the role of preprints. Quantitative Science Studies, 2(1), 367-379.

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# Discourse of resistance in contemporary Ukrainian fiction: satire and anti-colonial motives in Maria Miniailo's Stolen Spring

Дискурс опору в сучасній українській прозі: сатира й антиколоніальні мотиви в повісті «Вкрадена весна» М. Міняйло

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Written by: **Dmytro Drozdovskyi¹** https://orcid.org/0000-0002-2838-6086

#### Abstract

The situation of a full-scale invasion of Ukraine after February 24, 2022 resulted in the emergence of literary works that reflect the forms of literary interpretation of war, its catastrophic consequences and tragic losses. 'Stolen Spring' (2022) by Ukrainian writer Maria Miniailo is one of the first novellas in Ukraine that is based on the real situations that reveal the confrontation between Ukrainian people and Russian invaders in 2022 as the result of the full-scale invasion. 'Stolen Spring' is an example of a narrative that reveals Berlant's ideas about the theory of 'cruel optimism'. It was discussed that the reality of the war became the factor of resistance generating new senses that became a factor in establishing an innovative historical reality in Ukraine. At the same time, it was emphasized that Miniailo's novella is a form of intensification of Ukrainian resistance to the ideology of new Russian (Rasshism) represented in 'fascism' behaviour of the "katsap" community and portrayed in the concept of the "Russian soul". The writer resorts to the construction of the world that reinforces the satirical forms through transparent depictions of reality in all its forms in war and terror.

**Keywords:** contemporary Ukrainian literature, cruel optimism, Maria Miniailo, satire, war.

#### Анотація

Ситуація повномасштабного вторгнення в Україну після 24 лютого 2022 детермінувала появу літературних творів, які літературного відображають форми осмислення війни, її катастрофічних наслідків і трагічних втрат. «Вкрадена весна» (2022) української письменниці Марії Міняйло – одна з перших в Україні повістей, яка заснована на подіях, реальних ЩО розкривають протистояння українського народу російських загарбників у 2022 році внаслідок повномасштабного вторгнення. «Вкрадена весна» - приклад наративу, який розвиває концепцію Л. Берлант про «жорстокий оптимізм». З'ясовано, що реальність війни стала чинником спротиву, що породжує життєствердні сенси, які сприяли утвердженню нової історичної дійсності в Україні. Водночас наголошено, що повість М. Міняйло  $\epsilon$ чинником інтенсифікації в Україні опору ідеології нового російського «фашизму» (рашизму), яку оприявнено в поведінці «кацапської» спільноти та висвітлено в образі «російської душі». Письменниця вдається до конструювання світу, що підсилює сатиричні форми чітким зображенням дійсності в усіх її виявах під час війни й терору.

**Ключові слова:** сучасна українська література, жорстокий оптимізм, Марія Міняйло, сатира, війна.

<sup>&</sup>lt;sup>1</sup> Academic Fellow at the Department of Foreign and Slavic Literatures, Shevchenko Institute of Literature, National Academy of Sciences of Ukraine, Kyiv, Ukraine.





#### Introduction

The recently published book 24.02 (2022) by Maria Miniailo (Марія Міняйло) consists of two novellas, 'Stolen Spring' (the main work in the book) and 'The Flower Garden of Mrs. Savenko' and four short stories on war topics ('The story about grandfather Dmytro, who scared five saboteurs', 'A story about Olexandra, who met love in the ruins of her former life', 'A story about Ihor, who met face to face with a real spy, 'A story about Mrs. Myroslava, who prepared a special moonshine'). In the beginning of 2022, Miniailo's book The Children of Grad was published in London by Glagoslav Publications (https://waterloopress.co.uk/books/the-childrenof-grad-2022). This time the writer has created a narrative that in a special way portrays the situation in Ukraine after the full-scale invasion in 2022.

The war in Ukraine became a factor in the world crisis of ethics, as it caused mass emigration, the reign of fear, the death of ordinary people, etc.

Contemporary Ukrainian fiction (Drozdovskyi 2021) demonstrates the transformation of its literary landscape due to wartime. New motives and new concepts have been reinforced after the full-scale invasion. Contemporary novels, novellas and short stories portray the situation of the war and its influence on the social life of Ukrainian people. The Russian-Ukrainian war has generated texts in which the authors reflect on the tragedy that Ukraine experienced in 2022 and reveals the antihuman aggressive nature of Russian invaders who destroy people's homes and ruin human lives.

Miniailo's novella is an example of the narrative of resistance that was created in Ukrainian fiction (Miniailo, 2022) and poetry (Korotko, 2022) in 2022. The literary text is an example of literature that demonstrates the terror of war and re-thinks the relations between Russians and Ukrainians in one little village. Though partly satirical, her novella realistically depicts the catastrophes that happened in Ukrainian cities that were occupied in February-March, 2022. Miniailo reinforces the of inter-cultural clash communities, collaborationism and inner human transformations, and the unreasonable cruelty that is a remarkable feature of Russian identity. The writer demonstrates the abyss that exists between two communities in the Ukrainian village: Ukrainians, and Russians whom the author calls "the katsaps".

'Stolen Spring' is a cultural text with anthropological implications that demonstrate the basic and fundamental differences between communities and explain the nature of the destructive desire of the Russians for war and confrontations. In the novella, Miniailo re-thinks and revises the issues that deal with identity phenomenon. The author concludes that there are some stable and unchangeable features of identities that result in specific forms of social behaviour.

Despite some grotesque episodes and situations, the novella portrays real experiences of war and the situations that happened in the occupied Ukrainian villages and towns in 2022. The author may have used real facts distributed in the media about the cruelties of Russian invaders. However, this real cruelty has become an inspiration for the author to create a literary work that demonstrates the power of Ukrainian people and demonstrates how they were able to liberate their villages and towns. 'Stolen Spring' demonstrates Berlant's concept of "cruel optimism" and is an example of a text that was created in one of the most cruel times Ukraine has ever experienced. Tragedies of real life intensify literary experiment and demonstrate a system of new motives and socio-cultural issues that become important for literary representation in contemporary Ukrainian fiction.

In this paper, I will analyse the crash of two communities and cultural identities, Ukrainians and "katsaps", represented in 'Stolen Spring', and the forms of portraying the issues of occupations regarding the discourse of the Russian-Ukrainian war intensified after February 24, 2022.

#### **Theoretical Framework or Literature Review**

In the study 'Unclaimed Experience: Trauma, Narrative and History' (1996), Kathy Caruth speaks about trauma as an event that carries not only destructive potential, but one which also harbours the possibilities of new meanings and life-affirming narratives. In the article, I will consider the new form of relationship between social reality and literature (fiction), literary practices, and social fears and disasters. The war context of "cruel reality" has become a form of immense productivity in order to establish the narrative that is opposite to the discourse of Russian military aggression, antihumanism, fascism, etc.

The specificity of the situation in Ukraine after the full-scale invasion in February 2022 determines the choice of methodology that reflects the correlation of literature (fiction) with the relevant socio-cultural and political context. I reinforced theoretical works demonstrate the connection between the forms of restrictions due to terror, war, etc. and the reflection on such restrictions in literary texts. In the work of L. Berlant, the cruelty of reality contains the potential impulse transformations that draw inspiration from the cruelty of the surrounding reality. Kathleen Stewart's work Ordinary Affects (2007) demonstrates the correlations between the general social situation and the structure of sensibility, the forms of feelings that find realization in literature and the arts. Stewart in her research 'begins with the disparate, fragmented, and seemingly inconsequential experiences of everyday life to bring attention to the ordinary as an integral site of cultural politics. Ordinary affect, she insists, is registered in its particularities, yet it connects people and creates common experiences that shape public feeling' (Ordinary Affects). Moreover, Stewart has proved that social factors in many ways structure the narrative, reflecting certain images in it, determining literary practices, etc. The external reality and the general system of feelings that prevails in society determines the narratives in fiction, outlining a certain topic, image system, within it.

Fiction in post-postmodern conditions in Ukraine is postulated not as an autonomous phenomenon, but as one that is under the significant influence of social pressure, wartime consequences; and, therefore, the context determines artistic practices.

#### Methodology

The research vector corresponds to contemporary cultural approaches, methodological guidelines that determine the understanding of contemporary literature (fiction), in particular in the aspect of representing the concept of *Cruel Optimism* (Berlant, 2011), *Ordinary Affects* (Stewart, 2007), *The Promise of Happiness* (Ahmed, 2010), etc. This methodology is innovative and has not yet been applied to Ukrainian material, in particular in the aspect of studying fiction.

Berlant's methodology has been exploited in the research as in the most successful way it gives grounds to explain the connections between the 'cruel' reality of war in Ukraine and Miniailo's novella written in the war period as the result of this clash with the cruelness of the war. The originality and innovativeness of the project is connected with the necessity to comprehend changes in approaches, principles and techniques that take place in Ukrainian poetry during war time

William Watkins in his On Mourning: Theories of Loss in Modern Literature (2004) defines the crises of the contemporary world, in which there is a discrepancy between political, moral and ethical ideals and the existing state of affairs in society, which makes it impossible to build a society of ethics. The unattainability of these ideals forms a society of melancholy, which is reflected in culture and art, which appears as a narrative of grief, mourning, and pain. Literature these days reinforces the motif of death, because society cannot create a space of happiness and ethics for all individuals. If society cannot take responsibility for the ethical dimension, then arts and literature in particular, as Watkins stresses, take responsibility for death, which is the result of the gap that arises from the unattainability of the ideal. Literary practices and fiction forms reinforce the motives of melancholy and despair, which generally speak of the pessimistic images represented in their paradigm.

In their theoretical works, Berlant, Stewart, and Watkins define the methodology of this research, which explores the conceptual sphere of contemporary Ukrainian fiction. Such a sphere of new concepts is formed under the influence of generally threatening messages through the intensification of the discourse of melancholy, death, etc. The discourse of death is determined by the topic of war in Ukraine, which is relayed by media and which affects the worldview of Ukrainian writers like Miniailo. At the same time, the war increases the need for selfexpression, intensifying practices that appear as a form of response to the brutality of reality, or melancholy, crying and despair arising from the global violation of ethical principles. The represented methodology is determined by the real socio-cultural situation in Ukraine and reflects the key forms of interaction of literary and socio-cultural reality in the conditions of war.

#### **Results and Discussion**

T. Snyder (2022) explains the Russian-Ukrainian war as an example of the 'last postcolonial war'. The novella 'Stolen Spring' ('Вкрадена весна') draws readers' attention primarily due to the ability of the author to portray contemporary



characters in war torn Ukraine. The novella is genetically and typologically close to classic Ukrainian author Ivan Nechui-Levytskyi's famous novella Kaidash's Family ("Кайдашева сім'я", 1878). 'Stolen Spring' reinforces the questions raised in Nechui-Levytskyi's text, but in the new wartime context.

Miniailo wrote a story in which we have the concept of 'laughter through tears' (Ivan Franko used these words to define the essence of Kaidash's Family). It is an example of the imagological novella with an Us and Them emphasis for Ukrainian and Russian/ 'katsap' characters respectively: the Ukrainians (the Doroshko family, Andrii Shtanko) are depicted as familiar to the reader, while the Russians are ascribed the derogatory colloquial lexeme "katsaps" ("billy goats") to emphasize their foreignness (Vera Vasylivna, Styopa, Tan'ka).

Miniailo admitted in her January post on Facebook (with information about the publication of the book) that the basis for her novella 'Stolen Spring' was an uncompleted play, How The Katsaps In Our Village Had A Wedding Party, on which the writer had previously worked. Moreover, the dramatic element in the story is clear and strong enough to compare this novella with The Kaidash's Family. The novella was written on the basis of a grotesque and satirical depiction of the souls of the 'katsaps' and tragic events related to the occupation of Ukrainian villages, towns and cities in 2022.

Satire in Miniailo's novella becomes a powerful instrument instead of irony. Irony has become useless in the paradigm of war and for a culture staring death in the face. New (post-postmodern) Sincerity in Ukrainian novellas demonstrates the break with postmodernism in the aspect of irony and rejection of true emotions. Miniailo's novella underlines satire and the return to the human as core elements of the post-postmodern wartime discourse. 'The ideas of sincerity and authenticity are not unchanging but differ from culture to culture' (O'Gorman & Eaglestone, 2019: 38). Martin Paul Eve provides a few examples: 'Firstly, assuming that authenticity really exists, it is possible to behave authentically, but insincerely. If <...> you make a promise on which you subsequently renege, you were insincere but authentic.' (O'Gorman & Eaglestone, 2019, 38).

To explain the notion of New Sincerity, Martin Paul Eve states that 'one of the core components that needs to be analyzed is the supposition that the irony of postmodern literature 'is parasitic on sincerity' <...>. Indeed, those contemporary authors seeking new ways of engaging with sincerity in their fiction are not rejecting all aspects of postmodern literature; the complexity, fragmentation and even the historical subject often remains <...>. Instead, the core facet that these authors of the (New) Sincerity reject to their aesthetic is postmodern irony while in philosophy they retain a postmodern incredulity at the idea of an authentic self' (Eve, 2019: 39). Irony does not play the key role in the postpostmodern narrative of the contemporary Ukrainian novel. The narrative describes the situation in which irony is connected with sincerity, moreover, irony is connected with authenticity and, finally, irony is connected with the discourse of tragedy and pain the Ukraine wartime.

In the novella, the 'katsaps' live in the world of alcohol abasement and do not want to make any effort to make their own lives better. Unlike Ukrainian families, which are able to organize themselves in the most difficult moment in order to survive, the 'katsaps' can win only when they have a physical advantage. They are not capable of collectivism, of mutual assistance. The 'katsaps'' world in the novella is depicted as internally disjointed and aggressive, where the animal instinct reigns. The image of the 'katsap' woman Vira Vasylivna and her son Styopa ideas about the laziness reflects aggressiveness of the "Russian soul"; the 'katsaps' in the story are dirty and cruel to each other, e.g.: the mother abuses her son in the same way that her husband abused her until his death. In the novella, Miniailo recreated peculiarities of the interaction of two families in the Ukrainian countryside, one of which is typical Ukrainian, and the other typical 'katsap'. The writer manages to construct characters belonging to different cultural and historical paradigms. In general, the story is satirical; it resembles 'The Kaidash's Family' world with a huge number of dialogues between the characters. In addition, the novella could be easily transferred to a theatre stage: the dialogues between the characters are full of laughter and represent a special wit, they reflect the flow of real life.

Moreover, it is worth saying about the thirdperson narrative at the very beginning of the story that the writer resorts to a narrative technique which occurs in Ukrainian classical literature. This is the view of the omnipotent narrator who talks about the world in an epic, detached way; and such a story contrasts with what will be discussed further in the dialogues. In the finale episode, the reader finds out who recorded for posterity what happened in the village during the occupation, who told of the victories of the Ukrainians over the 'katsapy', who recorded all the crimes of the occupying marauders.

'And it so happened that many years ago (no one can say exactly how many years ago) several dozen katsap families moved (or were relocated) to our village. During this time, they multiplied so much that they now made up a significant percentage of our rural community. Most of them drank incessantly and lived in poverty on the edge of the village. As my grandmother used to say: "They are born naked and barefoot, they grow up naked and barefoot, they die naked and barefoot." They started drinking when they were young, but that's why they didn't live to old age. They gave life to the same miserable creatures who repeated the fate of their parents' (Miniailo, 2022, p. 7).

In 'Stolen Spring', the author uses words that are rarely used by writers today. These are forgotten, outdated lexemes. The author sometimes explains them in her notes for readers. These words help to create the mode that helps to deautomatize readers' perceptions. Old Ukrainian lexemes only confirm the specific authenticity of the Ukrainian world and intensify the grotesqueness of the reality, which in the reader's perception is still very strongly connected with the events of February 24, 2022.

Moreover, the novella is characterized by the discourse of Ukrainian authenticity. From the dialogues, the readers can clearly imagine contemporary characters. In the traditions of Ukrainian classic literature, the writer often resorts to the construction of a stock rustic world. But in 'Stolen Spring' the rustic space seems to be written in a modern form. The Ukrainian space of the modern village is depicted without artificial pastoralism, idealization or excessive images of village degradation. Psychological authenticity in the relationship between the characters is what attracts Miniailo's story.

Miniailo portrays typical characters of contemporary Ukraine. Tan'ka is perhaps the most expressive representative of the 'katsap' world: ugly, dirty, cruel, constantly drunk. Styopa's mother seems to have faith in God, but this faith appears to be flat, it is faith from spiritual poverty. Reverend (Father) Pavlo is depicted through the internal dynamics of confusion, and the struggle with his own efforts

to avoid participation in the wedding of Tan'ka and Styopa. The wedding is the apotheosis of the representation of the "Russian spirit", which ends with a senseless drunken fight.

Miniailo's satire on the Russian spirit is successful in the novella. The readers see in the story that all tortures the Ukrainians have gone through are not a figment of the author's imagination. Looting, rape, etc., everything is part of a real horror that continues to this day in Ukraine. Tan'ka happily has sex with the 'katsap' soldiers. But in the novel, both the geography teacher and the girl are raped. Styopa becomes a typical collaborator: he is a person without moral principles, although he still paid one of his debts. He rejoices in his widowhood and is ready to imprison the priest who sanctified his marriage.

Reverend Pavlo's role during the occupation of the village is important. At the same time, the victory over the 'katsaps' is attributed to the woman Marusia, who is considered a village witch. The "potions" she prepares help to deal with violent rapists who abuse Ukrainians.

The world of the 'katsaps' in 'Stolen Spring' is cruel, aggressive, mean and miserable. The author satirically ridicules the inability of the 'katsaps' to build a comfortable space. Instead, they show a bilious envy of the Ukrainians, who were able to create something amazing in their gardens. 'Styopa's house, where he lived with his mother, Vira Vasylivna, was on the edge of the village. There used to be barracks here, but over time, thanks to the efforts of the head of the village council, they disappeared, and in their place, a dozen one-story brick houses were built, to which the heirs of the katsap barracks moved. The locals jokingly called this place 'parebrik', because the katsap culture and attitudes prevailed here' (Miniailo, 2022, p. 19).

Styopa, by the way, also does not understand why his mother is unable to even plant carrots in her garden. However, he himself is childish, and cannot work out how to deal with the situation of marriage with Tan'ka. He chooses his wife only at the will of his mother, who sees Tan'ka as a good wife (from the financial point of view). The world of the 'katsap' soul is creepy, empty, haunted, but still capable of bringing death to Ukrainian lands. The marriage of Styopa and Tan'ka is unsustainable, so the death of Tan'ka seems natural in the story. For Styopa, the death of his wife is by no means a tragedy. He is down-to-earth and humble, living a primitive life; after Tan'ka's death he does not fall into grief, but



continues to seek to satisfy his physiological needs.

Ukrainian characters in the story have moral values. Their lives are not simple, there are misunderstandings, insults, internal struggles, but the characters live in a world built according to moral standards. However, the world of the 'katsaps' is fundamentally different. Almost entirely animal instincts reign there, some inexplicable cruelty that manifests itself in the relationship between husband and wife, mother and son. The characters of the story do not imagine any other life. Styopa thanks Bohdan for the fact that once he protected him from the boys who had fun beating a 'katsap'. Vira Vasylivna does not invite a priest of a Moscow church from a neighboring village to the wedding, because she believes that if Reverend Pavlo consecrates the marriage, somehow the family will already be tolerated and fall in love: "I believe that you are anointed by God...", said Vira Vasylivna unexpectedly. - You have sanctity. Let the son's marriage be a hundred times unhappy, but let him be blessed by God. Then there will be no grief in marriage. There will be no happiness, but the son will not fall into the noose, the wife will not be beaten either. Their life will be normal"" (Miniailo, 2022, p. 44). Vira Vasylivna's behaviour is irrational, mostly predatory (both towards her own and towards others) in the novella.

The novella 'Stolen Spring' demonstrates the chasm of worldviews, it satirically reveals the opinion that the Russian world is not viable. Vitality, which creates new lives, is not presented in the Russian world, the Russians have an animal desire to survive, there is a desire to "coop up", as the author writes, theirs is a desire to kill, to get pleasure from revenge and selfaggrandizement by diminishing one's neighbour. There are no values in the Russian world represented in the novella. That is why the marriage between Tan'ka and Styopa ends in an "abyss": she dies and Styopa becomes a collaborator. Styopa does not physically desire his wife, he does not have feelings for her, and even his attempts to "drink a cup of tea", (to have sex) with Tan'ka are simulated. 'Tanya dragged Styopa up to the second floor to their bedroom. No matter how he tried to delay this moment, explaining that it is not comfortable in front of people, Tanya did not listen to that. Vodka and the recent fight ignited such a thirst in her that she couldn't stand it. She dragged Styopa into the bedroom and, grabbing the skirt of the dress, growled: "Take me as a wife." Styopa did not really understand how exactly one should take a

wife and whether it is worth it at all?' (Miniailo, 2022, p. 65-66).

#### **Conclusions**

Miniailo's 'Stolen Spring' is a novella that reinforces the issues of war confrontation intensified after the full-scale invasion by Russia in February, 2022. The text demonstrates the author's attention to the identity representations that give a clue to understanding the nature of Russian aggression in Ukraine. 'Stolen Spring; is an example of the text that is a part of the narrative of resistance crated in Ukraine after 2022: the author has prepared a narrative that provokes emotional response to the cruelty of Russians perpetrated against the occupied Ukrainian territories. Miniailo unites in her story true facts and imagined situations providing a grotesque narrative in which satire plays a key role.

The novella demonstrates the importance of Berlant's theory that cruel reality could be a source for transformations in the sphere of arts and literature. Miniailo has used the discourse of war as a material for rethinking Russian identity and representing its key anthropological features. The writer uses irony to intensify the grotesque forms of representation of Russians as cruel, ugly, and without any desire to build a comfortable world. Miniailo stresses that Russians had a long history of coexistence with Ukrainians and in different times this coexistence was peaceful but with a lot of hidden problems that were not articulated in a public sphere. The author demonstrates inner Russian desire to destroy the order of the Ukrainian world, and to reshape their community in accordance with the norms of Russian the world. Miniailo explains in her novella the concept of the "Russian spirit" as a phenomenon that contains aggression and destructive intentions. Russian characters in the novella reveal the motif of unconscious behaviour, they are reckless and irrational, they do not have a desire to build a socially comfortable sphere and in their lives the characters share purely pragmatic views. The community of the 'katsaps' does not have values based on moral principles and ethics. They fight with each other and reveal the forms of cruel behaviour between mother and son, husband and wife.

'Stolen Spring; is an example of imagological texts in which the plot and narrative in general play with stereotypes and ruined expectations connected with identity representations and social interactions of the characters. The text

proves Stewart's theory about the influences of social background on the cultural situation that is determined by the tendentious society, and reveals the key socio-political issues that are important for people in a particular moment of time. Miniailo has created a story that is a new attempt to portray a typical Ukrainian family as in the times of Nechui-Levytskyi's outstanding Ukrainian novella 'Kaidash's Family. Miniailo also builds her story on many dialogues that intensify the plot dynamics and reinforce the issue of social relations between two different cultural groups. The level of dramatization in the novella is high and the conversations between characters give a possibility to understand their psychology and deep subconscious motivations. Ukrainians in the story are connected with the concept of a peaceful world order and the Russians (the 'katsaps') are portrayed as a community that has no values and that is oriented to bring destruction to the world and get satiation from social cruelty, war and violence as realized in murders, rapes, blackmailing, etc. that happen in the village in the occupation period.

The novella stresses the idea of the fundamental cultural and mental abyss between Russian and Ukrainian communities, and the author does not possibility of how to build any peaceful co-existence communication and between them. The mental differences are so marked between the two nationalities. The only desire of 'katsaps' is to invade, to occupy and to destroy the world in which they live. With the help of grotesquery and satire, Miniailo portrays the tragedy of war in Ukraine and puts emphasis on the human catastrophe that happens in the result of such wars. The novella exploits real situations from the recent war torn history of Ukraine in 2022 and combines them with the author's imagination in order to create a cultural

literary text that is part of the narrative of resistance.

#### Bibliographic references

- Ahmed, S. (2010). The Promise of Happiness. London, UK: Duke University Press.
- Berlant, L. (2011). Cruel Optimism. London-New York: Duke University Press.
- Caruth, C. (1996). Unclaimed Experience: Trauma, Narrative, and History. Baltimore: John Hopkins University Press.
- Drozdovskyi, D. (2021). Parabolic Realism in Discourse on Contemporary Ukrainian Fiction. The International Journal of Literary Humanities, 19(1), 181-192. doi: 10.18848/2327-7912/CGP/v19i01/181-192
- Eve, M. P. (2019). Sincerity. In: O'Gorman, D., & Eaglestone, R. The Routledge Companion to Twenty-First Century Literary Fiction. London-New York: Routledge: 36-47.
- Korotko, A. (2022). War Poems. London: Glagoslav Publications. ISBN: 978-1914337949
- Miniailo, M. (2022). 24.02. Kyiv: Summit book. 232 p. (in Ukrainian). ISBN: 978-966-986-459-8
- O'Gorman, D., & Eaglestone, R. (2019). The Routledge Companion to Twenty-First Century Literary Fiction. London-New York: Routledge.
- Snyder, T. (2022). The War in Ukraine Is a Colonial War. The New Yorker. April 28. https://www.newyorker.com/news/essay/the-war-in-ukraine-is-a-colonial-war
- Stewart, K. (2007). Ordinary Affects. Duke University Press.
- Watkins, W. (2004). On Mourning: Theories of Loss in Modern Literature. Edinburgh: Edinburgh University Press.



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# Theoretical bases of professional culture of future specialists in accordance with global challenges of the information society<sup>2</sup>

## Теоретичні засади професійної культури майбутніх фахівців відповідно до глобальних викликів інформаційного суспільства

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Written by:
Liudmyla Pankiv³
https://orcid.org/0000-0002-0218-657X
Tetiana Bodrova⁴
https://orcid.org/0000-0002-5359-2164
Nataliia Borshchenko⁵
https://orcid.org/0000-0002-6063-5695
Mariia Chabaiovska⁶
https://orcid.org/0000-0003-0954-5712
Nataliia Ihnatenko⁵
https://orcid.org/0000-0003-1616-8708

#### **Abstract**

The article highlights the theoretical bases of the professional culture of future specialists in accordance with the global challenges of the information society. The following functions of the general human culture are highlighted: reproductive and translational, constructiveadaptive, regulatory-corrective, developmental, design-orientation, harmonizing-preventive, productive-generative. In the structure of professional culture, motivational, cognitive. activity, axiological and personal components are highlighted, it is concluded that the main components of the content of professional culture are motivation to master special professional knowledge, skills, abilities, professionally important values, which in the method of making a professional culture should become personally significant, the importance of forming personal qualities that determine the success activity specialist professional of is

#### Анотація

статті висвітлено теоретичні основи професійної культури майбутніх спеціалістів відповідно глобальних викликів ДО інформаційного суспільства. Виділено такі функції загальної культури людини: репродуктивно-трансляційна, конструктивнопристосувальна, регулятивно-корекційна, проектно-орієнтаційна, розвивальна, гармонізуюче-профілактична, продуктивногенеративна. У структурі професійної культури мотиваційний, когнітивний, виділено діяльнісний, аксіологічний та особистісний компоненти, зроблено висновок про те, що основними компонентами змісту професійної мотивація культури є ДО оволодіння спеціальними професійними знаннями. уміннями, навичками, професійно значущими цінностями, які становлять мотивацію до оволодіння спеціальними професійними знаннями, уміннями, навичками, професійно

<sup>&</sup>lt;sup>7</sup> Ph.D. in Pedagogical Sciences, Professor at the Department of General and Social Pedagogy and Management, Dean of Faculty of Pedagogical Education, Management and Arts, Hryhorii Skovoroda University in Pereiaslav, Ukraine.



<sup>&</sup>lt;sup>3</sup> Doctor of Pedagogic Sciences, PhD in Pedagogy, Professor of Department of Art, National Pedagogical Dragomanov University, Ukraine.

<sup>&</sup>lt;sup>4</sup> Candidate of Pedagogic Sciences, PhD in Pedagogy, Professor of Faculty of Art, National Pedagogical Dragomanov University, Ukraine.

<sup>&</sup>lt;sup>5</sup> Postgraduate of Faculty of Art, National Pedagogical Dragomanov University, Ukraine.

<sup>&</sup>lt;sup>6</sup> Candidate of Pedagogical Sciences, Associate Professor of Pedagogy and Methods of Teaching Ukrainian and Foreign Languages at the Pedagogical Faculty, National Pedagogical Dragomanov University, Ukraine.

emphasized. Among its elements, the following were identified: foreseeing, interpretation of social phenomena and tasks in the goals and objectives of activities; awareness of professional culture as a path to success; use of professional culture with various forms of activity; analysis of the achieved result, linking it with the goals and objectives of professional culture.

**Keywords:** information society, professional culture, specialist training, education, teacher.

#### Introduction

Integration of Higher Education, Science and Production is the basis for restoring the content and forms of training and education of the future specialist, a factor that strengthens the unity and interaction of his educational, research, labor and social activities.

Education and training is designed to form the future specialist such personal qualities and abilities that will allow him to independently navigate the professional world and determine the vector of his professional growth, the general style of professional life (Sabatovska & Bobokalo, 2019).

Radical changes in Ukrainian society create prerequisites for determining the overall strategy of the modern higher education system, which requires the training of professionals who combine deep humanistic beliefs, fundamental theoretical knowledge and thorough practical training. Professional culture is a reflection of the spiritual and material values of education and training, methods of creative pedagogical activity necessary for the operation of the educational process. Therefore, the real needs of higher education lead to an rise in the interest of scientists in the problem of professional culture (Zhushma, 2020).

Professional culture of the individual, undoubtedly, affords for the control of professional knowledge, skills and abilities, among which a significant place belongs to the knowledge of the norms and rules of interpersonal interaction, the ability and skills of

значущими цінностями, які становлять мотивацію до оволодіння професійними знаннями, уміннями, навичками. у процесі формування професійна культура має стати особистісно значущою, підкреслено важливість формування особистісних якостей, що визначають ефективність професійної діяльності фахівця. Серед його елементів були виділені: передбачення, інтерпретація суспільних явищ і завдань у цілях і завданнях діяльності; усвідомлення фахової культури як шляху до досягнення здобутків; використання професійної культури з різними формами аналіз досягнутого роботи; результату, пов'язування його з цілями і задачами професійної культури.

**Ключові слова:** інформаційне суспільство, професійна культура, підготовка спеціалістів, освіта, учитель.

communication, adequate report information, reflection of one's own professional activity (Rudenko, 2016).

The purpose. To reveal the theoretical bases of the professional culture of future specialists in accordance with the global challenges of the information society.

#### **Literature Review**

N. Mykolayenko (2012) examines the essence of the definition of "professional culture" in sociological, psychological, pedagogical, and cultural sources. The definition of "professional culture" is generalized.

V. Tusheva (2013) substantiates the theoretical and methodical bases of processing the research culture of the future teacher in the conditions of the higher pedagogical school. The author emphasizes that «...based on cultural, systemic, synergetic, activity, axiological, personal scientific approaches, the essence of this personal phenomenon as a special type of competence in new socio-cultural and informational conditions is comprehensively revealed, its component-structural composition».

A. Popchuk (2013) proposed a special course "Professional culture of a document specialist" aimed at improving the general culture of the individual and forming the professional culture of future specialists in the circumstances of higher education institutions.



Yu. Kolisnyk-Humenyuk (2015) considers that «...the role of professional culture, the purpose of which is to increase the level of general culture of the individual through: the formation of students' creative thinking; the implementation of professional orientation of the content of education; the disclosure of professional qualities; creating conditions for development of personal qualities of future specialists in the art profile».

Ts. Yaochen (2016) reflects qualified culture as a route of creation of successful professional selfrealization. Based on the review of sources, the scientist showed the etymology and definition of the concept of "culture", considered the concept of "professional culture", and explored the elements of professional culture. The article defines the essence and conditions of the formation of the teacher's professional culture. shows the degree of formation of the professional culture of a modern specialist - low, medium, high. The function of future teachers as subjects of professional culture, implementing the process of professional activity and producing sociocultural values, is demonstrated.

- O. Makeeva (2016) analyzes the problems of the structure of professional culture of future social workers. The results of theoretical study of methodical works are presented. The structural components of the professional culture of future social workers are.
- I. Vorona & I. Prokop (2020) pointed out the peculiarities of the development of professional culture of medical students, analyzed the components of professional culture and the conditions of its formation, noted that the change of professional culture internally enriches a person and contributes to his professional development and personal self-improvement. A person is most clearly manifested in activities with others during the performance of professional duties. The culture of behavior, speaking, listening, and speech often determines the results of professional activity.
- T. Zhushma (2020) considered the didactic culture of the future teacher, studied the theoretical content and its correlation with professional culture and activity, analyzed the opinion on the issues of gradual deviations in the content, construction and organizational basis for the development of pedagogical culture. Moreover, she gave a recent idea of the components of the studied meaning of applicants for the master's educational level, and presented the structure of educational culture and its

important and least powerful mechanisms on the success of activities.

Kravchenko et al., (2022) on the properties of the new education system in Poland, shown by the introduction of multimedia technologies in education in Poland, the features of increasing the professional competence of a specialist are revealed. They light up, that «...various forms of innovations implemented in improving the professional competence of a specialist are listed: improvement (rationalization), modernization, innovation». Modernization of information resources, especially multimedia, is an urgent condition for the activity of professionals in society today, because specialists are in the focus of the educational process, during improvement of professional competence.

Plakhotnik et al., (2022) show that «...the importance of multimedia teaching tools is shown, which are promising and highly effective tools that allow the teacher not only to present an array of information in a larger volume than traditional sources of information, but also to include text, graphs, diagrams, sound, animation, video, etc. in a visually integrated form».

Shchyrbul et al., (2022) light up the content of the concept of multimedia. The article highlights multimedia functions. Digitization of the education process requires the teacher to have knowledge and skills in the field of multimedia technologies, as well as knowledge of highconcept methods and tools of modern science. The authors show the current concepts of media education, which are being deepened and improved in Ukraine and represent a strong basis for the modernization of education, which will energize the constructions of the digital society in the country and the formation of civil society. Distance education allows large sections of society to receive education and is considered the most democratic form of education. We can observe the use of distance learning methods in higher educational institutions, in schools, in the system of improving the qualifications of teachers, in the system of training various managerial personnel.

#### Methodology

To solve the tasks set and realize the goal, the resulting study methods were used: theoretical: examination, combination, judgement, systematization, generalization, modeling analysis of psychological and pedagogical scientific sources and methods of professional training on the topic under study to clarify the

key concepts of the study; study of provisions, concepts, normative documents on the professional culture of future specialists in accordance with the global challenges of the information society.

The study of the problem revealed the need for methodological substantiation of the process of forming the professional culture of future specialists.

Let's consider the methodological basis of the professional culture of future specialists.

We will consider the approaches as the basis of the methodology, which are determined by the peculiarity of professional activity, the specifics of training future specialists, the peculiarities of student training in organizations of secondary vocational education: the synthesis communicative and technological components, the constant interaction of all subjects of the educational process aimed at mastering service activities, the situational nature and rituality of implementation service communications, which require their contexts, the need for cultural development of a professional and the formation of his value-motivational sphere as a condition for increasing his competence.

Philosophical methodology forms a higher level, the content of which is the basic principles of knowledge and the categorical apparatus of science. The philosophical level determines approaches to the process of understanding and transforming reality. In this study, this methodological level is represented by an axiological approach.

The application of an axiological approach to the teaching of professional culture is based on the fact that axiology — a philosophical study of values, their nature, place in the real world and its structure — can be interpreted as a methodological basis of education, as it ensures the formation of value orientations of the individual, humanistic worldview, a establishment of activities and creative realization in it. The axiological approach contributes to the education of a humanitarian culture in the subject of education, which contributes to the formation of a sense of belonging to society, in the limit - to everything human. The axiological approach is a catalyst for the individual's activity, the driving force of his professional and personal development. It is manifested in the study and improvement of students' value orientations from the point of view of professional needs and interests.

Actualization of the axiological component of of training in process service communications contributes to the adaptation of the future specialist, his mastering of the values of professional culture: orientation to the service culture, implementation of a personal approach to each client and individualization of his service. The next level of methodology is the general scientific level, which forms a system of knowledge that is the basis of theory and practical activity. Systemic approach arose with the development of society's culture.

Systemic approach allows to consider the process of formation of students' professional culture as a system, to reveal its structure, external and internal connections and system-forming elements, interaction between them. The systematic approach in this study acts as a methodological basis for formulating research concepts and designing a model of the process of forming the professional culture of future specialists.

Specific scientific methodology is a set of principles, research methods used in a certain field of knowledge, which helps to specify the problem, identify principles and determine research methods in this scientific field. The competency approach is the methodological basis of federal state educational standards.

In order to reveal the research methodology in the article, we identified the functions of general human culture, the functions of professional culture of a specialist. It is emphasized that professional development is part of the overall development of the individual and the components of personal professionalism are highlighted. The theoretical foundations of the professional culture of future specialists are described in accordance with the global challenges of the information society.

#### **Results and Discussion**

Culture is one of the most characteristic attributes of human civilization, covering all aspects of social life and human activity. S. Honcharenko claims that culture is understood as the level of education, training of a person, as well as the level of proficiency in a particular branch of knowledge or activity (Honcharenko, 1997).

Scientists have identified such functions of the general human culture.

1. Reproductive and translational. The preservation and transmission of that new in



views, traditions, theories, methods, mode of action, values, as well as the achievement of a certain personal cultural level that would create the continuity of generations, would not allow subsequent generations to slide back and would prepare the conditions for the progress of mankind.

- Constructive and adaptive. Ensuring social adaptation, effective interaction, mutual understanding of people, ensuring the effectiveness of external and internal human activities aimed at solving problems, based on existing life experience, education, development of mental processes and qualities.
- Regulatory and corrective. Ensuring the effectiveness of self-regulation, organization, and self-control processes.
- Developmental. Activation of the processes of self-education, self-improvement, selfrealization, self-development.
- 5. Design-orientative. Orientation, planning in the processes of life self-determination, conscious design, "building" a person's life, solving crises that arise in life.
- Harmonizing and preventive. Harmonization of the inner world of a person, creation of a holistic consistent "I-Concept", a state of internal well-being, ensuring a full-fledged human life, improving the quality of life, and the degree of satisfaction.
- Productive and generative. Ensuring progress, renewal of individual and social human existence in all spheres of life (Ruzyak, 2022).

The progression of professional training is considered effective only in the context of the relationship of professional training with the professionalization of the future specialist. The formation of a professional's personality is provided by the synthesis of its capabilities, abilities, activity and requirements of activity.

General and professional development of the individual is an integral component of its professionalization, which involves formation of specific types of human labor activity. In our opinion, a professional is not just a specialist in a particular field of work. Professionalization involves not only the inclusion of the individual in professional activities, the presence of requirements for professional education and the level of qualification, the existence of a public need for professional improvement, but also the formation of an appropriate level of professional culture. Professional culture is one of the components of

the culture of the individual as a member of society, it provides for creative mastery and development of knowledge, personal performance of work, possession of a certain strategy in the performance of tasks, development of professional intuition. It is formed among people who are professionally engaged in a certain field of activity and have received special training for it. Professional culture is undoubtedly connected with the general culture, but it also has its own specific features. The structure of professional culture of specialists is characterized by a set of historically established principles, norms, rules and methods that regulate a person's professional activity. The position of a person as a subject of professional activity begins to form much earlier than this activity begins, so its development should be influenced from the beginning of training. The qualified situation of the student is created on a scheme of value-semantic constructive attitudes to: movement, its structures, surroundings, consequences; socio-cultural opportunities for determining environmental systems by the capabilities of the chosen profession; self-awareness in the profession. The complexity of a young person's life direction depends on many circumstances, and spirituality is an important factor, since it is directly related to the worldview, aspirations, and ideals. With the growing importance of the environment for the individual, his involvement, inclusion in this environment. the power, diversity personality-forming of the sophistication influences of the environment on the individual increases. Thus, the social environment determines the level of consciousness of each person and the potential of his spirituality, and therefore the level of his professional culture. Nevertheless, the interests, spiritual and human values, needs and actions of the individual reflect the level of culture of society. Therefore, the development of professional culture internally enriches a person and contributes to his qualified progress and individual self-improvement (Kolisnyk-Humenyuk, 2015).

The creation of a student's professional culture is a process of constant combination of a teacher and a student, humanity, creativity and the search for new ways and assignments, the solution of which increases the motivation of future professionals to achieve modern heights in professional practice (Vorona & Prokop, 2020). The cultural dictionary defines "The professional culture characterizes the level and quality of professional activity, which depend on the socioeconomic state of society and conscientiousness in mastering certain knowledge, skills of a

particular profession and their practical use" (Korinnyi & Shevchenko, 2003).

S. Isaenko argues, "Professional culture is an integral personal education, the essence of which is the dialectical connection of all elements of an individual's culture, which develops dynamically and non-linearly, specifically manifesting itself in the sphere of professional activity and communication" (Isaenko, 2009).

Ts. Yaochen (2016), studying the issues of professional culture, shares the position of scientists regarding the definition of professional culture from the point of view of the need of society for the cultural level of persons involved in a specific professional activity. He note that the general culture is considered very broadly. At the everyday level, people should focus on this model. Culture is identified with education. intelligence as a certain quality of a person. Culture can also be considered as a specific characteristic of society, reflecting a person's attitude to history, nature, and society. Understanding culture as a socially progressive activity of humanity in all spheres of existence and consciousness is aimed at improving and transforming reality, at transforming the wealth of human history into the inner wealth of the individual.

The definition of "professional culture" is not a combination of the concepts of "professionalism" and "culture". This synthesis creates a new social phenomenon, where mastery with a common culture is formed. Therefore, for a professional, his activity serves as a criterion for personal morality, compliance with the educational principle. Professional culture is combined with ethical standards, professional competence, encouraging a person to high professionalism and personal expression.

Professional culture is considered as an essential part of the general culture of the individual, or as a complex structural education based on conscious assimilation. Moreover, continuous development and use of an integral system of special professional knowledge, skills and abilities, or as a professional quality for highly effective professional activity in situations that require the mobilization of deep personal resources of a specialist. Thus, based on the above, N. Mykolayenko (2012) suggests interpreting professional culture as a complex, integrative socio-psychological education, which is born in the system of relations to the social environment, defines ideological guidelines, value attitudes, and the general concept of professional training of a specialist. Professional culture is a qualitative sign of social development, a concrete integrity created by human activity. It is characterized through the certainty of human activity as a system of the most important and necessary properties of a certain specialty.

The professional culture of a teacher is a system of social qualities that directly ensures the level of labor, professional activity and determines its content, attitude to work; it is the most important spiritual quality of a person, which manifests itself in the pleasure that he (the person) receives from work, etc. Nevertheless, pedagogical culture is the level of assimilation of pedagogical experience by a specialist and its manifestation in the process of professional activity.

Professional culture includes internal and external components. The internal component is not only the level of knowledge and skills in the field of pedagogy, because it characterizes only competence in the relevant field, but also formed personal attitudes, ideals, needs, motives that determine the scope and conditions of their daily manifestation. The main components of the internal culture of the teacher are: a) the personality of the teacher (internal originality) with its individual psychological and social pedagogical dignity and disadvantages individual-personal level; b) the volume and degree of assimilation of the teacher accumulated professional activity pedagogical of experience. This is the theoretical (ideological) level of pedagogical culture. It defines the rational level (component) and shows what psychological and pedagogical knowledge and how it is learned by the teacher; to what extent they can be used in professional activities; c) a sensitive attitude of the teacher to the object of pedagogical work, its results, their pedagogical components is formed, and self-improvement in the pedagogical field is the emotional level of pedagogical culture.

In the real educational process, professional culture is found in integral unity with the general cultural and moral manifestations of the teacher's personality. It is determined by the creative use of the usual technological nature of its activities, thanks to which it acquires peculiar features of science and at the same time art. Therefore, it is no coincidence that today such considerable attention of researchers and practitioners is paid to the problems of pedagogical artistry, which is only able to successfully solve complex tasks of important and responsible professional activity of a higher school teacher (Zhushma, 2020).



O. Makeeva (2016) concluded in the structure of professional culture identified motivational, cognitive, activity, axiological and personal components, that the main components of the content of professional culture is motivation to master special professional knowledge, skills, abilities, professionally important values. There are in the process of forming professional culture should become personally significant, noted the importance of the formation of personal qualities that determine the effectiveness of professional activity of a specialist.

- I. Sabatovska (2010) offers the following functions of professional culture of a specialist:
- creating a sense of internal control;
- formation of a strict standard of activity;
- development of moral validity of service relations;
- desire to perform official duty;
- increasing the culture of professional
- stoppage of professional deformation.

The professional culture of a specialist has its own specifics. Among its basics, the following can be distinguished: foreseeing, interpretation of social phenomena and tasks in the goals and objectives of activities; awareness professional culture as a path to success; use of professional culture with various forms of activity; analysis of the achieved result, linking it with the goals and objectives of professional culture.

As mentioned above, the professional culture of a specialist is a component of his general culture, more precisely, education in an integral structure of personality. We can outline the most characteristic features of the professional culture of a specialist: the presence of abilities for professional activity, the development of which contributes to the education of culture, because of which the specialist is able to feel and understand others. Moreover, the formation of professional culture, which affects both the general development of a person and his inner world and is the basis of the general culture. The presence of professional and cultural skills and abilities; the development of the emotional sphere, without which it is impossible to develop the spiritual culture of the individual, the assimilation of values of social existence, etc (Yaochen, 2016).

The level of professional culture of the future specialist is influenced by many factors, but the most significant of them are the scientific and general culture of teachers, the culture of organizing diverse activities of the student at the University, the quality and aesthetic appearance of material, technical and methodological support of the educational process.

In a higher education institution, a team of teachers - people of different ages and experience of different specialties pedagogical views, different character and temperament, moral development, etc. solves the task of forming a general and professional culture of the future specialist.

The formation of a professional culture of a future specialist is impossible at a department where there is no culture of joint activities and interpersonal communication of teachers. Therefore, updating the requirements for the professional culture of a future specialist automatically complements the list requirements for the scientific and pedagogical staff of an educational institution, because scientific knowledge can exist only in a certain cultural environment.

Improving the level of professional culture of a student is also impossible without improving the quality of educational activities, namely: the culture of educational work, its productivity due to scientific organization and intensification of educational process. increasing the coefficient of useful classroom extracurricular work. In practice, this means certain changes in the organizational structure of the higher education institution, which would take into account the trends of integration of educational, scientific and industrial activities. They would create conditions for the formation of socio-cultural aspects of professional activity of future specialists, adapted the mechanism of organizing versatile activities of students to the new requirements of the time.

Harmonious personal development is impossible without increasing the volume of cultural and informational saturation of the educational process, introducing problem-based learning and modeling professional situations. Such an environment is created by interdisciplinary integrative courses that creatively and purposefully combine various fields of knowledge, preserving their consistency and integrity, form and expand the horizons of students, create a moral, intellectual and psychological basis for future work.

Professional development is part of the overall development of the individual. There are the



following components of personal professionalism:

- teaching;
- systematic and analytical thinking, the ability to foreseeing the development of the situation, foreseeing the outcome of decisions, the ability to think large-scale and realistic at the same time;
- communication skills, abilities of effective interpersonal interaction;
- high level of self-regulation, developed selfcontrol, stress tolerance;
- business orientation, activity, striving for continuous improvement of professionalism;
- a clear self-concept, a realistic perception of your abilities (Dudoladova, 2009).

Professional culture enables further self-improvement of the teacher, his perfect level of professional functions and prospects. It stems from the unity of the professional properties of the individual, the degree of his possession of achievements and professional knowledge, which energizes social and moral development in the conditions of entry into the pan-European educational space. In the modern world, there is a demand for the study, detection and analysis of exactly this set of attributes that arise in an educational institution and are subject to their own subsequent improvement, are applied and embodied in the work of a teacher (Kuchai & Kuchai, 2018).

#### Conclusions

At the present-day point of development of pedagogical theory and practice, interest in the problem of professional culture is noticeably growing, which is due to the public need for specialists of a high cultural level who would have the ability to effectively solve professional and life tasks. Thus contributing to progress within their own professionogenesis, a certain professional industry and society as a whole. This problem is relevant for professional training of specialists for each field of professional activity (Popchuk, 2013).

Professional culture occupies an active place in the structure of civilization, because in the process of professional practice it acquires its deep and effective realization. In the structure of the individual's culture, the professional culture of the individual acquires specific weight. It occupies an increasing place both as a subject of research and as a factor that is significant for the interpretation and understanding of the behavior of workers. It should be noted that future specialists are obliged to possess professional knowledge and skills in any field, to be highly educated specialists with great awareness and a high general cultural level in accordance with the global challenges of today's society (Sabatovska, 2011).

The article highlights the notional bases of the professional culture of future specialists in accordance with the global challenges of the information society. Elements of a specialist's professional culture are emphasized. The most typical structures of the professional culture of a specialist are charted. The components of personal professionalism are revealed. The following functions of the universal human culture are highlighted.

The main components of the content of professional culture are motivation to master special professional knowledge, skills, abilities, professionally important values, which in the process of forming a professional culture should become personally significant, the importance of forming personal qualities that determine the success of professional activity of a specialist is noted. The functions of professional culture of a individual are proposed.

We see prospects for further research in the characteristics of the components of personal professionalism.

#### Bibliographic references

- Dudoladova, A.V. (2009). Professional culture of the personality of the future specialist. Rusnauk. URL: http://www.rusnauka.com/8\_DNI\_2009/Ped agogica/43385.doc.htm
- Honcharenko, S. U. (1997). Ukrainian pedagogical dictionary. Kyiv: Lybid. (In Ukranian)
- Isaenko, S. A. (2009). Formation of professional culture among students of engineering and technical specialties by means of a foreign language (Diss... cand. ped. Sciences) Institute of Higher education Academy of Pedagogical Sciences of Ukraine (In Ukranian)
- Kolisnyk-Humenyuk, Yu. I. (2015). Formation of the professional culture of future specialists in folk arts and crafts. Educational discourse, 2(10), 150-158. (In Ukranian)
- Korinnyi, M.M. & Shevchenko, V.F. (2003). Short encyclopedic dictionary of culture. K.: Ukraine. (In Ukranian)





- Kravchenko, T., Varga, L., Lypchanko-Kovachyk, O., Chinchoy, A., Yevtushenko, N., Syladii, I., & Kuchai, O. (2022). Improving the Professional Competence of a Specialist in Poland by Implementing Multimedia Technologies. International Journal of Computer Science and Network Security, 22(9), 51-58
- Kuchai, T. & Kuchai, O. (2018). Theoretical foundations of the professional culture of future specialists. Scientific Bulletin of V.O. Sukhomlynskyi Mykolaiv State University, 4(63), 61-63. (In Ukranian)
- Makeeva, O. (2016). The structure of the professional culture of future social workers. Pedagogical sciences, 65, 122-128. (In Ukranian)
- Mykolayenko, N.M. (2012). Essential characteristics of the concept of "professional culture". Aesthetic education of children and youth: theory, practice, development prospects: a collection of scientific works. Zhytomyr: Publication of I. Franko ZhDU, 539-545. (In Ukranian)
- Plakhotnik, O., Strazhnikova, I., Yehorova, I., Semchuk, S., Tymchenko, A., Logvinova, Ya., & Kuchai, O. (2022). The Importance of Multimedia for Professional Training of Future Specialists. International Journal of Computer Science and Network Security, 22(9), 43-50.
- Popchuk, O. V. (2013). Professional culture of a document researcher: educational method. manual. Rivne: RDSU. (In Ukranian)
- Popovych, I., Chervinskyi, A., Kazibekova, V., Chervinska, I., & Machynska, N. (2021a). Empirical research of the typology of social expectations of the personality. Amazonia Investiga, 10(43), 112-122. https://doi.org/10.34069/AI/2021.43.07.11
- Rudenko, L. A. (2016). Theoretical and methodical principles of formation of communicative culture of future specialists in the field of service in vocational and technical educational institutions: (author's abstract. ... thesis to obtain the scientific degree of Doctor of Pedagogical Sciences). Special Vinnitsa. National Academy of Pedagogical Sciences of Ukraine Lviv Scientific and Practical Center of the Institute of Vocational and Technical Education (In Ukranian)
- Ruzyak, T. I. (2022). Formation of the professional culture of students of vocational and technical education institutions in the

- service sector. (Dissertation for obtaining the degree of Doctor of Philosophy in specialty 015 Professional education (by specialization)). Lviv Polytechnic National University. Lviv. 311. (In Ukranian)
- Sabatovska, I.S. (2010). The main mechanism of formation of the professional culture of the future specialist. [File PDF] URL: http://eprints.kname.edu.ua/31950/1/92.pdf
- Sabatovska, I.S. (2011). Professional culture of the individual: structure and measurement criteria. VI International Scientific and Practical Congress "Special Project: Analysis of Scientific Research" (May 30 and 31, 2011) URL: http://www.confcontact.com/20110531/so\_s abat.htm.
- Sabatovska, I., & Bobokalo, S. (2019) Modeling the professional activity of future teachers in the conditions of master's training. ScienceRise. Pedagogical Education, 2,
  - 22-27. https://doi.org/10.15587/2519-4984.2019.161580
- Shchyrbul, O., Babalich, V., Mishyn, S., Novikova, V., Zinchenko, L., Haidamashko, I., & Kuchai, O. (2022). Conceptual Approaches to Training Specialists Using Multimedia Technologies. International Journal of Computer Science and Network Security, 22(9), 123-130.
- Tusheva, V.V. (2013). Theoretical and methodological foundations of the formation of the scientific and research culture of the future teacher in the process of professional training: Monograph. UMO National Academy of Sciences of Ukraine. Kharkiv: Fedorko Publishing House. (In Ukranian)
- Vorona, I. I., & Prokop, I. A. (2020). Professional culture in the context of training a future doctor. Medical education, 1, 117–121.
- Yaochen, J. (2016) Professional culture as a vector of success. Innovative solutions in modern science, 8(8), 2016. URL: http://naukajournal.org/index.php/ISMSD/ar ticle/viewFile/997/1133
- Zhushma, T. (2020). The content and structure of the pedagogical culture of future teachers of higher education institutions as an important component of the specialist's professional activity. Theory and practice of managing social systems: philosophy, psychology, pedagogy, sociology, 1, 61-75. (In Ukranian)

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# Research on the functional semantic field of spatial orientation in russian and chinese languages

#### 俄汉语空间方向功能语义场对比研究

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Written by:
Gao Yanrong<sup>8</sup>
https://orcid.org/0000-0001-5723-3348
Morugova Y.A.<sup>9</sup>
https://orcid.org/0000-0002-5374-7744
Duo Li<sup>10</sup>
https://orcid.org/0000-0003-0452-6715

#### **Abstract**

According to Bondarko's functional grammar theory, combined with the corpus of the Russian State Corpus and the BCC Corpus of Peking University, this paper discusses the language expression means of each subfield of the functional semantic field of spatial orientational category in Russian and Chinese Languages, and constructs the structure of directional functional semantic field. The research results of this paper will help Chinese students better grasp the grammatical structure of Russian spatial direction prepositions. At the same time, This paper systematically compares and analyzes the characteristics of the expressions about the directional functional semantic field in the two languages, provides theoretical guidance for Chinese college students to learn Russian, and provides theoretical support for teachers engaged in Russian teaching.

**Key Words:** functional semantic field, orientation, Russian spatial preposition, Chinese spatial preposition, semantic.

#### Introduction

The concept of "field" was originally used in physics and has since been borrowed by many scientific disciplines to describe the phenomena they study. In recent years, the study of combined structural fields composed of different language

摘要

本文根据邦达尔科功能语法理论,结合俄语国家语料库和北京大学BCC语料库中的语料,探讨了俄汉空间方向范畴的功能语义场各子场的语言表达手段,构建了俄汉语空间方向功能语义场结构系统。本文的研究结果有助于中国学生更好地掌握俄语空间方向前置词的语法结构。同时,对比分析两种语言在方向功能语义场中表达方式特点,对中国大学生学习俄语提供理论上的指导,对从事俄语教学的教师提供理论文撑。

**关键词:**功能语义场;方向;俄语空间前

置词;汉语空间介词;语义

units has become a research trend. These language units can not only systematically present the picture of the language world, but also study language phenomena from the perspectives of onomatics and semantics.

<sup>&</sup>lt;sup>10</sup> Doctoral student, Abai Kazakh National Pedagogical University, Kazakhstan, Almaty. (Corresponding author)



<sup>&</sup>lt;sup>8</sup> Associate professor, Zhejiang Yuexiu University, Shaoxing, Zhejiang; PhD, Al-Farabi Kazakh National University, Kazakhstan, Almaty

<sup>&</sup>lt;sup>9</sup> College teacher, Al-Farabi Kazakh National University, Kazakhstan, Almaty.



Shchur (Щур  $\Gamma$ . C.) devoted himself to the study of the basic theory of field division of labor in linguistics, with special attention to the functional semantic field. He pointed out the use of functional semantics for "field" research. The advantages of studying with this method are: firstly, the "field" is regarded as a spatial phenomenon; secondly, not only the function of language units, but also the common semantic features of language units are considered (Shchur, 1974:66). In other words, unlike other fields, the functional semantic field is based on two criteria—functionality and semantics. Therefore, the functional semantic field is defined as "a multi-level system of expressions that reflects the unity of functions and the interaction between functions in a language based on a certain semantic category" (Bondarko, 1984:21-22).

The purpose of the paper is to identify the variety of the spatial orientational category in modern Russian and Chinese languages, to determine similarities and differences in the expression of this category, to classify the ways of expression in methodological purposes for predicting and preventing possible interference in the speech of the Chinese students.

#### Literature review

According to Bondarko (Бондарко A.B.), there are two main structural types of functional semantic fields: monocentric fields with the same grammaticalized structure and polycentric fields without the same structure but with the same specific characteristics. Among them, the core structure of the polycentric field can be composed of several linguistic structures. Any functional semantic field is a subsystem in the language structure, and each language unit in the system has common semantic features and has the characteristics of semantic commonality. The structure of functional semantic field is divided into core field, transition field and fringe field (Popova et al., 1989: 6).

According to the characteristics of semantic Bondarko divided categories, functional semantic fields into four categories: predicate functional semantic field, subject-object functional semantic field, quality-quantitative functional semantic field, and sparse functional semantic field (Bondarko, 2002:35). The spatial functional semantic field belongs to the predicate functional semantic field. As a special language system, it has a complex language structure, and its constituent elements are connected by semantic categories and syntactic relations. The

functional semantic field is a multi-dimensional. huge and ordered aggregate of language units, and one of its main characteristics is to completely include language units into the aggregate of language units through the same semantic category. The spatial functional semantic field is mainly composed of the locational functional semantic field and the directional functional semantic field. This paper mainly studies the functional semantic field of Russian-Chinese spatial orientation and its composition, and compares and analyzes the similarities and differences of language expressions in each subfield of the two-language spatial directional functional semantic fields. According to Bondarko's functional semantic field theory, we divide the directional functional semantic field into core field, transition field and fringe field.

#### The materials and methods

We selected the corpus from the Russian State Corpus and the BCC Corpus of Peking University. According to the sampling method, we extracted 1000 corpora from the two corpora respectively, searched for the corpus expressing the structure of the spatial direction functional semantic field in these 1000 corpora, analyzed the proportion of each expression type in the field, and then based on these corpora. The proportion of the corpus in the 1000 corpus is calculated to calculate the number of entries for each expression means in each functional semantic field in the corpus. To this end, we use data analysis and comparative methods to explore the functional semantic field of Russian-Chinese spatial orientation.

#### Results and Discussion

Functional Semantic Field of Russian Spatial Orientation

Guided by Bondarko's functional semantic field theory, we constructed a functional semantic field of Russian spatial orientation. Its core field, transition field and fringe field are as follows:

#### 1. Core field

The expression means of the core field in functional semantic field of Russian spatial orientation is the spatial preposition structure that expresses the orientational meaning. Among them, "в", "на", "nod", "за", "к", "из", "с", "om", "do", "no" and other prepositions are the most typical symbolic words for orientation.

There are three types of spatial preposition structures that express the meaning of orientation: Verb + Spatial Preposition + the accusative N., Verb + Spatial Preposition + the dative N., Verb + Spatial Preposition + the genitive N.

- 1) Verb + Spatial Preposition + the accusative N.: Verb + в, на, noò, за + the accusative N., For example:
- (a) Вышел *на* улицу, походил ничего не нашёл.

I went to the street to look for something and found nothing.

- (b) Он садился *на* поезд, ехал в Москву. Не took the train to Moscow.
- (c) Я осел  $\mu a$  пол и полез под кровать. I fell to the ground and crawled under the bed.
- 2) Verb + spatial preposition + the dative N.: verb +  $\kappa$ , *no* + the dative N., for example:
- (a) Когда она первый раз пришла ко мне и зашла в мою комнату.

The first time she came to my place, she walked into my room.

(b) А Кэт любила ходить с Аськой по магазинам.

Kate likes to go shopping with Aska.

- 3) Verb + spatial preposition + the genitive N.: verb + *u*3, *c*, *om*, *do* + the genitive N., for example:
- (а) Я отдал ему замок и вышел uз дома. I gave him the lock and left the house.
- (b) Никто не прокрался c улицы, что очень сомнительно.

No one sneaked in from the street, it is suspicious.

(с) И нам приятно узнавать *от* вас самые разные подробности о нашем городе.

We are delighted to have learned various details about our city from you.

(d) За пять минут Таня добежала  $\partial o$  дома. Five minutes later Tanya ran into the house.

#### 2. Transition field

The expression types of the transition field in the functional semantic field of Russian orientation are mainly adverbs (*myða*, *cioða*, *omcioða*, *enepëð*, etc.), prepositional combinations (*om...ðo...*, *c...ðo...*, etc.).

- Adverbs indicating the meaning of orientation
- (a) Очень давно не был в цирке по-моему, даже в детстве ходил *myда* только один раз.

It's been a long time since I've been to a circus in my opinion, even as a kid, I've only been there once.

(b) Я узнал про этих железнодорожников, что они ездят туда и сюда.

I heard that these railway workers travel by car.

- 2) prepositional combinations: *om...до...*, *из...в/на...*etc.
- (а) Александр Терехов сопровождает недаром учителя *от университета до дома* темным и льдистым арбатским переулкам.

No wonder Alexander Terekhov accompanied the teacher from school to home, because the alley of Arbat is dark and gloomy.

(b) Все бегали *из дома на улицу*, таскали веши

Everyone ran from home to the street, dragging things...

#### 3. Fringe field

The fringe field in the functional semantic field of Russian orientation is an infinitely vast space system that intersects with other semantic categories. The main types of expressions are: adverbs, verbs that express the meaning of departure (покинуть/покидать, etc.), mainsubordinate compound sentences (откуда-led main-subordinate compound sentences) and so on.

- 1) Adverbs
- (a) Это *издали* он казался всё таким же слонёнком, как при первой встрече.

From a distance, he appears to be the same baby elephant as when they first met.

- 2) Verbs (покинуть etc. that express the meaning of departure)
- (a) Четверть века прошло, как навсегда, я *покинул* этот город.

Twenty-five years passed away, I have left the city forever.

- 3) Main-subordinate compound sentences (... ommyда, omкуда... or adjective + N. + omкуда clause, etc.)
- (a) Очевидно, кто-то там вышел *оттуда*, *откуда* она звонила.

Obviously, someone over there went out from where she called.

(b) Та самая комната, *откуда* мы ушли утром. Exactly the room left we in the morning.



#### Functional Semantic Field of Chinese Spatial Orientation

#### 1. Core field

The expression means of the core field in the functional semantic field of Chinese spatial orientation are spatial prepositional phrases and directional verb structures. Among them, the prepositions "cóng 从", "xiàng 向", "wǎng 往", "dào 到", "cháo 朝" and other words express the meaning of orientation. According to statistics, there are six types of spatial prepositional phrases that express orientational meaning: spatial preposition + noun + orientational word, spatial preposition + locational word, spatial preposition + locational word + directional verb, spatial preposition + locational word + verb + directional verb, Spatial preposition + locational noun, spatial preposition + demonstrative pronoun. There are four types of directional verb structures that express the meaning of orientation: directional verb + locational noun, directional verb + common noun, directional verb, verb + directional verb.

Orientational words refer to words that express the names of orientation and relative positional relationship (Yuehua, 2017: 50), such as "shàng 上、xià 下、zuǒ 左、vòu 右、gián 前、hòu 后、 nèi 内、wai4 外" and so on. This paper adopts Wu Jiadi's definition and identification of orientational words, locational words and locational nouns from the perspective of semantic grammar. orientational words are spatial positional words that express the directional and positional relationship based on reference objects. A total of 123 orientational words are screened (1), of which There are 83 human body orientational words and 40 natural orientational words (Jiadi, 2008: 21-22).

Locational words are spatial locational words that represent places based on buildings (Jiadi. 2009). A total of 115 locational words have been screened (2). For example, the basic semantics are teaching units, place names, administrative divisions, etc., which are classified as "locational nouns", such as Beijing, Shanghai, Harbin, etc.

The directional verb is a special relatively closed part of speech, and it is also the most important means of expressing direction (Jing, 2020). Its characteristic is that it can be used as a complement after the verb. We screened out 26 directional verbs in total: shàng 上、xià 下、jìn 进、chū 出、kāi 开、huí 回、guò 过、qǐ 起、 dào 到、lái 来、shànglái 上来、xiàlái 下来、

jìnlái 进来、chūlái 出来、开来、huílái 回来、 guòlái 过来、qǐlái 起来、dàolái 到来、qù 去、 shàngqù 上去、xiàqù 下去、jìnqù 进去、chūqù 出去、kāigù 开去、huígù 回去、guògù 过去.

- 1) Spatial preposition + common noun + orientational word
- a) ...说着赶紧**从房间里拿出一叠**发票来, 一副悔过自新的神色。

...Then he quickly took out a stack of invoices from the room with a repentant look.

马希山狠狠地咬了咬牙,拳头*向桌子上* 一拍, 震得杯盘当当响。

Ma Xishan gritted his teeth fiercely and slapped his fist on the table, making the cups and plates rattle.

- Spatial preposition + locational word
- (a) 林玉辉凭着一身好水性,把渡船渐渐*往* 岸边拉。

With his good swimming skill, Lin Yuhui gradually pulled the ferry to the shore.

- (b) 日本人把它们带*到城外*一块空地上。 The Japanese took them to a vacant area outside the city.
- Spatial preposition + locational word + directional verb
- (a) 这时刘勃卡坐到邬丽亚身边来。
- At this time, Liu Boka sat down beside Wu Liya.
- (b) 韩飞飞沉吟了一下道:"你从哪儿来?" 那黑衣壮汉道:"属下刚从城外来。"

Han Fei pondered for a moment and said, "Where are you from?" The strong man in black said: "I have just come from outside the city.

- 4) Spatial preposition + locational word + verb + directional verb
- (a) 两个戴眼镜的姑娘*从身旁走过*。

Two girls with glasses passed by.

- (b) 她睁大了眼睛,吃惊地*向窗外看去*。 She opened her eyes wide and looked out of the window in surprise.
- 5) Spatial preposition + locational noun
- (a) 班长吴猛明天一早,就要**离开**这前沿阵



地·**到北京**—**毛主席的身**边去上社会主义的大学了。

Wu Meng, the monitor, will leave this frontline early tomorrow morning and go to Beijing—Chairman Mao's side to attend a socialist university.

(b) 我们*从哈尔滨*乘夜间火车,一早起来即已到达鸡西市。

We took the night train from Harbin and arrived in Jixi City early in the morning.

- 6) Spatial Prepositions + Demonstrative Pronouns
- (a) 为了那个微笑的女孩·人们从全世界走 到这里—普林森格拉赫特街 263 号。

People come from all over the world for that smiling girl - 263 Prinsengracht Street.

(b) 这边有一个地方的坡度较小,我们*从这 儿*下去。

There is a place with a small slope here, let's go down from here.

- 7) Directional verb + locational noun
- (a) "祺尔, 我明天要跟你*去上海*。"

"Qi Er, I want to go to Shanghai with you tomorrow."

(b) 1981 年,老赖带着他的部分书画作品*来* 杭州举行画展。

In 1981, the old Lai brought some of his calligraphy and painting works to Hangzhou for an exhibition.

- 8) Directional verb + common noun
- (a) 她笑着背起筐子,就跟我*上山*。 She carried the basket with a smile and followed me up the mountain.
- (b) 小燕子刷完了屋顶,飞身*下地*。 Xiaoyanzi finished painting the roof and flew down to the ground.
- 9) Directional Verbs
- (a) 初霞看了看那"单薄"的滑竿,说什么也 不肯*上去*。

Chuxia looked at the "thin" sliding pole and refused to go up.

(b) 我走到博物馆门口,忽然不想*进去*了。 I walked to the entrance of the museum and suddenly didn't want to go in.

- 10) Verb + directional Verb
- (a) 巴纳斯山回答说: "从这烟囱里*爬上去*"。 Banas Hill replied: "Climb up from this chimney".

In order to find the meaning of my life, I must go out!

#### 2. Transition field

The expressions of transition field in Chinese directional functional semantic field mainly include: locational word + verb + directional verb, demonstrative pronoun, idiom, orientational word + directional verb, directional verb + orientational word, etc.

- 1) locational word + verb + directional verb
- (a) **街上**传来一辆马车的声音·泰伊番先生 家一个穿号衣的当差神色慌张的冲进来 ·古的太太一眼便认出了。

There was the sound of a carriage coming from the street, a Mr. Taifan's waiter in a coat rushed in with a flustered look, Mrs. Gu recognized him at a glance.

(b) **忽然***天上飞过*一片黑云,把月亮遮了个 严丝合缝。

Suddenly a black cloud flew across the sky, covering the moon tightly.

- 2) Demonstrative pronouns
- (a) 我们一直在找,就是找不到*哪里*发出来。 We have been looking for it, but we can't find where it was from.
- (b) 不久,我们听到*那儿*传来一声枪响。 Soon, we heard a gunshot coming from there.
- 3) Idioms
- (a) **于是我**们这个小姑娘就要*东奔西走*。

So our little girl will move out and run away.

(b) *南来北往*无数次,有一件事我迄今记得 清清楚楚。

I have traveled from south to north countless times, and there is one thing I remember clearly so far.

- 4) orientational words (east, south, west, north, etc.) + directional verbs (up, down, etc.)
- (a) 他闭上眼,不愿告知更多,包括他即将





北上,不告而别。

He closed his eyes and was reluctant to tell more, including that he was about to go north, left without saying goodbye.

- (b) 有人称之为"人流*南下*,广货*北上*"。 Some people call it "the flow of people goes south, the goods from Guangzhou go north".
- directional verb + orientational word
- (a) 风清扬一听端木雪是来报信的, 急忙上

Feng Qingyang hurried forward when he heard that Duanmuxue was here to report.

#### Fringe field

It should be pointed out that the fringe field of the functional semantic field is an infinitely vast space system. The fringe field of one functional semantic field may intersect with another functional semantic field. The fringe field of the functional semantic field of Chinese spatial orientation mainly includes locational words, locational nouns and phrases that express the meaning of time.

- locational word
- (a) "去哪?"— "*书房*"。 — "Where to go?" — "Study room".
- locational noun
- (a) "走?往哪儿走?"—"*南京*, *上海*, 最末不成就是台湾了。"
- "Go? Where to go?" "Nanjing, Shanghai, Taiwan will be the last."
- 3) Phrases that express the meaning of time
- (a) 自女儿从国外*求学回来至今*,他们两老 等他这个动作可久了。

Since their daughter came back from studying abroad, the old couples have been waiting for his such action for a long time.

(b) *待到出口前*,导游让我们回头观望,但见远 处水面浮着一弯新月, 皎洁可人。

At the exit, the tour guide asked us to look back, but we saw a crescent moon floating on the water in the distance, which was bright and pleasant.

#### Conclusion

It is well known that any concept expressed in human consciousness can be conveyed through language. Some concepts are systematically reflected in language, while others can only be

expressed under specific circumstances, and sometimes these concepts have no difference or connection with other concepts with similar content, which shows that language can distinguish relatively more essential concepts. According to the above research on the functional semantic field of Russian-Chinese spatial orientation, the expression means of functional semantic field of Russian spatial orientation are morphological, lexical and syntactic means, while the expression means of Chinese are lexical and syntactic means. In Chinese, the expression means of core field, transition field and fringe field are much more than those in Russian.

From the perspective of functional semantic fields, we study the set of fields representing directional meaning in Russian and Chinese. We present the similarities and differences of the two language expressions more systematically, realize the integrity of the two language units in the interaction, show the function of the units from the different languages, especially the unmarked way of expressing spatial relationships, it ensures the clarity of the grammatical phenomena we study. The realization of the above goals is based on the theory of functional grammar, that is, the two methods of analyzing language are "from semantics to form" ("from function to means") and "from form to semantics" ("from means to function"), it systematically forms the semantic functions of aggregates of language units.

This paper presents the spatial orientational functional semantic field as a system composed of three subfields: core field, transition field and fringe field, whose basic semantics include the meaning of "path starting point" and "path ending point". The linguistic units in the core field have stronger semantic category functions, and the category meaning in the fringe field intersects with the semantic categories of other fields.

Considering the characteristics of communicative function method, when we teach Chinese university students the structure of expressing Russian spatial orientation, we can optimize Chinese students to construct the functional semantic field structure of Russian spatial orientation and improve their learning efficiency. The research of this paper will have certain theoretical value in translation studies, speech communication, etc., and will have a certain enlightenment effect for Chinese students to learn Russian grammar, especially the grammatical knowledge of Russian spatial prepositions.

#### Bibliographic references

- Bondarko, A.V. (1984). Functional grammar[M].

  Moscow: Science, 21-22.
  https://www.twirpx.com/files/science/langua
  ges/linguistics/grammar/teoriia\_funktsional\_
  noi\_grammatiki/
- Bondarko, A.V. (2002). Theory of meaning in the system of functional grammar: on the material of the Russian language[M]. Moscow: Languages of Slavic Culture, 35. https://www.twirpx.com/file/796880/
- Jiadi, W. (2008). Research on the semantics of modern Chinese Fangsuo words[D]. (Master's Thesis) Nanjing Normal University, 21-22. http://www.doc88.com/p-9186756692125.html
- Jiadi, W. (2009). Definition and screening of modern Chinese vocabulary[J]. Modern Languages, 12. https://acortar.link/y6qBqH
   Jing, H. (2020). Research on the functional

- semantic Field of Fangsuo from the perspective of functional grammar [J]. Chinese Character Culture, 08. https://kns-cnki-net-
- 443.vpn.yxc.cn/kcms2/article/abstract?v=3u oqIhG8C44YLTlOAiTRKibYlV5Vjs7i8oR R1PAr7RxjuAJk4dHXoslFtKyDC26v5XIt2 SRZTfEiK7\_dNqJs6PEv\_wI3m6vN&unipla tform=NZKPT
- Popova, Z.D., Sternin, I.A., & Belyaeva, E.I. (1989). Field structures in the language system[M]. Voronezh: Izdateotsivo Voronezh, 6.
- https://search.rsl.ru/ru/record/01001501558 Shchur, G.S. (1974). Field theories in linguistics[M]. Moscow: Science, 64-72. https://www.twirpx.com/file/2427222/
- Yuehua, L. (2017). Practical modern Chinese grammar[M]. Beijing: Commercial Press, 50. https://book.douban.com/subject/1091176/



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# The education role in the development of the information society: Progressive ideas of the world's leading countries<sup>11</sup>

## Роль освіти у розвитку інформаційного суспільства в контексті творчого використання прогресивних ідей провідних країн світу

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https://orcid.org/0000-0001-9221-277X **Olena Borzyk**<sup>16</sup> https://orcid.org/0000-0002-2394-9230

Abstract

The article describes the retrospective of the countries' practice, which gives rise to the conviction of the signs of national character. This experience combines the support of traditions with a desire to listen to the demands of today's developed world. In the article, great attention is paid to the study of education systems in the countries of the European Union, as well as the USA, Canada and other countries, their features in the information society. The article shows similar approaches in the organization of the educational process. We revealed the signs of the national education system based on structural recommendations, the consequences of training and other resources relative to other countries, which will allow diplomats and managers to evaluate the consequences of educational practice, characterize the improvement of state policy in the field of education and make

#### Анотація

У статті охарактеризовано ретроспективу практики країн, що зараджує переконанню ознак національного характеру. Цей досвід суміщає в собі підтримку традицій жаги прислухатися до вимог нинішнього розвиненого світу. Одним із найважливіших шляхів урядових перетворень у різних країнах світу є децентралізація порядків державного керівництва, а також у галузі освіти, у ході якої ведеться поділ прав між гілками влади різних рівнів. У статті велику увагу приділено на дослідженні систем освіти країнах Європейського Союзу, а також США, Канади інших країн, особливостей ïx інформаційному суспільстві. Стаття показує подібні підходи в організації навчального Показано порівняльний процесу. значення освіти системи та методики пілготовки майбутніх спеціалістів У

<sup>&</sup>lt;sup>16</sup> Doctor of Philosophy, Senior Lecturer of Natural Sciences, Municipal Establishment "Kharkiv Humanitarian-Pedagogical Academy" of Kharkiv Regional Council, Ukraine.



<sup>&</sup>lt;sup>12</sup> Ph.D. in Pedagogical Sciences, Associate Professor, Docent of Primary Education Department, Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Ukraine.

<sup>&</sup>lt;sup>13</sup> Candidate of Pedagogical Sciences, Faculty of Pedagogical Education, Management and Arts, Department of Pedagogy, Theory and Methods of Primary Education, Hryhorii Skovoroda University in Pereiaslav, Ukraine.

<sup>&</sup>lt;sup>14</sup> Doctor of Philosophy (Ph.D), Assistant Professor of the Department of Tactics and Combined Military Disciplines, Military Academy, Ukraine.

<sup>&</sup>lt;sup>15</sup> Ph.D. in Pedagogical Sciences, Associate Professor of English and Methods of its Teaching Department, Pavlo Tychyna Uman State Pedagogical University, Ukraine.

informed decisions about its improvement. The training of specialists in the modern information society requires taking into account the ideas of continuity, openness and anticipatory development. The article analyzes the prospects of creative application of the advanced beliefs of different countries of the world for the training of specialists in Ukraine in the conditions of the modern information society.

**Keywords:** education, advanced ideas, information society, leading countries, training of specialists.

#### Introduction

The transition to the information society requires profound changes in the production of knowledge and its transfer and assimilation, and, as a result, fundamentally changes the role and place of education, which becomes the basis for social development.

The process of development of the information society is connected with intensive processes of formation of a new educational paradigm. The basis of the new paradigm is a change in fundamental ideas about a person and his development through education, a transition from a disciplinary to a systemic model of the content of education, the main part of which is to teach to understand the world, society, oneself, one's work.

One of the urgent trends in the growth of modern education is the training of specialists of a qualitatively new type, the realization that the sustainable development of society, overcoming differences depend on the education system, the level of education of the population, its orientation towards mastering new knowledge and competencies throughout life. Currently, the mission of renovating the education system in the conditions of the modern information society and ensuring its compliance with international standards is gaining particular relevance.

The need for a new educational model is caused by the implementation of an eco-humanistic way of constructing an information society, which is based on sustainable and safe development and зарубіжних країнах та Україні. Ми розкрили ознаки національної системи освіти за структурними рекомендаціями, наслідками навчання та іншими ресурсами відносно інших країн, що дозволить дипломатам, менеджерам оцінювати наслідки освітньої практики, характеризувати покращення державної політики у сфері освіти та приймати зважені рішення щодо її вдосконалення. Потребує врахування ідей неперервності, відкритості та випереджаючого розвитку підготовка фахівців у сучасному інформаційному суспільстві. перспективи Стаття аналізує творчого застосовування передових переконань різних країн світу для підготовки фахівців в Україні в умовах сучасного інформаційного суспільства.

**Ключові слова:** освіта, передові ідеї, інформаційне суспільство, провідні країни, підготовка спеціалістів.

replaces the crisis-driven, costly, unsustainable development.

New requirements for a specialist in the context of the development of the information society have determined our interest in the study of the essence and role of the information component in the system of vocational education. The novelty of the theoretical and methodological research lies in the systematization of existing knowledge on the research topic, as well as in identifying and concretizing the conditions for organizing and developing the information environment in vocational education institutions.

We consider it necessary to note that quite recently such concepts as "informatization" (the process of regulating the structure of various production areas based on information and technologies information telecommunication interactions), "information society" and "information culture" considered in the context of the applied activities of specialists on information technologies. Today, information flows and technologies are so rapidly penetrating various areas of human life that they determine the information design of its various aspects: socio-cultural, professional, industrial, educational, etc. In this situation, innovative changes are obvious in many areas, primarily in education.

In modern conditions, education must meet the demands placed on it by society. Education appears as a socially adaptive mechanism capable of responding to social transformations,



and in a sense, it is necessary to develop a model of education in such a way that it (education) functions as a dynamic and flexible system capable of responding to social changes. As the experience of many countries shows, only the anticipatory development of the education sector forms the investment attractiveness of the and ensures a technological breakthrough, all these problems are considered by us in the article.

The purpose of the article: to consider the content and features of training specialists from different countries in the modern information society and to highlight the progressive ideas of the leading countries of the world regarding implementation in the educational process of Ukraine.

#### Literature Review

Many scientists have considered the problem of education in the development of the information society in the context of creative use of advanced concepts from the leading countries of the world. V. Bilan (2010) devoted his research to analyzing the current state and trends in the development of innovation in Germany. He identified the advantages and disadvantages of the state of innovation activity in Germany, as well as measures to use modern foreign experience in order to change the innovation sphere in Ukraine. Under the leadership of V. Kremen (2003; 2014), a complete study of the state and change of National Education during the 25-year period of independence of Ukraine was carried out. He proposed recent problems of the educational range, the causes of their occurrence were identified, and scientifically based traditions of modernizing national education in the situation of globalization, European integration and general self-identification.

- N. Terentyeva, & O. Sytnyk (2016) analyzed education in Ireland and Ukraine, performed a comparative analysis of current trends in the advance of teaching in Ireland and Ukraine, gave a description of the main forms and content of education in both countries. Based on the conducted research, the authors attempt to identify the common and distinctive features of Irish Education for Ukraine and justify recommendations for using the progressive ideas of the Irish experience in the progress of the education system in Ukraine.
- O. Kuchai (2014) highlights «...the main task of modern education in Poland – lifelong learning and the introduction of information technologies

in all spheres of public life and activities». Students take qualified knowledge during their studies (regardless of its duration), which helps them manage their own experience; participate in the methods taking place in the world around them, using information support.

- T. Kuchai (2009) carried out, that «...a comparative analysis of the content of the education system and methods of training future specialists in the UK and Ukraine, which made it possible to identify similar approaches in the organization of the educational process; to identify the presence of different levels of training and features of such training in universities in the UK».
- T. Sverdlova (2002) characterizes, that «...the educational systems of the Far East countries that are in a state of rapid development and indicates significant evolutionary changes, similar to the education system in Ukraine».
- S. Honcharenko (1993) investigate the problem of building a Ukrainian school, emphasize the need to introduce individualization in the learning process.

Kravchenko et al., (2022) show, «...modernization of computer technologies, especially multimedia ones, is a necessary condition for the functioning of specialists in modern society, since specialists are at the center of the educational process, during improvement of professional competence».

Plakhotnik et al., (2022) expose, «...multimedia teaching tools, which are promising and highly effective tools that allow the teacher not only to present an array of information in a larger volume than traditional sources of information, but also to include text, graphs, diagrams, sound, animation, video, etc. in a visually integrated form».

Shchyrbul et al., (2022) demonstrate, that «...relevant ideas of media education, developed form an important basis for the modernization of education, which will contribute to the construction of an information society in the country and the formation of civil society».

#### Methodology

The foundation of scientific research is the philosophical principles of the theory of knowledge, according to which the character of education in the change of the information society is considered as an object of systematic

study, analysis and interpretation of scientific facts from the standpoint of integrity, unity, interaction of various factors; general scientific principles of historicism, cultural relevance, unity of the national and universal.

The basis of the methodology is also a established of ideas set forth in the works of many scientists devoted to the part of education in the progress of the information civilization in various countries in the world.

#### Results and Discussion

The main task and main feature of current education in the information society is lifelong learning and the introduction of information technologies in all ranges of community life and actions. Students, future specialists, receive qualified knowledge during their studies (regardless of its duration), which helps them manage their own experience; participate in the processes taking place in the world around them, using information support.

As T. Sverdlova (2002) notes, that «...the educational systems of the Far East countries are in a state of rapid development». In the process of these changes, the top general successes and the most broadminded world practice are positively combined. As a consequence, the use of training in the modern information society is constantly increasing, and at the same time, its humanistic orientation is becoming more and more pronounced.

Recently, scientists note that research on the development of the modern education area in the modern information society should be carried out comprehensively. In particular, V. Kremen (2006) notes that education, as a whole is a field of complex research, interdisciplinary approach and system analysis, since it is a "systemic" object.

In Ukraine, changes are taking place in the field of politics, economy, culture, and interethnic relations, which encourage a rethinking of educational goals in the modern Information Society (Hryshchenko, 2009).

Global integration processes require an objective, comprehensive scientific analysis of the development of education systems in the modern information society, in both Europe and the East. Ukrainian researchers mainly focus on the study of the education systems of the European Union states, as well as the United States, Canada and other countries. Meanwhile,

as the identification of scientific sources shows, the experience of the development of education systems in the countries of the East, in particular, the training of specialists, is not sufficiently studied (Komar et al., 2021).

Japan is one of the world's leading economic powers, which retains its original national culture under broad international influences. The experience of the Japanese people in educating the younger generation has a long history, which has developed over the centuries as the most important tradition. The study of the historical experience of this country should contribute to understanding the peculiarities of the national character of the Japanese, which combines dedication to traditions and at the same time a evidently spoken and positive desire to income to explanation the necessities of the current civilized world. Japanese education is a unique phenomenon. Its special appeal lies in the high efficiency of the economic and intellectual development of the nation. Japan's education is not isolated from society; it is influenced by the transformations that characterize its development (Kuchai, 2015).

In Ukraine, only the question of increasing the role of education in the life of society, in the "intellectualization" of the economy, in the development of education is raised. Japan, in the middle of the last century, passed the path of "intellectualization" of the economy and became one of the first advanced countries in the world. The prestige of creativity in European culture is very high. According to content analysis, the word "creativity" itself is among the top ten most commonly used words in psychology, sociology, philosophy, and even political science. However, for example, this is not the case in eastern culture, and such a seemingly Western-progressive country as Japan does not have such a cult of creativity as in the United States. The main thing for a Japanese schoolchild, and then a Japanese engineer, or any specialist, is first to learn how to perform something in the best, most effective way. In addition, the entire education system in Japan, organized in its own way, is aimed at serious education of children (Hrynevych, 2011). According to UNESCO, Japan provides its children with education, according to some indicators, almost the best in the world (Sverdlova, 2004).

Investigating the problem of the development of the Ukrainian school, Ukrainian scientists S. Honcharenko (1993) consider it necessary in the modern information society to introduce individualization in the learning process.



Continuing their opinion, we note that the tendency of individualization is a strong cross of the organization of the education process (Oseredchuk et al., 2022).

The formation of aesthetic consciousness of students and young people in the system of education and training of Japan takes place in educational, pedagogical, methodological and other areas. This contributes to the development of creative thinking of young students, parents and other categories of the population. A wide range of aesthetic learning and training makes it possible to develop and constantly update not only the value component (aesthetic perception, aesthetic needs, aesthetic attitude), but also the cognitive component (aesthetic ideas, aesthetic knowledge). In addition, national traditions that contribute to the aesthetic education of students retain their strength today, contributing to the deepening of the aestheticization of the Japanese develop people. Children systematically politeness, obedience, hard insubordination, ability to work in a group, discipline and other qualities. Leading Japanese scientists justify approaches aimed at ensuring the widespread use of national traditions in the educational process of the school (Kuchai, 2015). theoretical justification of training specialists in the modern information society requires taking into account the ideas of continuity, openness, advanced development, which depends on the results of the integral process of teacher formation methodological, general pedagogical, general psychological, scientific levels and is considered as the formation of a scientific worldview based on them (Shunkov et al., 2022).

Modern methodological approaches to the education and training of students in Japanese schools are of considerable scientific interest: egalitarian, activity-based, traditional, cultural, and systematic, partner to the school-university system, as well as the multicultural, functional and approach to the education of children. Creative implementation of these and other approaches ensures achievements in the development of Education, Science, Culture, Nanotechnology and allows the country to be a leader among other advanced countries of the world.

The Ministry of Education, Culture, Sports, Science and Technology of Japan refers to the ways of modernizing the educational process in the modern Information Society in universities: updating the content of training; introducing new training courses; using innovative teaching

methods. Moreover. preparing training instructions and didactic materials for students; a strict system of knowledge assessment; creating the necessary conditions for independent training of students in the modern Information Society; training creative future specialists with a humanistic worldview, developed creative abilities. The content of professional training of teachers is based on a combination of native Japanese philosophical attitudes, national traditions and modern conceptual provisions of domestic and world pedagogy (Kuchai, 2015).

Poland's accession to the European Union has led to another wave of modernization in the education system, in particular in the system of training and improvement of highly qualified specialists in the modern Information Society.

Another feature of professional training of specialists in Poland is the use of various methodological concepts in the classroom, which helps to assimilate knowledge with a predominance of methods activated by discussion, group decision-making, planning and creative development of thinking depending on the program content in the modern Information Society (Kotiash et al., 2022).

A characteristic feature of the training and activity of a Polish specialist is pedagogical control, the modernization of which began in 2011. The task of modernization is the development of the education (coordination of external control over teaching in the country, formulation of general requirements, selection of assessment and control tools, training of persons responsible for external pedagogical supervision) and improvement of individual schools and other educational institutions. In each voivodship, regional centers for the quality of education are established institutions responsible for conducting pedagogical supervision. Education quality inspectors should examine the quality of Educational Institutions' activities to ensure that they meet the same criteria for all schools. The introduction of external monitoring helps to analyze, draw conclusions, and outline short-and long-term strategies for the development of education at the state and local levels.

One of the qualities of professional training of specialists in Poland is increased attention to the educational component.

European education requires that a modern specialist in the modern information society is not only a person who gives knowledge, but also

an adviser to the student regarding its development, independent formation of its creative foundations. A new generation of future specialists should be prepared for such tasks, which is characterized by knowledge, information skills and qualified pedagogical training (Kuchai, 2014).

In Europe, the country with a pronounced decentralized education system is the United Kingdom, which is associated with its division into England, Wales, Scotland and Northern Ireland. In each of these regions, the education system reveals certain specifics. At the same time, both local education authorities and educational institutions themselves enjoy the right to solve many specific problems independently everywhere.

Great Britain is one of the countries that were the first to embark on the path of industrial development and felt the negative consequences of industrialization and the scientific and technological revolution, to overcome which the national and original education system of the population created in the country is focused. It is based on universal values and folk traditions of environmental protection, wide dissemination of progressive ideas in society (Kravchenko et al., 2022).

Comparing the forms of organization of training and methods in Ukraine and the UK, we note that, although the didactics of higher education in the UK does not clearly distinguish between teaching methods and organizational forms of training, the positive thing in university education is that discussions, debates, group forms of training are extremely widely used. As well as the imitation of certain fragments of their future activities by future specialists, as a result of which more effective training of students is carried out because in the classroom they learn to argue their opinions, listen to each other, conduct discussions, etc.

Discussion both as a method of teaching and as a form of organizing the educational process, according to English experts, has a number of important advantages: it helps students develop the ability to express and argue their opinions, listen to each other, and act as critics. Conducting a discussion, which requires not only the logical construction of the utterance, but also the correct literary design of the provisions, contributes to the development of spontaneous speech. Discussion forms of work form students' scientific thinking, stimulate their independence and activity, develop the ability to discuss

problems, and prepare them for their future profession (Kuchai, 2009).

Germany has a highly developed policy in supporting innovation. The National High-Tech Strategy, introduced in 2006, covers all ministries. It creates strategies for 17 "future areas" and goals to instrument new skills as soon as possible. In February 2008, this state implemented an internationalization strategy to appeal scientists, students and foreign investment. Germany also reserves investigate plans to support research in schools and universities. Significant advantages of Germany can be defined as: close cooperation between higher education institutions: research institutions and enterprises; creation of clusters; highly developed infrastructure; competitive environment; high level of demand for innovative products and services; developed policy in the field of innovation support (Bilan, 2010).

The study and implementation of foreign experience through its adaptation to domestic educational and cultural traditions will contribute to providing the population with broad access to the expansion of the worldview and personal development throughout life, which in turn is the key to the development of education in our country.

In the course of conducting a comparative pedagogical analysis of the development of education in Ireland and Ukraine, modern trends in the development of Education in Ireland are highlighted, in particular: public partnership in education, namely: the creation of public organizations (AONTAS, NALA). In addition, regional education in order to ensure work with people who want to return or continue their education, offering a person-oriented approach using individual training, in order to ensure positive personal or social results. Modernization of the content of educational programs for adults, in particular with the allocation of areas of work with different groups of the population (women or young mothers, men, travelers, people with disabilities, the elderly, migrants refugees, residents); disadvantaged people, rural integration of national programs to participate in the European educational program environment to involve the population in education (Terentyeva & Sytnyk, 2016).

## **Conclusions**

In our opinion, the progressive ideas of the leading countries of the world that should be





implemented in Ukraine include training of a research specialist by applying a researchoriented approach and foreseeing university curricula in the educational process. In addition, partnership approach to the school-university system; implementation of the leading function of environmental education in the formation of a high culture of behavior in the environment among the younger generation, combining the cultural traditions of the people and modern ideas about human interaction with nature. Moreover, enrichment of the methodological system of environmental education in Ukraine, taking into account the progressive ideas of Great Britain and providing their scientific and methodological justification by: diversity of teaching methods informational). interactive, increasing the time for independent work of students in order to develop critical thinking of future specialists; introducing the most relevant subjects of our time to the curriculums of pedagogical faculties of universities: technological approach to equipping the educational process.

Among the orientations of information provision of professional education, the following can be distinguished: information mobility, efficiency, as well as the need to ensure the reliability and validity of synthesized knowledge, which allows productively (in various ways) to solve professional tasks within a given time limit in conditions of high professional competition; clarity, systematicity and step-by-step provision of information, characterized by imperatives: from knowledge to knowledge, from complete knowledge to comprehensive knowledge, from existing knowledge to more perfect knowledge". implemented with the help of experience that professional ensures continuous improvement based on the formation of necessary professional competencies; focus on high-quality information professional support, characterized by the relevance and reliability of the information resource used.

Summing up, we can say with confidence that the goal of professional education is not just the accumulation of knowledge and skills, but also the professional development of an individual who has the ability to independently produce knowledge of a new type.

# Bibliographic references

Bilan, V.I. (2010). Innovative sphere of Germany: development trends and ways of using progressive experience for Ukraine. Scientific works of KNTU. Series "Economic

- Sciences". 17. http://www.kntu.kr.ua/doc/zb\_17\_ekon/stat\_17/69.pdf
- Honcharenko, S. U. (1993). Socio-pedagogical problems of building the Ukrainian school. Native school, 4, 51-56. (In Ukranian)
- Hrynevych, L. M. (2011). Educational indicators for international evaluation (on the example of the report "View of education 2011): OECD indicators". Theory and methodology of education management. 7. http://umo.edu.ua/images/content/nashi\_vyd anya/metod\_upr\_osvit/v\_7/3.pdf
- Hryshchenko, I.M. (2009). The state and features of higher education management in Japan. Tribuna, 9-10, 26-29. (In Ukranian)
- Kotiash, I., Shevchuk, I., Borysonok, M., Matviienko, I., Popov, M., Terekhov, V., & Kuchai, O. (2022). Possibilities of Using Multimedia Technologies in Education. International Journal of Computer Science and Network Security, 22(6), 727-732. https://doi.org/10.22937/IJCSNS.2022.22.6.
  91
- Komar, O., Bazhenkov, I., Vnukova, O., Kolomoiets, H., Yanchyshyn, A., & Polishchuk, O. (2021). Theoretical Principles of Using Innovative Modern Technologies in Higher Education Institutions. International journal of computer science and network security, 21(9), 185-190.
- Kravchenko, T., Varga, L., Lypchanko-Kovachyk, O., Chinchoy, A., Yevtushenko, N., Syladii, I., & Kuchai, O. (2022). Improving the Professional Competence of a Specialist in Poland by Implementing Multimedia Technologies. International Journal of Computer Science and Network Security, 22(9), 51-58.
- Kremen, V. G. (2006). The philosophy of anthropocentrism in the context of educational problems. Electronic scientific edition of the materials of the international science and practice conf. "Humanism and Education" (June 11–13, 2006) / Ministry of Education and Science of Ukraine, Academy of Pedagogical Sciences of Ukraine, Vinnytsia National Technical University, Yevle University (Sweden). Vinnytsia National Technical University (VNTU). http://conf.vntu.edu.ua/humed/2006/txt/06kv kpo.php
- Kremen, V.G. (2003). Education and science of Ukraine, ways of modernization (Facts, reflections, perspectives). K.: Diploma. (In Ukranian)
- Kremen, V.G. (2014). Synergetics and education: monograph. K.: Institute of the Gifted Child.



- Kuchai, O. V. (2014). Theoretical and methodical principles of training future primary school teachers by means of multimedia technologies in higher educational institutions of Poland. Cherkasy: publisher Chabanenko Yu. A. (In Ukranian)
- Kuchai, T. P. (2009). Preparation of future teachers in the universities of Great Britain for ecological education of students (thesis. ... candidate ped. Sciences) Cherkasy, Bohdan Khmelnytsky National University, 237. (In Ukranian)
- Kuchai, T. P. (2015). The system of professional training of primary school teachers in Japanese universities for the moral and ethical education of students. (Dissertation of Dr. Ped. Sciences). Cherkasy 400. Bogdan Khmelnytskyi Cherkasy National University.
- Oseredchuk, O., Mykhailichenko, M., Rokosovyk, N., Komar, O., Bielikova, V., Plakhotnik, O., & Kuchai, O. (2022). Ensuring the Quality of Higher Education in Ukraine. International Journal of Computer Science and Network Security, 22(12), 146-152.
- Plakhotnik, O., Strazhnikova, I., Yehorova, I., Semchuk, S., Tymchenko, A., Logvinova, Ya., & Kuchai, O. (2022). The Importance of Multimedia for Professional Training of Future Specialists. International Journal of Computer Science and Network Security, 22(9), 43-50.

- Shchyrbul, O., Babalich, V., Mishyn, S.,
  Novikova, V., Zinchenko, L.,
  Haidamashko, I., & Kuchai, O. (2022).
  Conceptual Approaches to Training
  Specialists Using Multimedia Technologies.
  International Journal of Computer Science
  and Network Security, 22(9), 123-130.
- Sverdlova, T. G. (2002). Elementary school in Japan: compliance with the criteria of humanization of education. Theoretical issues of culture, education and upbringing. coll. of science works of KNLU, NMAU, 21, 117–120. (In Ukranian)
- Sverdlova, T. G. (2004). Theoretical principles of the process of humanization of education in Japan. (diss. ... candidate ped. of science). Drahomanov National Pedagogical university, Kyiv. 216.
- Shunkov, V., Shevtsova, O., Koval, V., Grygorenko, T., Yefymenko, L., Smolianko, Y., Kuchai, O. (2022). Prospective Directions of Using Multimedia Technologies in the Training of Future Specialists. International Journal of Computer Science and Network Security, 22(6), 739-746. https://doi.org/10.22937/IJCSNS.2022.22.6. 93
- Terentyeva, N. & Sytnyk, O. (2016). Adult education in Ireland and Ukraine: common and different in development trends. Education, 1(13), 198-207. (In Ukranian)



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# Forming ecological culture in educational applicants within the context of modern education

## Формування екологічної культури здобувачів освіти в умовах сучасної освіти

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Written by:

Svitlana Tolochko<sup>17</sup>

https://orcid.org/0000-0002-9262-2311

Nataliia Bordiug18

https://orcid.org/0000-0002-3489-4669

Liudmyla Mironets19

https://orcid.org/0000-0002-9741-7157

Irvna Mozul<sup>20</sup>

https://orcid.org/0000-0002-8331-9011

Iuliia Tanasiichuk<sup>21</sup>

https://orcid.org/0000-0001-7772-1509

#### Abstract

The article reveals the foundations of the formation of the ecological culture of youth. The most important function of culture is highlighted. Taking into account the latest global trends, it is claimed that the formation of ecological culture among young people is gaining importance. The article notes that culture consists of four main elements. Each of these components plays a significant role in creating a cultural image and providing environmental education specialists. Digitization of education is an undeniable requirement of modern times. The current system of education and science must undergo major digital changes and meet the global trends of digital development so that every person can successfully realize his potential. The article defines the main goal of open education. Features of open education are quality, excellence, accessibility, flexibility creativity. In this system, the learning process becomes open and creative, free access to information resources, freedom of choice, an individualized approach are ensured, conditions are created for joint creative mastering of the

## Анотація

статті розкрито формування основи екологічної культури молоді. Виділено найважливішу функцію культури. Враховуючи новітні світові тенденції, стверджується, що питомої ваги набуває формування екологічної культури у молоді. Стаття зазнасає, що культура складається з чотирьох основних елементів. Кожен із цих компонентів відіграє ведику роль у створенні культурного іміджу та забезпеченні екологічної освіти спеціалістів. Цифровізація освіти є беззаперечною вимогою сучасності. Нинішня система освіти і науки має зазнати великих цифрових змін і відповідати світовим тенденціям цифрового розвитку, щоб кожна людина могла успішно реалізувати свій потенціал. У статті визначено головну мету відкритої освіти. Особливості відкритої освіти є якість, передовий характер, доступність, гнучкість і креативність. У цій системі процес навчання відкритим ста€ творчим, забезпечується вільний доступ інформаційних ресурсів, свобода вибору, індивідуалізований підхід, створюються умови для спільного творчого освоєння світу у

<sup>&</sup>lt;sup>21</sup> PhD, Lecturer of Medical and Biological Fundamentals of Physical Culture Department, Pavlo Tychyna Uman State Pedagogical University, Ukraine.



<sup>&</sup>lt;sup>17</sup> Doctor of Pedagogical Sciences, Professor, Chief Researcher of the Laboratory of Extracurricular Education Institute of Problems on Education of the National Academy of Educational Sciences of Ukraine, Ukraine.

<sup>&</sup>lt;sup>18</sup> Doctor of Pedagogical Sciences, Professor, Department of Ecology and Environmental Tecnologies, Zhytomyr Politechnic State University, Ukraine.

<sup>&</sup>lt;sup>19</sup> PhD of Pedagogical Sciences, Associate Professor, Department of Biology and Teaching Methods of Biology, Sumy State Pedagogical University named after A.S. Makarenko, Ukraine.

<sup>&</sup>lt;sup>20</sup> Candidate of Pedagogical Sciences, Senior Lecturer of the Department of Theory and Methodology of Primary Education, Oleksandr Dovzhenko Hlukhiv National Pedagogical University, Ukraine.

world in the formation of the ecological culture of the students of education. We are lighted up the principles of the educational policy of digital development.

**Keywords:** education seekers, open education, digitalization, culture, ecological culture.

## Introduction

Informatization of society contributes to the solution of a large number of urgent tasks, among which the issue of the introduction of open education takes place both at the global level and in individual countries and regions. Scientific and practical interest in the phenomenon of open education is associated with new educational opportunities, namely, deepening democratization. This is flexibility in the organization of the educational process, individualization of education, deepening and expansion of the source and information base of educational and scientific projects, (Leshchenko & Yatsyshyn, 2014).

In order for each person to be able to successfully realize their abilities, the modern system of education and science must undergo thorough digital changes and correspond to the global trends of digital development. Thus, digitalization of education is an indisputable requirement of modern times (Ivashev et al., 2021).

The issues of the formation of ecological culture and health-preserving practices of young people do not depart from economic and political phenomena that vividly reflect the contradictions of our society. One of the urgent tasks of pedagogical science is to provide the future specialist with knowledge of ecological culture regarding the requirements for professional activity. In order to form an ecological culture of education seekers, a modern approach to the problems of raising the personality of a new formation, a healthy, mobile, competitive, morally mature, professionally cultured specialist ready for active life in the conditions of modern educational phenomena is needed. This формуванні екологічної культури здобувачів освіти.

Вилілено принципи освітньої політики цифрового розвитку. При формуванні екологічної культури фахівцуів в контексті сучасних освітніх явищ має чинне місце інформаційне освітнє середовище відкритої освіти. Екологічна культура фахівців може допомагати трансформації людства споживацького способу життя до ощадливого та відновного, оскільки саме в закладах освіти можна виховати любов до навколишнього середовища, краси та здоров'я.

**Ключові слова:** здобувачі освіти, відкрита освіта, цифровізація, культура, екологічна культура.

requires open education and digitalization. It is not easy to organize high-quality training of specialists with the aim of forming an ecological culture of education seekers using digital technologies, for this it is necessary to inspire and motivate the participants of the educational process, to solve various technical problems. Therefore, in the current conditions, open education and acquired experience in the use of new information and communication technologies, distance learning, mastering the relevant skills and personal competencies acquire a special significance (Osadchuk, 2022).

**The purpose.** To reveal the foundations of the formation of ecological culture of educational applicants in the context of modern educational phenomena: open education and digitalization.

# Literature Review

M. Leshchenko, A. Yatsyshyn (2014) considered the historical basics for the appearance of the type "open education", they generalized the scientific literature to compare the position of scientists regarding the content of the idea of "open education", examined the genesis of using this concept. In addition, recognized the key problems of the progress of the open education system, acceptable the convenience of using open education technologies in the educational development, measured capable instructions for realizing elements of open education.

Ye. Ivashev, O. Sakhno, V. Hriadushchna, A. Denisova, A. Lukiianchuk, S. Udovyk substantiated conceptual research plans reflecting the content of digitization and its purpose in the development of education. The



article presents a model of the development of digital competence of teachers of professional (vocational and technical) education institutions. The authors indicated plans for the application of various digital technologies in the educational process, as well as the introduction of elective courses and short-term thematic author's courses into the educational process of improving the qualifications of teachers of professional (vocational and technical) education institutions (Ivashev et al., 2021).

- I. Maistryuk I. & N. Ponomaryova (2022) considered the issue of introducing innovative pedagogical technologies in digital schools, such as the following topics: prospects for the development of education in a digital society, innovations in education, and information and technologies communication education.
- T. P. Gerasimyk-Chernova (2021) devotes her research to the problems of ensuring digitalization of the educational process under martial law; discussion of issues related to the development of digital competence of teachers and applicants for education in vocational education institutions, the acquisition of digital literacy skills and digital culture.
- V. Osadchuk (2022) carried out a historical analysis of the development of open education, analyzed its strengths and weaknesses. The scientist positions open education as a modern educational technology, a factor of anticipatory development of society, aimed at helping people's openness to knowledge. The author studied the urgent issues of the use of information technologies, as well as their implementation in the educational process of educational institutions that provide educational services both in the context of traditional and distance learning. He emphasizes that open universities have both advantages over the system and traditional education their vulnerabilities, while creating a perspectives for improving the quality of education.
- O. Bida, T. Zorochkina, I. Oros, O. Kuchai, A. Chichuk & T. Kuchai (2021) studied the problem of ecological culture development of educational applicants and expressed, concretized and methodically corroborated pedagogical situations for real health-saving activities of students in the educational process of educational institutions.

Xiaoming Yi (2019) emphasizes that: «two outcomes of ecological education through esthetic engagement in schools: students acquire rich and full esthetic experiences through wholebody involvement in the natural environment and students' art-making promotes conversation between their esthetic experiences, art creation, and ecological ethics».

- Z. Alimin, N. Warnandi, R, Akhlan, & E. Ratnengsih (2019) believed that: «the objectives of the study to find out the implementation of inclusive education have an impact on the expansion of learning access for all children in the context of compulsory education, recognizing the objective conditions of inclusive education implementation from the perspective of cultural approaches, policies and practice of inclusive education».
- A. Hoffmann, & L.L.P. Sobrinho (2022) show in the article recommendation to examine Environmental Education as an instrument of environmental and ecological sustainability.
- S. Findlow (2019) notes that: «...a critical framework integrating Capability, Feminist and Critical Pedagogic theories to challenge the reductive focus within sustainability discourses on the physical environment, and education's typical 'development' focus on economic growth».
- P. Kubiznak, W. Hochachka, V. Osoba, T. Kotek, J. Kuchar, V. Klapetek, K. Hradcova, J. Ruzicka, & M. Zarybnicka (2019) shows that: «...purpose-designed systems, applying features found in Internet-of-Things devices, enable more efficient gathering, managing, and disseminating of a diverse array of data needed to study the life histories of wild animals».
- Q. Jian (2020) believed that: «due to advances in technology and the advent of many inventions, many factories have emerged, causing many environmental problems».

# Methodology

For the research, a set of methods was used in particular: analysis of philosophical, pedagogical, psychological literature, synthesis, comparison, generalization for the study of scientific literature, to compare the positions of scientists regarding the content of the concept of "open education"; to determine the importance of open education in the process of digitalization of educational and pedagogical space.

At the stage of formation of an environmental problem, methods that stimulate independent activity play an important role. The tasks are aimed at identifying contradictions in the interaction of society and nature, at forming a problem and generating ideas about the way to solve it, taking into account the concept of the studied subject. Discussions stimulate educational activities. promoting manifestation of the applicants' personal attitude problems, familiarization with environmental conditions, and the search for opportunities to solve them.

The theoretical and methodological basis is the philosophical propositions about the general connection and interdependence of nature, man and society; cultural approach to interaction in the "man-nature" system; psychological and pedagogical concepts about the leading role of activity in the formation and development of personality; concepts of environmental education and upbringing; ideas of personally oriented education; the concept of problem-based developmental learning; the main provisions of the competence approach in education.

The methodological basis of the research was made up of various approaches that define activity as the leading condition for full-fledged personality development in the educational process and allow considering the person of the future specialist in the context of subject-subject educational relations as a subject of professional development; interdisciplinary and systemic approaches that contribute to the construction of the educational process on the basis of continuity, integrity and system; a complex of philosophical, natural, psychological and pedagogical concepts of the interaction of society and nature; principles of humanization and humanization of higher education.

In the field of knowledge, there is a rethinking of the theoretical, methodological and conceptual foundations of the formation of the ecological culture of the individual. Natural and active concepts of ecological culture appear. Studies on the development of a typological approach in the field of ecology, environmental culture and environmental education have shown that the cognitive paradigm is evolving from a classical (biological) understanding of the essence of the concept of "ecological" to an operational one. The methodological analysis made it possible to distinguish two types of environmental culture of the individual: natural and active. The naturalscientific type of ecological culture of the individual is characterized by "classical" ideas

about the essence of ecological activity. For the most part, they are reduced to a biological approach to the study of environmental issues. The active type of environmental culture of the individual is a modern methodology for solving environmental problems in society. All the above-mentioned problems are considered by us in the article.

## Results and Discussion

Taking into account modern world trends, the formation of ecological culture among young people is of primary importance. We will show the main advantages of forming an ecological culture of youth in the context of open education and digitalization. We would like to note that culture consists of four main elements:

- Concepts (found mostly in language; thanks to them, people's experience can be organized.
- Relationships (they not only distinguish certain parts of the world with the help of ideologies, but also show how these components are related to each other: in space and time, in meaning, on the basis of causal conditioning.
- Values (generally accepted beliefs about the goals to which a person should strive. They form the basis of moral provisions.
- Rules and regulations (these elements regulate the actions of people in accordance with the values of a certain culture (Horbach et al., 2019).

Each of these components plays an extremely important role in creating the cultural image and environmental education of applicants for education. Culture, like any other social phenomenon, performs certain functions in public life, is a complex of subjectivations and objectivations that must necessarily be assimilated in the process of cross-cultural education and used in everyday orientation. The most important function of culture is that it is the way in which societies solve global problems in the context of modern educational phenomena: open education and digitalization.

Taking into account modern world trends, the main modern problems of education and nature protection are of particular importance in Ukraine, so the preparation of future specialists for environmental education, and the formation of ecological culture among applicants for education is an urgent problem in the activities of educational institutions and requires new approaches to its optimal solution. The



ecological culture of future specialists can contribute to the transformation of humanity from a consumer lifestyle to a lean and restorative one (Akseonova, Varetska, Klopov & Bida, 2020).

It is very important to bring environmental education as close as possible to everyday life – to promote the awareness of humanity that their everyday activities affect the ecological state of the immediate environment, as well as to form a culture and thinking that would help them in any situation to evaluate their own activities from the point of view of environmental expediency.

An important component of the ecological culture of a specialist is the valeological component, which provides for the preservation and promotion of human health, which to a certain extent depends on the ecolological state of the environment.

Health has always been a major factor in the nation's security. Health should be one of the results of education, one of the main foundations of modern society. Today, there is a need to create an educational innovation system that would not only educate an educated cultured person, but also preserve his health.

Work on the formation of an ecological culture of educational applicants should combine two interrelated components:

- their acceptance of healthy lifestyle values (propaganda component);
- their acquisition of knowledge acquisition of skills and abilities necessary for independent fulfillment of requirements and transfer of knowledge to students in future professional activities (content, information and practical planes).

The study of the state of the problem of the formation of ecological culture of educational applicants in modern scientific research allows us to formulate, concretize and scientifically substantiate the pedagogical conditions for effective health-saving activities of students in educational process of educational institutions, namely a value attitude to the preservation and promotion of health; mastering the health values necessary in socio-personal, mental and physical terms to increase the effectiveness of professional education and further effective professional activitie. In addition, implementation of a systematic solution to the problem of preserving and strengthening health in educational. informational

behavioral terms: differentiated and individual selection of the content, forms and methods of forming the ecological culture of educational applicants, taking into account the characteristics of the student population. Moreover, development of a system of software and methodological support for the problem of forming the ecological culture of educational applicants, the development of a complex of methodological and organizational measures for implementation of this problem; consideration and implementation of recreational and rehabilitation prospects and capabilities of the body (Bida, Chychuk, Kuchai, Honcharuk & Kuchai, 2022; Bida, Zorochkina, Oros, Kuchai, Chychuk & Kuchai, 2021).

In the XXI century, thanks to the development of information technologies that provide fast, universal and remote access to information and knowledge, new information and pedagogical technologies have emerged that form the basis for a qualitatively new development of the phenomenon of education. open development of the category "open education" begins with definitions describing a democratic, individualized, flexible process of obtaining knowledge, which is provided, first of all, by the purposeful activity of the teacher and the management of the educational institution. At the present stage, the application of this category in the vast majority of cases is associated with ICT, in particular cloud technologies, thanks to the use of which the availability, individualization and flexibility of training is realized (Leshchenko & Yatsyshyn, 2014).

Therefore, open education is an integral part of informatization of society, reflects the general trend of consistent transition of educational processes from one state to another, the formation of the defining information and communication basis for the development of education and is necessary in the formation of the ecological culture of educational applicants.

The main purpose of open education is to prepare applicants for full and effective participation in public and professional life in the information society. Features of open education include quality, advanced character, accessibility, flexibility, creativity. In this system, the learning process becomes open and creative, free access to information resources, freedom of choice, an individualized approach are provided, and conditions for joint creative development of the world are created in the formation of the ecological culture of educational applicants.

Open education in the formation of the ecological culture of educational applicants ensures continuity of learning throughout life, changes in the nature of relations between participants in educational activities, efficiency and accessibility in obtaining knowledge. Open education, integrating all the valuable things that science has developed, reflecting the truly democratic and humanistic orientation of the educational process, is the dominant feature of the civilizational development of society (Leshchenko & Yatsyshyn, 2014).

Today, the interpretation of the terms "openness" and "open education" in pedagogical theory and practice is characterized by a variety of approaches (synergistic, anthropological, and systemic) to the disclosure of their essence. It is in an open system that you can express your personal opinion, choose your life path, and build your own career. Providing freedom for such choices means giving a person the opportunity to receive education without external restrictions. In an open education system, citizens who have difficulties in obtaining an education or who have not previously had basic or vocational education should have a real opportunity to study. Today, a cultural picture of the world has replaced the principles of the mechanical picture of the world, and the defining trend of the modern educational process should be integration, where the ideas and principles of synergetics have become the basis for holistic perception and awareness of the surrounding world. The informatization of education will raise the educational process in the formation of the ecological culture of educational applicants to the level of active social creativity, and this will expand the opportunities for Human Development and contribute to the integration and transformation of various kinds of information in an open information and educational environment.

Elements of open education can be actively used in the formation of the ecological culture of educational applicants in distance education and lifelong learning; information communication technologies make it possible not only to tell, but also to demonstrate clearly, modeling a certain situation, which will give positive results in the short term. In addition, electronic publications will promote access to more educational materials (digital formats of textbooks, methodological materials for the formation of the ecological culture of educational applicants, which is much cheaper and freely available). This ensures a higher level of system transparency and achieves higher quality indicators (Leshchenko & Yatsyshyn, 2014).

Open education can expand the educational opportunities of a person in the formation of ecological culture and create a qualitative level of openness and unity of the learning system at all levels, namely, in all types and varieties of internal and external communications. This is the connection between society and the state and the education system as a whole and specific educational institutions. and internal communications include the connection between teacher and teacher; student and student; teacher and student; school administration and teacher and student.

Collective participation in the process of forming the ecological culture of educational applicants is created thanks to a variety of dialogue systems that allow you to communicate in real time, in particular: e-mail, video conferences, and chats. For example, Swedish teachers use "electronic blackboards" (www.sisweb.com/math-/whiteboard/), newsgroups (www.peg.apc.org/iearn/-works.htm), conferences (www.ascusc.org/jcmc), special programs: collaborative and multimedia learning environment (www.cc.gatech.edu/gvu/edtech) integrated information environment (www.kie.berkeley.edu/KIE) (Leshchenko & Yatsyshyn, 2014).

In connection with the digitalization of education, the role of individual elements in the content of components of the ecological culture of educational applicants is changing and new elements are appearing. Therefore, for example, in the motivational and value component, the importance of awareness of the value of selfeducation increases. In the content and procedural component - a special place is occupied by the skills of using information and communication technologies and media literacy. In the control and reflexive component – to plan your own educational and cognitive activities and manage them using automated control and diagnostic tools, etc. (Maistryuk Ponomaryova, 2022).

Digital information and communication technologies in the formation of the ecological culture of educational applicants replace, no matter how sad it may be to state, the book and the printed word as the dominant carrier of an information resource. Each new method of information dissemination makes the challenge to society its own, unexpected yesterday, opportunities for storing and transmitting information, for which it is necessary to develop new structures and methods of management. According to smartphones and laptops, today



there is a strong technological development, which is characterized as "digitization", "automation" and "networking". Almost any data can be converted to digital format, their number is almost unlimited due to a variety of storage options (therefore, publicity about the excess of information is spreading more and more loudly). Thanks to networks, stored data is instantly processed automatically and instantly becomes available to the whole world. All this simultaneously leads to changes and creates a wave of new challenges.

The implementation of the digital development educational policy is based on the following principles:

- openness consists in providing open access to departmental data (information), unless otherwise established by law;
- transparency consists in ensuring the possibility of using open external interfaces departmental information to systems. including application programming interfaces;
- reusable consists in ensuring an open interagency exchange of solutions and their
- technological neutrality and data portability - is to ensure access to departmental services and data and reuse regardless of technologies or their products;
- citizen orientation consists in ensuring priority consideration of the needs and expectations of citizens when making decisions on the forms or methods of performing state functions;
- inclusivity and accessibility is to provide an opportunity for all citizens to enjoy the latest achievements of information technologies and access to services;
- security and confidentiality is to provide citizens and business entities with a safe and reliable environment in which electronic interaction with the state takes place, including its full compliance with the rules and requirements established by laws on the protection of personal data and information belonging to the state. electronic identification and trust services;
- multilingualism consists in ensuring the provision of administrative, information and other services to citizens and business entities, including cross-border ones, using the language of their choice;
- decision support consists in ensuring the use of the latest information technologies for the development of software products that

- support decision-making by executive authorities during the exercise of power;
- administrative simplification consists in ensuring the acceleration and simplification of administrative processes through their digital development;
- information retention is to ensure the storage of solutions, information, records and data, reliability and integrity, as well as their availability in accordance with the security and privacy policy for a certain period of time:
- efficiency and effectiveness assessment consists of conducting a comprehensive assessment and comparison of at least two alternative solutions to ensure the effectiveness of the exercise of power (Ivashev et al., 2021).

Based on the analysis of the directions of development of digital technologies, taking into account the results of the research described above, as well as trends in the organization of the process of forming the ecological culture of educational applicants in the conditions of modern educational phenomena: open education and digitalization in quarantine due to the pandemic, such modern educational trends will be determined, which will soon affect the education system:

- distance learning, online learning and blended learning;
- non-formal learning (informal learning);
- cloud computing (cloud technology);
- gamification;
- Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR);
- mobile technologies in training;
- STEM Education:
- educational robotics:
- 3D technologies;
- programming or coding (Ivashev et al., 2021; Kuzminskyi, Bida, Kuchai, Yezhova & Kuchai, 2019).

When forming the ecological culture of educational applicants in the context of modern educational phenomena: open education and digitalization, a single information educational environment should provide the following functions: information system, which provides open access to information, creates conditions for information exchange; interactive, which allows you to implement internal and system connections; communication, which allows you to maintain connections "inside", as well as with the "external" information space; coordinating,



that is, to record and present in a relationship the content that is addressed to different subjects; developmental: development of intelligence, personal creative qualities; cultural-forming, related to information culture; professional-oriented, focused on the profile of future professional activity.

Based on the purposes, objectives and characteristics of the implementation of the formation of the ecological culture of educational applicants in the conditions of modern educational phenomena: open education and digitalization, the main principles of functioning are the following:

- the principle of an integrated approach to the problem of informatization of Education, which provides for:
- scientifically based determination of the primary input state of the informatization process;
- program-based approach to the development and management of this process;
- cooperation of subjects interested in the problem of informatization of Education;
- changing traditional views on the process of informatization of Education;
- the principle of systematic construction of informatization of education of subjects, which requires:
- creation of new organizational structures that ensure the organization and functioning of technologies;
- openness of this system at all levels;
- availability of information exchanges (Gerasimyk-Chernova, 2021; Kuchai, Honcharuk, Kuchai, Visaver & Syroezhko, 2022).

The implementation of a comprehensive, scientifically and methodologically based approach to solving this problem, in our opinion, will significantly increase the effectiveness of the formation of the ecological culture of educational applicants in the conditions of modern educational phenomena: open education and digitalization. Turning to the problem of the general plan - to the value orientations of students - it can be stated that the ecological culture of applicants for education in the conditions of modern educational phenomena: open education and digitalization occupies a place that is not adequate to its real potential. Analyzing this problem, we identified particularly weak points in the educational process of Higher Education regarding the formation of the ecological culture of educational applicants in the conditions of modern

educational phenomena: open education and digitalization. First, from the point of view of information security of students on the issues of strengthening and preserving health; second, from the point of view of their mental and physical activity; third, from the point of view of the ability to preserve and strengthen health. Fourth, from the point of view of socially positive attitudes in the field of its development. Software and methodological support on the problem of formation of ecological culture of educational applicants in the conditions of modern educational phenomena: open education and digitalization depends, first, on such factors as material support of the educational process; the contingent that participates in the educational process. In addition, the implementation of specific conditions of the program (review of the content of educational material, the use of various forms of organization of educational activities, the choice of adequate content and form of training methods, taking into account the individual characteristics of students in the organization of training sessions).

These factors may vary in different regions, taking into account the conditions, but the very principles of building the process of forming the ecological culture of applicants for education in of conditions modern educational phenomena: open education and digitalization, its attitudes remain virtually unchanged. These are: from an educational point of view-training students in health-saving activities, health-saving principles, methodological features and practical skills in organizing independent classes of recreational and health-improving orientation. Development of activity and independence in the implementation of self-education and selfprograms; improvement motivationaland positionsinstallation behavioral organization of the pedagogical process with a focus on changing personal aspirations from individual improvement to socially important ones. The ability to use the potential of ecological culture for successful mastery of professionally significant abilities: applied skills and abilities, increasing the body's resistance to adverse environmental influences, mental and physical activity. which determines the further achievement of skill in their profession and career growth of a specialist (Bida, Zorochkina, Oros, Kuchai, Chichuk & Kuchai, 2021; Kuchai, Kuchai, Rokosovyk, 2022).

The ecological culture of educational applicants in the conditions of modern educational phenomena: open education and digitalization is the defining basis for the comprehensive and



harmonious development of the student's personality, lifestyle and life position.

As you know, culture is a complex of subjectivations and objectivations that must necessarily be assimilated in the process of crosscultural education and used in everyday orientation. The most important function of culture is the way societies solve problems.

Taking into account modern world trends, the main modern problems of education and nature protection are of particular importance in Ukraine, so the formation of an ecological culture of educational applicants in the context of modern educational phenomena: open education and digitalization is an urgent problem in the activities of educational institutions and requires new approaches to its optimal solution. The ecological culture of educational applicants can contribute to the transformation of humanity from a consumer lifestyle to a lean and restorative one, because it is from educational institutions that you can instill a love for the environment, for beauty, and for health.

The relevance of the environmental problem is enhanced by Ukraine's entry into the European and world levels, which significantly expands the functions of teachers. It is required to master new teaching technologies, the ability to rebuild the educational space into an effective pedagogical system based on the replacement of the reproductive style of pedagogical activity with a creative one.

The European Office of the World Health Organization and the Council of Europe has published the project "European Network of Health Promotion Schools". Some schools in our country have the status of an experimental educational institution of the all-Ukrainian level for the development of models of a school for promoting health, a system of continuous valeological education. A working group of the Ministry of Education and Science of Ukraine, the Academy of Pedagogical Sciences, and the UNICEF children's fund in Ukraine has been established to develop a concept for the formation of a healthy lifestyle in children and youth. The national network of Health Promotion Schools is designed to fulfill an important task – to raise a healthy generation. In Ukraine, the model "Educational Institution - School of Health Promotion" has been developed. Schools in different regions of Ukraine are called upon to develop their own models and create health promotion schools (Kuchai, 2010; Nxumalo, Nayak & Tuck, 2022).

#### Conclusions

From the above, we can conclude that scientists are increasingly talking not just about the education of the younger generation, but also about the formation of an ecological culture of educational applicants in the context of modern educational phenomena: open education and digitalization. Culture consists of four main elements: concepts, relationships, values, rules and norms. Each of these components plays an extremely important role in creating a cultural image and environmental education of specialists. The most important function of culture is the way in which society solves problems. Taking into account current global trends, the formation of an ecological culture among young people is of particular importance in Ukraine.

Digitalization of domestic education is an uncontested requirement of our time. Open education is an integral part of informatization of society, reflects the general trend of consistent transition of educational processes from one state to another, the formation of the defining information and communication basis for the development of education and is necessary in the formation of the ecological culture of educational applicants. The main goal of open education is defined. Features of open education are highlighted. In this system, the learning process becomes open and creative, free access to information resources, freedom of choice, an individualized approach are provided, and conditions for joint creative development of the world are created in the formation of the ecological culture of educational applicants. The principles of implementing the educational policy of digital development are considered. When forming the ecological culture of educational applicants in the context of modern educational phenomena: open education and digitalization, a single information educational environment should provide the functions described in the article.

# Bibliographic references

Akseonova, E., Varetska, O., Klopov, R., & Bida, O. (2020). Efficiency of Social and Educational Experimental Training "New Physical Culture for the New Ukrainian School". Romanian Magazine for Multidimensional Education, 12, 1(1), 1–18.

Alimin, Z., Warnandi, N., Akhlan, R., & Ratnengsih, E. (2019). Implementation Inclusive Education Through Ecological Approach. Advanced science letters, 25(1),

- 170-174.
- Bida, O., Chyhuk, A., Kuchai, O., Honcharuk, V.,
  & Kuchai T. (2022). Formation of ecological competence of future biology teachers. Origins of pedagogical mastery: journal (Series "Pedagogical Sciences"). Poltava national ped. V. G. Korolenko University, 29, 19-25. (In Ukranian)
- Bida, O., Zorochkina, T., Oros, I., Kuchai, O., Chichuk, A., & Kuchai, T. (2021). Formation of ecological culture of specialists. Academic studies. Series "Pedagogy", Publishing house "Helvetica", 3(2), 3-10. https://doi.org/10.52726/as.pedagogy/2021.3.2.
- Findlow, S. (2019). Challenging Bias in Ecological Education Discourses: Emancipatory 'Development Education' in Developing Countries. Ecological Economics, 157, 373-381.
- Gerasimyk-Chernova T.P. (2021). Modernization of the learning process using a single informational educational environment. Implementation of modern pedagogical technologies in the conditions of digitization of the economy and society: regional dimension: Materials of the regional scientific and practical seminar (June 2, 2022). Bila Tserkva, 16-20. https://acortar.link/oXaDOr
- Hoffmann, A., & Sobrinho, L.L.P. (2022). Environmental education: sustainability instrument environmental and ecological, Humanidades & Inovacao, 9(18), 60-72. https://revista.unitins.br/index.php/humanidadeseinovacao/article/view/7821
- Horbach, N. Ya., Gelei, S. D., & Russkaya, Z. P. (2019) Theory and history of world and national culture: a textbook. Lviv: Kamenyar. (In Ukranian)
- Ivashev, E. V., Sakhno, O. V., Hryadushcha, V. V., Denisova, A. V., Lukiyanchuk, A. M., & Udovik, S. I. (2021). Development of digital competence of pedagogical workers of professional (vocational and technical) education institutions by means of information and communication technologies: a study guide. Bila Tserkva: BINPO. (In Ukranian)
- Jian, Q. (2020). Correlation of ecological education at colleges based on the view of ecological environment. Journal of environmental protection and ecology, 20(A), 230-235.
- Kubiznak, P., Hochachka, W.M., Osoba, V., Kotek, T., Kuchar, J., Klapetek, V., Hradcova, K., Ruzicka, J., & Zarybnicka, M. (2019). Designing network-connected systems for ecological research and education. Ecosphere, 10(6), 27-61.

- Kuchai, T. (2010). Preparation of future teachers in the universities of Great Britain for the ecological education of students. (Dissertation for obtaining the scientific degree of Candidate of Pedagogical Sciences. Specialty) Bohdan Khmelnytsky National University, 216 p.
- Kuchai, T., Kuchai, O., & Rokosovyk, N. (2022).

  Formation of forestry specialists' value attitude to work and worldview of environmental sustainability. Collection of scientific works: Scientific notes. Series: Pedagogical sciences, 200, 26–30. https://dspace.kmf.uz.ua/jspui/bitstream/12345 6789/1637/1/Bida\_O\_Orosz\_I\_Goncharuk\_V\_Teoretychni\_osnovy\_profesiinoi\_pidhotovky\_maibutnikh fakhivtsiv 2022.pdf
- Kuchai, T.P., Honcharuk, V.V., Kuchai, O.V., Visaver, V.A., & Syroezhko, O.V. (2022). Formation of ecological culture of future specialists in the modern educational space. Bulletin of the Glukhiv National Pedagogical University named after Oleksandr Dovzhenko. Pedagogical Sciences, 3(50), 86-91. https://drive.google.com/file/d/1iZUVB4FSN QnoSsqKP3mROdHvlTibEONH/view
- Kuzminskyi, A., Bida, O., Kuchai, O.,
  Yezhova, O., & Kuchai, T. (2019).
  Information Support of Educationalists as an
  Important Function of a Postgraduate
  Education System. The Romanian Journal for
  Multidimensional Education, 11(3), 263-279.
- Leshchenko M. & Yatsyshyn A. (2014). Open education in the categorical field of domestic and foreign scientists. Information technologies and teaching aids, 39, (1), 1-16.
- Maistryuk, I., & Ponomaryova, N. (2022). The content of the components of self-educational competence of a schoolchild in the conditions of digitalization of education. Innovative pedagogical technologies in a digital school: a collection of theses of reports of the IV All-Ukrainian (with international participation) scientific and practical conference of young scientists (Kharkov, May 11-12 2022). Kharkiv, 141-143. (In Ukranian)
- Nxumalo, F., Nayak, P., & Tuck, E. (2022). Education and ecological precarity: Pedagogical, curricular, and conceptual provocations. Curriculum inquiry, 52(2), 97-107.
- Osadchuk, V. V. (2022). Development of open education as a phenomenon of the XXI century. Adult education: theory, experience, perspectives, 1 (21), 58-67. (In Ukranian)
- Xiaoming, Yi (2019). Ecological education1 through aesthetic engagement. The Journal of Environmental Education, 50(3), 183-191



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# The importance of musical and aesthetic education of young people in modern society<sup>22</sup>

## Значення музично-естетичного виховання молоді в сучасному суспільсті

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Written by:
Olena Shevtsova<sup>23</sup>
https://orcid.org/0000-0002-5318-5286
Vladyslav Tsarenko<sup>24</sup>
https://orcid.org/0000-0001-6868-1808
Snizhana Kurkina<sup>25</sup>
https://orcid.org/0000-0002-2009-1590
Petro Voloshyn<sup>26</sup>
https://orcid.org/0000-0002-6235-8003
Tetiana Lisovska<sup>27</sup>
https://orcid.org/0009-0002-8100-0311

Анотація

The importance of musical and aesthetic education of young people to form their spiritual world in modern conditions of the information society is clarified. The approaches of scientists to understanding the phenomenon of "musical and aesthetic education" are generalized, which gives grounds to assert that this concept is: a component of the spiritual development of the individual, his artistic and emotional sphere, aesthetic attitude to the surrounding reality; a means of developing his musical abilities in the process of conscious perception of works of musical art and critical attitude to musical phenomena; a specially organized purposeful process of forming musical qualities and musical and aesthetic consciousness of the individual. The main purpose of musical education is to children to understand music by teach familiarizing children with folk music, works of great composers and organizing music circles where you can study musical literacy, music

Abstract

З'ясовано значення музично-естетичного виховання молоді для формування її духовного світу в сучасних умовах інформаційного суспільства. Узагальнено підходи науковців до розуміння феномену «музично-естетичне виховання», що дає підстави стверджувати, що це поняття є: складовою духовного розвитку особистості, її художньо-емоційної сфери, естетичного ставлення до навколишньої дійсності. ; засіб розвитку його музичних здібностей у процесі свідомого сприйняття творів музичного мистецтва та критичного ставлення до музичних явищ; спеціально організований цілеспрямований процес формування музичних якостей та музичноестетичної свідомості особистості. Основна мета музичного виховання - навчити дітей розуміти музику шляхом ознайомлення дітей з народною музикою, творчістю великих композиторів, організації музичних гуртків, де можна вивчати музичну грамоту, історію

<sup>&</sup>lt;sup>27</sup> PhD., Associate Professor, Associate Professor of Primary School and Preschool Education Department, V. O. Sukhomlynskyi National University of Mykolaiv, Ukraine.



<sup>&</sup>lt;sup>23</sup> Candidate of Pedagogical Sciences, Associate Professor, Associate Professor of the Departament of the Art Education, Volodymyr Vynnychenko Central Ukrainian State University, Ukraine.

<sup>&</sup>lt;sup>24</sup> Postgraduate Student of Pedagogy and Special Education Department, Volodymyr Vynnychenko Central Ukrainian State University, Ukraine.

<sup>&</sup>lt;sup>25</sup> Candidate of Pedagogic Science, Associate Professor, Associate Professor of the Departament of the Art Education, Volodymyr Vynnychenko Central Ukrainian State Pedagogical University, Ukraine.

<sup>&</sup>lt;sup>26</sup> Candidate of Pedagogical Sciences, Associate Professor of the Department of Musicology and Vocal and Choral Art, Honored Worker of Culture of Ukraine, Pavlo Tychyna Uman State Pedagogical University, Ukraine.

history, and learn to play musical instruments. It is proved that teenagers are the most susceptible to the influence of music, since they are passionate about listening to music and are included in performing musical activities, striving to improve melodic hearing, fret sense, develop harmonious hearing, auditory representations and musical abilities.

**Keywords:** musical and aesthetic education, youth, teenagers, information society, musical abilities.

## Introduction

The modern period of renewal of Ukrainian society, its spiritual revival put forward for pedagogical science the task of strengthening the connection between culture and education, which is due to the affirmation of the ideas of the self-value of the human person, the humanistic essence of the nationally oriented worldview of young people. In modern conditions of reforming the educational system, considerable attention is paid to musical and aesthetic education of students, which is aimed at forming the spiritual world of the child, his emotional sphere, developing a sense of beauty, musical taste, creativity.

In the modern conditions of the information society, musical and aesthetic education of adolescent children is of particular importance — the period when awareness of the general picture of the world occurs, self-awareness increases, value orientations are formed, the processes of self-determination, self-knowledge, determination of personal ethical and aesthetic views and judgments are activated.

In the modern socio-cultural situation, music is increasingly coming to the fore in the structure of artistic preferences of young people. It is ahead of other types of art in the amount of consumption due to its directly sensory features of influence. But behind such a picture are hidden complex contradictions of everyday life, perception, value orientations in the art of music. The perception of music, of course, depends on the individual who encounters this art. The formation of the musical and aesthetic culture of the individual — a kind of indicator of the development of the person himself — is one of the most important goals of aesthetic education.

The most important result of involvement in musical values is the formation of musical and aesthetic preferences and ideals of the individual, which become an indicator of the level of his музики, вчитися грі на музичних інструментах. Доведено, що підлітки найбільш сприйнятливі до впливу музики, оскільки вони захоплюються музикою і включаються у виконавську музичну діяльність, прагнучи вдосконалювати мелодичний слух, ладове відчуття, розвивати гармонійний слух, слухові уявлення та музичні здібності.

**Ключові слова:** музично-естетичне виховання, молодь, підлітки, інформаційне суспільство, музичні здібності.

musical development. Hence, the development of personal evaluative ideas is the subject of special concern in the formation of the musical culture of the individual. Thus, participation in musical creativity through various forms of musical activity, the development of the moral and aesthetic sides of an individual under the influence of his musical and cultural potential, a high level of knowledge and evaluative ideas in music - all these are leading signs that determine the qualities of a person's musical culture, its level musical and cultural development. We have considered all these problems in the article.

The article shows the essence of aesthetic education, various aspects and principles of musical and aesthetic education in modern conditions of the information society.

# **Literature Review**

A significant contribution to the research of the problem of musical and aesthetic education belongs to Ukrainian and foreign scientists. M. Fitsula (2000) describes the process of education and explains it as a system of educational measures aimed at the formation of a comprehensively and harmoniously developed personality.

- O. Oleksyuk (2006) argues that the main components of the spiritual world of youth, national identity and patriotic thinking should be formed by means of music, since it is primarily associated with the comprehensive use of the best examples of Ukrainian musical creativity the folklore of our people.
- O. Rudnytska (2005) argues that it is music, which is distinguished by processality, the absence of any visual concreteness, subject representation, chronology of events that requires as much as possible from the perceiver emotional sensitivity, imagination, creative



initiative, associative thinking, and observation. Those qualities that are sometimes more useful for a person than the sum of knowledge received by its.

I. Zyazyun (1970) considers that aesthetic education is the involvement of a person in the socio-cultural space, obtaining aesthetic experience that specifically connects it with the world, referring aesthetic experience as a "spiritual education" to complex mental phenomena that can be considered as systems and have a component structure.

The research of I. Slyatina (2015) allows us to state that it is in adolescence that the ideological principles of the individual are formed and its cultural level is determined. A teenager develops an evaluative perception of the world, representations, and forms aesthetic feelings in the process of learning the world through the prism of art.

Investigating the role of music in the process of educational activity, C. Plummeridge (1999) claims that the musical material itself influences the emotional sphere of the child's personality, and one of the tasks of musical education considers the formation of emotional sensitivity to music and the development of musical and aesthetic feelings.

D. Elliott (1995) is convinced that music can be better understood by exploring and studying its aesthetic qualities, listening to and performing musical works. "Musical art has the ability to cultivate aesthetic feelings that arise on the basis of the perception of beauty in the process of listening and performing musical compositions".

The purpose is to find out the significance of musical and aesthetic education of young people in the direction of forming their spiritual world in modern conditions of the information society.

# Methodology

To perform certain tasks, theoretical research methods were used: analysis of philosophical, social, psychological and pedagogical literature, study of legislative and regulatory documents on the education of modern youth and generalization of information received in order to establish the state of development of the problem under study. Moreover, synthesis, generalization, systematization for theoretical justification of the significance of musical and aesthetic education of adolescents in the direction of forming their spiritual world.

## Results and Discussion

The modern period of renewal of Ukrainian society, its spiritual revival put forward to pedagogical science the task of strengthening the connection between culture and education in modern conditions of the information society, which is due to the affirmation of the ideas of the self-value of the human person, the humanistic essence of the nationally oriented worldview of young people (Demyanyuk, 2003).

Today, the education of Ukraine is faced with the requirement of forming an emotional and aesthetic experience of the individual at various stages of training for a number of important reasons: the need to restore the balance between the spiritual development of the individual and the material values of society in favor of spirituality and human-centrism. In addition, the importance of developing a conscious attitude of the individual to the global spread of mass media, the fascination of the music and information space with popular music of low artistic value and the allocation of truly artistically valuable samples of modern musical art. Moreover, expanding the volume of musical and auditory impressions of students from the perception of modern music to the understanding of the beauty and perfection of classical musical art.

Let us find out the content of the key concepts of the study "education", "musical education", "aesthetic education" and "musical and aesthetic education".

Consider the interpretation of the pedagogical category "education", which, according to V. Yahupov (2002), is used in pedagogical science in four meanings. In the broad social – it is an educational influence on a person of the whole society and the whole reality, which has not only a positive orientation, since reality contains conflicts and contradictions and the person acquires not only a positive social experience, but also a negative one. In the broad pedagogical - it is an educational activity of various educational systems that are guided by pedagogical theories; in the narrow pedagogical - it is a purposeful system of educational influences of the teacher, the purpose of which is to achieve the planned educational results. In the extreme narrow – this is the solution of a specific individual problem of education or re-education by a teacher.

"Education" as a pedagogical category is characterized by: first, purposefulness (the presence of a certain model, socio-cultural ideal); second, compliance with certain socio-cultural values and orientation to universal values; third, a system of organized educational influences: integral, continuous and lasting, throughout life. In modern conditions of the information society, education is a process of purposeful, systematic, organized and systematic interaction between the educator and the pupil, which affects the consciousness, subconscious, cognitive, emotional-volitional and motivational spheres of the child in order to form a scientific worldview, moral, civil and professional features of his personality (Syroezhko, 2019).

Thus, the scientific and pedagogical category "education" is a purposeful organized pedagogical process, during which the personality of the pupil is formed.

The Ukrainian pedagogical dictionary interprets the term "musical education" as a process of purposeful knowledge of music, the development of musical and aesthetic tastes of a person, abilities for musical activity and the enrichment of his musical culture (Honcharenko, 1997).

Investigating the problems of the theory and methodology of music education, V. Cherkasov defines that musical education is a conscious and purposeful influence on the child by means of musical art, aimed at the formation of an aesthetic culture of the individual. In addition. views and beliefs, values, and its content, forms and methods depend on the age characteristics of children. the cultural and educational environment in which the individual grows, and are regulated by state standards. The researcher believes that in the modern conditions of the information society, musical development is the process and result of the development of musical and creative abilities of pupils (thinking, memory, imagination during perception and reproduction. Moreover, interpretation of the intonation and figurative content of a musical work, improvisation of both vocal and instrumental) during active participation in specific types of music making (Cherkasov, 2014).

Leading teachers of both the past and the present reveal the educational potential and humanistic orientation of musical art; in particular, V. Sukhomlynskyi focuses the attention of teachers on the training of children by means of music, claiming that it is the language of feelings, experiences, the most subtle shades of mood, a powerful means of aesthetic education. The teacher is convinced that "...the sensitivity of the perception of the language of music, its

understanding depend on the perception in childhood and adolescence of works composed by people and composers, and the beauty of a musical melody opens up to the child its own inner beauty and educates a conscious sense of dignity" (Sukhomlynsky, 1975).

Revealing the value of the influence of music on the child, the teacher claims "...the emotionality of nature, characteristic of a morally and aesthetically educated person, is expressed in the fact that the heart becomes receptive to a kind word, instruction, advice, parting words. If you want the word to teach you to live, so that your students strive for good, — cultivate subtlety, emotional responsiveness of the young heart. Among the many means of influencing the young heart, an important place belongs to music" (Sukhomlynsky, 1976).

The process of connecting the individual with the musical art has a procedural character and occurs on an emotional, intellectual and creative level. Thus, the primary basis of communication with musical art is the emotional and sensual activity of students who, in the process of perceiving musical works, react emotionally, empathize, enjoy what they hear, and experience pleasure from communicating with the beautiful in art (Padalka, 2008).

Thus, summarizing the above, it should be concluded: musical education is a component of an organized educational process that ensures the development of musical abilities of the pupil, the means of mastering musical knowledge, mastering the skills of practical musical activity, the formation of musical consciousness and aesthetic attitude to the surrounding reality.

The relevance of the external and internal transformation of the individual as an aesthetic and spiritual-moral value, the prospect of selfrealization of the individual is the aesthetic education of the younger generations, the level of which depends on the state of education of people in society, their culture and humanistic attitude to various phenomena of the surrounding reality. Aesthetic education is considered as a process of forming a certain aesthetic attitude of a person to reality, in which the orientation of the individual in the world of aesthetic values is developed, in accordance with the ideas about its character that develop in a certain particular society with the involvement of these values. Aesthetic education, in particular the formation of emotional and aesthetic experience, is an important component of the harmonious development of the individual.



In pedagogy, there are different approaches to defining the scientific and pedagogical category of the concept of "aesthetic education". The focus of aesthetic education on personal development, the need to form an aesthetic culture of the individual, the development of his ability to improve himself, his creative needs and abilities. The purpose (result) of aesthetic education is the aesthetic and general development of the individual; the subject of formation is the personality, and the methods used are guided by the personality (its age and other characteristics), and the pedagogical process itself is aimed at preserving the personality (Brylin & Brylina, 2022).

According to M. Fitsula, the concept of "aesthetic education" is a component of the educational process, directly aimed at the formation of the ability to perceive and transform reality according to the laws of beauty in all spheres of human activity (Fitsula, 2000).

The author O. Dubaseniuk understands the above concept as a pedagogical process of interaction between the teacher and students, aimed at the formation of aesthetic culture and the development of the aesthetic attitude of the individual to life, the acquisition of the ability to creative activity according to the laws of beauty (Dubaseniuk & Ivanchenko, 2002).

According to Yu. Yutsevich, aesthetic education is the education of the ability to purposefully perceive, feel, correctly understand and evaluate the beauty of the surrounding reality: nature, social life, work, art; purposeful activity, which is realized through the implementation of the relations of its participants, thanks to the teacher's management of the activity process (Yutsevich, 2003).

The analysis of approaches to the definition of the concept of "aesthetic education" gives grounds to identify its most significant features: the ability to perceive, feel and understand the beautiful; artistic activity; development of artistic abilities; formation of aesthetic culture, development of aesthetic views, tastes and sensations. Therefore, aesthetic education is the formation of emotional and aesthetic experience and an important component of the harmonious development of the individual.

Generalization of researchers' approaches to the definition of the concept of "aesthetic education" gives grounds to assert that this scientific and pedagogical category is a purposeful activity of the individual to develop the ability to perceive, understand and aesthetically evaluate facts, phenomena, processes of the real world based on knowledge and practical skills in a particular art form. It is worth noting that the process of forming aesthetic feelings, tastes, interests, needs, preferences of the individual occurs through artistic and emotional mastering of the surrounding reality.

So. based on the above, the main provisions that characterize the essence of aesthetic education are highlighted. First, it is a process of purposeful action; secondly, it is the formation of the ability to perceive and see beauty in art and life, to evaluate it. Thirdly, the purpose of aesthetic education of the individual is the formation of its aesthetic tastes and ideals of the individual; fourth, it is the development of the ability to independent creativity.

The study of researchers' approaches to the interpretation of the concept of "aesthetic education" gives grounds to assert that they distinguish the following common features in the content of the above scientific category. The ability to perceive, feel and understand the beautiful; artistic activity; the development of artistic abilities; the formation of aesthetic culture, the development of aesthetic views, tastes and sensations.

In the context of the study of the problem of musical and aesthetic education of adolescents, the concept of "aesthetic education of a teenager" is understood as a pedagogical process of including adolescents in musical activities by means of folk and instrumental performance in order to awaken an aesthetic attitude to national folklore, art, the surrounding world and cultural values.

In the modern conditions of the information society, musical and aesthetic education of teenagers should be based on the best examples of Ukrainian national folklore, foster love for folk Ukrainian traditions. In addition, for the native land and the history of our ancestors, contribute to the formation of the main components of the spiritual world of the individual, national identity and patriotic thinking. Musical and aesthetic education is a separate branch of aesthetic education and the sphere of attracting members of society to musical culture, purposeful development of musical abilities of the individual, education of a holistic sense, experience and understanding of the figurative content of musical compositions. Assimilation of socio-historical experience of musical activity aimed at the formation and development by means of arts of aesthetic feelings, experiences, concepts, interests, needs, tastes, assessments, imaginative thinking, creative abilities, humanistic attitude to the surrounding life and art (Yutsevich, 2003).

It is worth noting that integration based on the close interaction of various elements of musical and aesthetic education effectively affects the process of developing the spiritual culture of children. Achieving the optimal influence of the aesthetic essence of musical art on the development of the pupil's personality ensures the introduction of the principles and methods of music pedagogy.

Musical and aesthetic education in modern conditions of the information society is considered in two aspects. First, because of the action of the system, which is fixed by the state standard for a certain educational system. Second, given that the result of musical and aesthetic education is a person, the result is his musical and aesthetic experience as a set of personal qualities, musical knowledge, skills and abilities, value orientations, worldview, musical and creative activity (Ovcharenko, Sysoieva, Samoilenko, Chebotarenko, & Bohianu, 2021).

The development of musical abilities and skills of musical and creative activity of the pupil is carried out during musical and aesthetic education, which provides not only a conscious perception of works of musical art, but also the ability to be critical of musical phenomena, preserve, and multiply national musical traditions.

Special attention in the study of the problem of musical and aesthetic education deserves the pedagogical heritage of M. Tracy, who carried out a scientific and theoretical justification of the scientific and pedagogical approach to musical and aesthetic education of children. The main purpose of musical education the researcher considers teaching children to understand music by means of familiarizing children with folk music, works of great composers and organizing music circles where you can study musical literacy, music history, and learn to play musical instruments. (Szilvay, 2008).

Ukrainian musical art has a significant aesthetic impact on the individual, the pedagogical support of which is based on the actualization of emotional empathy of artistic images that are close in intonation and figurative nature to the national worldview of the individual. The aesthetic and educational potential of Ukrainian

music lies in the high spirituality and humanistic orientation of its artistic images; in the use of a wide palette of national-style and genre formation with the support of professional music on folklore. The proximity of intonation and fret colors to the national and aesthetic perception of students, the melodic orientation of expressive means inherent in the best examples of domestic music, constitute the musical and mental basis for the development of aesthetic culture of future citizens of Ukraine. Deep into the intonation structure of music allows children to feel the peculiarities of artistic perception of the world by a particular people, psychological features, typical characters of its characters, characteristic "words - sentences" of the musical language of their society (Hordeichuk, 2015).

Therefore, the generalization of scientists' approaches to understanding the phenomenon of "musical and aesthetic education" gives grounds to assert that this concept is a component of the spiritual development of the individual, his artistic and emotional sphere, aesthetic attitude to the surrounding reality. In addition, a means of developing his musical abilities in the process of conscious perception of works of musical art and critical attitude to musical phenomena; a specially organized purposeful process of forming musical qualities and musical and aesthetic consciousness of the individual.

Musical and aesthetic education is implemented by means of creating a musical and aesthetic environment, which includes the process of forming the musical and aesthetic consciousness of the individual, the system of his musical abilities and skills of musical and creative activity.

Summarizing the above, we define musical and aesthetic education of adolescents in the context of our research as a purposeful process of including a teenager in the system of extracurricular musical activities aimed at improving musical and aesthetic ideas and developing creative musical abilities by means of folk instrumental performance.

In this context, the formation of adolescents' interest in folk instrumental performance, which stimulates their need for self-realization and is a means of developing the spirituality of the individual, becomes particularly relevant. The dominant feature in the musical and educational process is the versatility of musical and aesthetic activities of adolescents by means of participation in various forms of group work in extracurricular educational institutions, which



significantly stimulates creative their development as a person. Freedom to choose activities and forms of communication during classes in clubs provides favorable opportunities for meeting the interests, needs, inclinations of students. and identifying individuality. Therefore, with pedagogically appropriate organization and optimal selection of methods of influence, group classes can become an effective factor in the formation of musical and aesthetic culture of adolescents (Nelyubov, 2012).

In our opinion, pedagogically appropriate organization and optimal choice of methods of classes will ensure the musical and aesthetic education of teenagers by means of folk instrumental performance, the result of which will be the formation of musical and aesthetic culture and musical and aesthetic competence (Ovcharenko, Matveieva, & Chebotarenko, 2020).

The formation of a certain system of musical and aesthetic ideas, views in adolescents that can help them develop criteria for aesthetic values, readiness and ability to bring elements of beauty into their lives begins with the perception of the environment. Consequently, music education is not an isolated process, but is associated with the social and general mental development of the student and is carried out in the context of the formation of an integral human personality (Rostovsky, 1997). Establishing a dialogue between adolescent students and musical art is possible if they learn to perceive it independently, analyze and evaluate it deeply, as well as interpret it creatively, which will allow them to become the subject of this process and show appropriate activity and independence.

The above allows us to conclude that the pupil of adolescence has a different level of readiness for the relationship with the musical art: a significant part of students still have insufficient experience in learning and mastering the musical art, experiences significant difficulties establishing a fruitful dialogue with manifestations of beauty in musical performing practice. For teenagers, creativity is a means of self-expression and self-affirmation. Significant in adolescent creativity are the search and testing of their own capabilities, the study of certain processes, and life discoveries (Zhurba & Hariacha, 2007); Ovcharenko et al., 2021).

Psychologists, sociologists and teachers address the problems of adolescence in their works. Jean-Jacques Rousseau characterizes this period as a "new birth" of a person and notes that an important feature of this age period is the growth of self-awareness, the formation of personality. G. Didych notes that an important factor in the development of adolescents is the ability to abstract thinking, the formation of active, independent, creative thinking.

It is worth noting that in parallel with the physical and social development of adolescents, the feelings and emotions of adolescents are actively developing, moral ideals, a sense responsibility, patriotism, national pride, etc. are formed. Therefore, adolescence is "a period of formation of aesthetic feelings and aesthetic attitude of the pupil to reality" (Didych, 2014).

S. Honcharenko characterizes adolescence as "a rapid rise in life activity and a deep restructuring of the body; the formation of the first beliefs of individual, taking into account the psychological patterns of adolescent development, which is an important prerequisite for successful education and training of children" (Honcharenko, 1997). The attitude to musical art in modern conditions of the information society is an important indicator of the spiritual needs of a growing person in adolescence, which is characterized by the emergence of new needs and interests in various spheres of spiritual life. The desire to actively participate in various forms of extracurricular activities, the desire independence, changes in the value system (Koval, 1983). This is due to such factors as expressiveness, rhythmicity of music, which allows a teenager to express their feelings and emotions, as well as the ability of music itself to be a means of interpersonal communication between children and young people.

One of the problems of the process of musical and aesthetic education in adolescent children is that during this period, students change the ratio of concrete-figurative and abstract thinking.

It is in the development of the musical and aesthetic potential of a teenager that his aesthetic taste, ideal is formed, his personality is improved in accordance with the Universal Laws of Kindness, Beauty, Love, etc. (Beh, 2020). One of the essential features of the development of thinking in adolescents is the combination of abstraction with imagery, which indicates their special sensitivity to artistic images-symbols, a tendency to their active, creative awareness (Rudnytska, 1998).

Actualization of the solution of the above problem in the context of the theoretical foundations of the development of education and



training of students in their free time. In particular in extracurricular educational institutions, is caused by the need to meet the personal interests and needs of adolescents by means of introducing a personality-oriented approach based on the principles of consistency, interactivity, child-centrism, multiculturalism.

Therefore, musical and aesthetic education of adolescents in modern conditions of the information society has the following features: it is based on a personality-oriented approach, which involves taking into account the needs and interests of each child; it has different age associations of pupils according to common interests. In addition, it provides freedom of choice of classes; it is characterized by flexibility, non-formalization of the structure, which quickly responds to changes in sociocultural and educational needs of children, takes into account their individual capabilities and abilities; it is carried out in the leisure time of a teenager.

The process of education in modern conditions of the information society has the following features: voluntary participation of children; lack of regulatory attitudes; differentiation of students by interests in a particular field of work, science, technology and production; setting up relatives in front of each pupil in achieving the tasks of work. Moreover, freedom and the ability to choose favorite activities in extracurricular institutions have a beneficial effect on the nature of selforganization of the child's future life, contribute basic professional training and competence, help to find the ideal model of future professional activity. In addition, "try on" it to their capabilities and character at an early age, more precisely determine the place in life, and fully realize creative abilities. The peculiarity of the methodology of extracurricular pedagogical process is the continuity of the process of musical and aesthetic education; the child not only reproduces what he learns, but also develops the acquired experience, complements it, improves – this is the law of creative behavior (Sushchenko, 2020).

One of the most important, organizing and determining factors of education is the personality of the educator, who plays a crucial role in organizing and purposefully managing the process of Education. The success of the latter is largely determined by the content and orientation of the teacher's value orientations, professional competence.

Along with learning, communication is a specific activity, in the process and result of which students acquire a variety of knowledge, master certain skills and abilities, and learn certain habits. Communicating in the course of various types of joint activities, students learn each other's character, learn to perceive understand other people, be aware of and evaluate themselves. The unity of the educational process consists in the formation of collectivist relationships between students and the formation of the children's collective itself, the success factors of which are the inclusion of pupils in certain types of joint, collective activities that meet the following requirements. The goals of the activity should become the motives of the children's activities, since the so-called "shift of the motive to the goal" occurs relatively easily; the structure of musical activities and ways of its organization should ensure the possibility of each student's awareness of the importance of his personal contribution. Moreover, for the successful achievement of the goal of the entire team; it is important that students' awareness of the social significance of the results of their collective activities. The activity of students, built based on optimal self-activity and selforganization as a collective in the future as a whole, and all its members, will ensure the improvement of the structure and educational functions of the team itself, its impact on each pupil. In addition, encouraging, supporting and stimulating the initiative of each member of the team creates conditions for the disclosure of its creative capabilities.

The use of music as an educational tool is based on the application of the method of selecting musical material and introducing innovative forms for its effective use, which will contribute to more effective involvement of pupils in artistic and creative activities, which will fully contribute to musical and aesthetic education. We believe that before studying a piece of music with students, the teacher himself should understand its musical content and form and the possibilities of its use (Shevchenko, 2010).

## **Conclusions**

The analysis of psychological and pedagogical literature gave us the opportunity to consider the theoretical foundations of the problem under study, to determine the system-integrative structure of the concept of "musical and aesthetic education" of adolescents. Based on the analysis of the state of development of the problem in the philosophical, social, psychological and pedagogical domestic and foreign literature, the



content of the key concepts of the study is clarified: "education", "musical education", "aesthetic education" and "musical and aesthetic education", "folk instrumental performance".

We have highlighted the psychological and pedagogical features of musical and aesthetic education of adolescents in modern conditions of the information society, namely: musical and aesthetic education of adolescents extracurricular educational institutions in content and form, the role relationship between the teenager and the teacher-leader of the group. In addition, musical activity of adolescents is based on voluntary, personality-oriented approach to the interests and abilities of each pupil; features of the content of the educational process of extracurricular educational institutions, namely: the presence of various (in particular individual) standard, authors, complex, etc. Programs, the predicted result of which is not only in-depth knowledge, skills, special skills of students, but also the development of the pupil's personality, the formation of his individuality, the formation of a value system; individual approach in combination with the social orientation of activities creates opportunities for the child to find his place in the team.

Musical and aesthetic education is based on the following principles: humanization (dominance of the idea of uniqueness of each pupil); recognition of the self-value of childhood, orientation to create comfortable psychological conditions for the development of the creative potential of the pupil. In addition, child-centrism (priority of the interests and needs of the pupil); natural conformity and cultural conformity (orientation to take into account individual natural inclinations and opportunities for the development of a teenager); unity of the process of musical and aesthetic education and sociocultural environment. Moreover, creative cooperation of pupils and teachers on the basis of partnership; approval of relations of creative participation in the process of musical activities to achieve joint goals individualization, which involves not only taking into account the individual characteristics of the pupil, but also accepting his values for the development of his uniqueness.

## **Bibliographic references**

Beh, I. (2020). Preschool education: transformation landmarks. Preschool education in the context of the ideas of the New Ukrainian School: a collection of scientific works by general edited by G.V.

- Belenkoi, V.I. Bondar, I.M. Shoroburi. Khmelnytskyi: FOP Melnyk A.A., 7-20. https://elibrary.kubg.edu.ua/id/eprint/31201/1/L\_Harashchenko\_TSDDDVvRI\_2020.pdf
- Brylin, B., & Brylina, V. (2022). Features of the development of aesthetic culture of the future teacher in the process of creative activity. Modern information technologies and innovative teaching methods in training specialists: methodology, theory, experience, problems, (52), 244–247.
- Cherkasov, V. F. (2014). Theory and methodology of music education: study guide. Ternopil: Educational book Bohdan. (In Ukranian)
- Demyanyuk, T. (2003). Spiritual and moral development of the individual in the extracurricular pedagogical process. New pedagogical thought: Science. method. Journal, 4, 75-77. (In Ukranian)
- Didych, G. (2014). Peculiarities of the formation of general aesthetic culture of teenagers by means of music. Scientific notes of V. Vinnichenko Kirovohrad State Pedagogical University. Series: Pedagogical Sciences, 133, 73–79. (In Ukranian)
- Dubaseniuk, O. A., & Ivanchenko, A. V. (2002). Workshop on pedagogy: teaching. study guide higher education closing, general ed. Kind. 2nd, add. and processing. Zhytomyr: Ivan Franko Zhytomyr state. Pedagogical University.http://eprints.zu.edu.ua/7574/1/Pr actic pos.pdf
- Elliott, D. (1995). Music matters. New York: Oxford University Press.
- Fitsula, M. M. (2000). Pedagogy: a study guide for students of higher pedagogical institutions of education. Kyiv: Academy. (In Ukranian)
- Honcharenko, S. U. (1997). Ukrainian pedagogical dictionary. Kyiv: Lybid. (In Ukranian)
- Hordeichuk, Ya. A. (2015). Musical and aesthetic education of students of junior grades based on the examples of children's music by Ukrainian composers. Bulletin of the Chernihiv National Pedagogical University. Series: Pedagogical Sciences, 125, 304-307. http://nbuv.gov.ua/UJRN/VchdpuP\_2015\_1 25 74
- Koval, L. G. (1983). Education of a sense of beauty. Kyiv: Rad. School.
- Nelyubov, R. M. (2012). Problems and prospects of collective folk-instrumental music making. Pedagogical education: theory and practice, 11, 273-277. (In Ukranian)
- Oleksyuk, O. M. (2006). Musical pedagogy: study guide. Kyiv: KNUKiM.



- Ovcharenko, N., Matveieva, O., & Chebotarenko, O. (2020). Metodological readiness formation of future music art teachers for their professional activity. Amazonia Investiga, 9(27), 157-164 https://doi.org/10.34069/AI/2020.27.03.16
- Ovcharenko, N., Merezhko, Y., Moskva, O., Neboga, O., & Kosiak, L. (2021). Technological competence of future music teachers: diagnostic and formative methods. Amazonia Investiga, 10(48), 238-247 https://doi.org/10.34069/AI/2021.48.12.25
- Ovcharenko, N., Sysoieva, S., Samoilenko, A., Chebotarenko, O., & Bohianu, K. (2021). Formation of prospective music art teachers' readiness for inclusive educational activity. Amazonia Investiga, 10(45), 175-184 https://doi.org/10.34069/AI/2021.45.09.18
- Padalka, G. M. (2008). Art pedagogy (theory and methods of teaching art disciplines). Kyiv: Education of Ukraine. (In Ukranian)
- Plummeridge, C. (1999). Aesthetic education and the practice of music teaching. British Journal of Music Education, 2(16), 115-122.
- Rostovsky, O. Ya. (1997). Pedagogy of musical perception: educational and methodological manual. Kyiv: IZMN.
- Rudnytska, O. P. (2005). General and artistic pedagogy: teacher. manual Ternopil: Educational book - Bohdan. (In Ukranian)
- Rudnytska, O. (1998). Music and personality culture: problems of modern pedagogical education: Study. Manual. K.: IZMN. http://dnpb.gov.ua/wp-content/uploads/2022/09/Rudnytska\_O.P.Ro l muzychnoho spryynyattya.pdf
- Shevchenko, G. P. (2010). Development of aesthetic education in higher educational institutions of Ukraine at the modern stage. Origins of pedagogical mastery. Series: Pedagogical sciences, 7, 9-13. http://nbuv.gov.ua/UJRN/vpm\_2010\_7\_4
- Slyatina, O. (2015). Criteria and indicators of musical and aesthetic education of adolescent students. Actual problems of public administration, pedagogy and psychology, 1, 18-21. https://cutt.ly/g4lS10H

- Sukhomlynsky, V. A. (1975). How to raise a real person. Kyiv: Soviet School. https://enpuir.npu.edu.ua/handle/123456789/21037
- Sukhomlynskyi, V. (1976). Selected works: in 5 volumes. Vol. 2, One hundred tips for the teacher. Kyiv: Rad. school. https://enpuir.npu.edu.ua/handle/123456789/21037
- Sushchenko, (2020). T.I. Out-of-school pedagogy in the day of the priority of personalityю Pedagogy of creative personality formation in higher and 70(4), secondary schools, 18-23. http://www.pedagogyjournal.kpu.zp.ua/archive/2020/70/part 4/5.
- Syroezhko, O. V. (2019). Musical and aesthetic education of teenagers in the children's orchestra of folk instruments. Scientific journal of the National Pedagogical University named after M. P. Drahomanov. Series 5: Pedagogical sciences: realities and prospects: coll. of science works, 69, 219-223.
  - https://enpuir.npu.edu.ua/bitstream/handle/1 23456789/28132/Syroiezhko.pdf?sequence= 1&isAllowed=y
- Szilvay, G. (2008). Violin ABC. Handbook for Teachers and Parents. Fennica Gehrman.
- Yahupov, V. (2002). Pedagogy: Education. manual. K.: Lybid.
- Yutsevich, Yu. E. (2003). Music: dictionary-reference. Ternopil: Educational book Bohdan. (In Ukranian)
- Zhurba, K., & Hariacha, S. (2007). Formation of ethical culture of teachers as a necessary condition of modern education. Psychological and pedagogical problems of a rural school, 22, 24-30. https://library.udpu.edu.ua/library\_files/psuh\_pedagog\_probl\_silsk\_shkolu/22/visnuk\_3.p df
- Zyazyun, I. A. (1970). Aesthetic experience of the person. Formation and scope of manifestation. Kyiv: Higher School.



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# Current trends in school reform in the Republic of FINLAND

# Tendencias modernas de la reforma de la educación escolar en la República de **FINLANDIA**

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> Written by: Yuliia Kosenchuk<sup>28</sup> https://orcid.org/0000-0002-8069-7375 Irvna Androshchuk<sup>29</sup> https://orcid.org/0000-0002-3557-793X Nataliia Bakhmat<sup>30</sup> https://orcid.org/0000-0001-6248-8468 Olha Kosenchuk<sup>31</sup> https://orcid.org/0000-0002-1733-5937

## Abstract

School education in Finland is considered to be one of the most progressive in Europe, so using the experience of local teachers is a relevant task for the study. The article aims to characterize the main modern trends of school education reform in Finland, based on the main globalization vectors of education system development. The study uses theoretical methods of scientific knowledge. The results analyze the main aspects of Finnish education reforming (tendencies of independence. consistency. flexibility). digitalization of Finnish school education, emphasis on practicality, personality-centered approachof learning. The conclusions note that a fundamental aspect of the Finnish education system reform is the autonomy and autonomy of teachers.

**Keywords:** Finland, school education, transformation, digitalization of the educational process.

## Introduction

Finland is a high performer in the school system in the Program for International Student Assessment (PISA). It has also become almost the only European state to be among the top countries extremely attractive for research on the

## Resumen

La educación escolar en Finlandia se considera una de las más progresistas de Europa, por lo que utilizar la experiencia de los profesores locales es una tarea relevante para el estudio. El objetivo del artículo es caracterizar las principales tendencias modernas de la reforma de la educación escolar en Finlandia, basado en los principales vectores de globalización del desarrollo del sistema educativo. El estudio utiliza métodos teóricos del conocimiento científico. Los resultados analizan los principales aspectos de la reforma de la educación finlandesa (tendencias de independencia, coherencia, flexibilidad), digitalización de la educación escolar finlandesa, el énfasis en la practicidad, el enfoque centrado en la personalidad del aprendizaje. Las conclusiones señalan que un aspecto fundamental de la reforma del sistema educativo finlandés es la autonomía y la autonomía de los profesores.

Palabras clave: Finlandia, educación escolar, transformación, digitalización del proceso educativo.

effectiveness of educational reforms, which are widespread in the European community as the most effective. Consequently, an analysis of the main trends in Finnish school reform is important in view of demonstrating the main solutions that

Podilskyi Ivan Ohiienko National University (Kamianets-Podilskyi, Ukraine). 1 Associate Professor, Department of Pedagogy and Psychology of Vocational Education, Faculty of Linguistics and Social Communications in National Aviation University (Kyiv, Ukraine).



<sup>&</sup>lt;sup>28</sup> Postgraduate Student, Department of Educology and Psychological and Pedagogical Sciences in Borys Grinchenko Kyiv University (Kyiv, Ukraine). <sup>29</sup> Professor, Doctor of Pedagogical Sciences, Department of Labor Pedagogy and Andragogy Institute of Pedagogy in Academy of Special Pedagogy

<sup>(</sup>Warsaw, Poland). Doctor of Pedagogical Sciences, Professor, Head at the Department of Elementary Education Theory and Methods Faculty of Pedagogics in Kamianets-

can be useful in European education as a whole. At the same time, current trends in educational development demonstrate that the educational process is becoming increasingly globalized and digitalized, however, Finnish teachers use their own methods of educational organization based on basic both traditional (time-tested) forms of organization of learning activities and innovative ways of conducting the educational process in order to improve students' motivation and curiosity. The article aims to characterize the main current trends of school reform in Finland based on the main globalization vectors of education system development.

#### Literature Review

The methodological basis of this article is the work of Finnish scholars, who have highlighted in detail the main changes and transformations in Finnish school education. In particular, Korhonen et al., (2021) described the main changes in Finnish education during the period of distance learning. The scholars characterized the features of e-learning organization and conduct and described the key pedagogical methods used in these processes. Korhonen et al., (2021) focused on the fact that there was a trend in digital schooling in Finland to support students and their parents through weekly communication with teachers. At the same time, the authors noted that many Finnish teachers found it difficult to understand modern E-learning technologies. Therefore, Korhonen et al., (2021) believe that the main direction of pedagogical excellence is to increase digital competence and develop digipedagogical skills.

Saari & Säntti (2017) studied the problem of digital transformation in education management. Lavonen (2020) highlighted the key aspects of the organization of the Finnish Kirikulum, the main educational document regulating the provision of educational services. Niemi & Kousa (2020) explored the use of the case method in the Finnish educational system. O'Leary et al., 2019 described the key principles of special education reform in Finland and described the impact of these changes on the emergence of the main educational trends of the 21st century. Vahtivuori-Hänninen et al., (2014) analyzed the new curriculum for basic school education in Finland. The work of other European scholars is also important for this study. Lemeshchuk et al., (2022) identified European practices to improve inclusive education through the prism of experience for Ukraine. Sork (2020) analyzed the problem of

creating classrooms through the use of innovative technologies and STEM education. Zhang & Aslan (2021) analyzed the main technologies used in education through the prism of analysis of modern scientific achievements. At the same time, Prokopenko (2021) characterized the main technological challenges of future education. At the same Rak-Młynarska (2022)conducted comprehensive analysis of current trends in the development of the educational environment. Skakun (2021) explored key aspects of future teachers' digital literacy. Babych et al., (2022) used empirical analysis to identify features of improving teaching methods. However, the future perspectives of the Finnish school model through the lens of borrowing experiences in responding to globalization challenges remain understudied aspects of the problem.

# Methodology

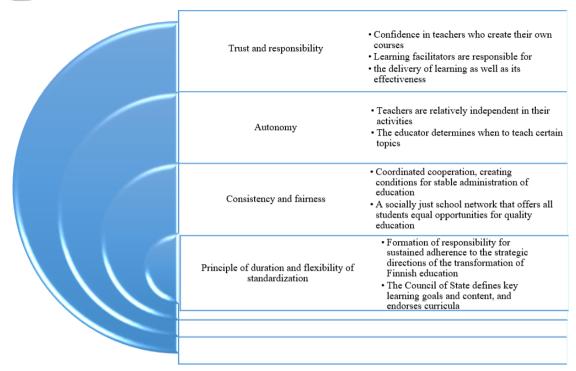
Pedagogical theoretical methods of scientific knowledge were used to write this article. In particular, based on the dialectical method of reforming school education in Finland is considered as a dynamically developing and improving process. At the same time, as a result of using the deductive method the transition from general statements to the formation of our own hypotheses and judgments was carried out. Based on concretization the main trends of reforms in Finnish education were characterized. The main method was the method of abstraction, with the help of which the main value principles of the modern Finnish school education system were defined. The methodological basis of the article is also based on the content analysis of modern pedagogical literature. The research is also formed on the principles of objectivity, systematicity, and abstraction.

## Results

# Key aspects of the Finnish education reform system: trends toward autonomy, coherence, flexibility

The Finnish primary and school education system is showing strong results in the effectiveness of the reforms implemented (Lavonen, 2020). Finnish education policy is based on several strong principles that define the key strategic directions of Finnish education: trust, responsibility, autonomy, autonomy, coherence, fairness, flexibility of standardization, etc. (See Figure 1).





*Figure 1.* Basic Principles of School Reform in Finland. Article authors' development

In particular, trust and responsibility are central foundational aspects. Particularly in Finnish secondary and elementary school, the programs and their own courses are created by the teachers themselves, taking into account local criteria (community history, nature, etc.) (Korhonen et al., 2021). Such courses and programs are not approved at higher levels. The key is the responsibility of the educator, who divides the topics into three years, adding his own courses, deciding when and what students will study in his discipline. The above system works at all levels of schooling. Despite this, teachers can team up to discuss different programs so that a logical schedule can be formed (O'Leary et al., 2019). Another principle of school organization in Finland is autonomy. It refers to the fact that learning organizers are generally responsible for the learning process as well as for its quality and effectiveness (Lavonen, 2020). In particular, there are no mandatory guidelines that relate to the number of students in a class, for this reason, the teacher-organizers are free to form and determine the composition of the student group on their own. At the same time, local governments determine the amount of authority delegated to schools: the latter have the right to provide educational services in accordance with their administrative and organizational frameworks and concepts for the development of education, subject to the responsibilities and functions stipulated by law

(Lavonen, 2020). Many organizational situations (expenditures, recruitment) are the responsibility of the educational institutions themselves. As noted above, teachers have a great deal of autonomy when conducting classes. In addition, they can decide for themselves which methods, forms of work, or technologies to use in teaching. Teachers have the right to choose textbooks, manuals, and other teaching materials.

The coherence factor is an important aspect, which provides for the coherent interaction of the sectors and forms the basic conditions for stable education management. The Finnish educational system is seen by the government as an important part of society's activities, so that quality education is essential for solving basic problems such as eliminating inequality, reducing poverty, improving sustainable economic development, and the competitiveness of the state (Lavonen, 2020). A key strategic underlying aspect of educational reform in Finland is the principle of equity. It is about shaping and supporting a socially equitable school network that offers all students equal opportunities for quality education (Maier & Schmidt, 2015). Primary secondary schools offer all children not only excellent educational services, but psychological counseling, health and nutrition care, and various special or inclusive education services (Korhonen et al., 2021; Bešić, 2020). At the same time, the criterion of duration is aimed

at the formation of responsibility for the stable observance of the indicated strategic directions of the transformation of the Finnish educational system. This principle also influences the formation of long-term development perspectives, a strategic vision (Sork, 2020). The management process cannot be limited to day-today management and administration but aims at the formation of responsibility for the observance of the selected guidelines and directions of the educational system transformation in Finland. The last important principle is the flexibility of standardization. It means that the State Board of Education forms and determines the key goals and content of education, approves the national curriculum, and the school can choose its own methods of implementing the goals.

Modern practical implementation of educational reforms in Finland in the dimension of paradigmatic change: practicality, person-centered approach, a game form of learning.

Educational reforms have been underway in Finland for more than 40 years. The first results were obtained back in the early 1990s (Sahlberg, 2010). Among others, the figures of the founders of the reform stand out. For example, educational advisor Ari Markus Pokka now is working as the CEO of the Finnish Education Institution. He is a prominent teacher and author of "Top Class: Finnish School Leadership and Management". Another founder Finnish educational reforms Pasi Sahlberg, an education expert, author of the book "Finnish Lessons: What can the world learn from educational change in Finland?", professor at the University of New South Wales in Australia. Also he worked at Harvard University and at the World Bank, he was the director of the Centre for International Mobility in Finland. Ari Antikainen is a professor emeritus of educational sociology at the University of Eastern Finland and a nonfiction writer with coauthor Anne Pitkänen described history of Finnish education reforms (Antikainen, 1990).

The high quality of education is shaped by many factors. Note that every child receives free schooling (Bohuta, 2022). Despite this, all educational institutions in any part of Finland are well equipped and equipped. This contributes to the development of digital competence in both teachers and students (Kosenchuk, 2022). At the same time, the teaching profession is not only prestigious but also well-paid. The most important factor is that the school system has a

strong practical orientation that meets international standards (Lavonen, 2020). Consequently, teachers in Finland are not based on students learning a lot of information, as is the case in other countries, but on acquiring practical knowledge and the ability to use it in life.

In schools, education begins at age seven and lasts nine years. Schooling is a compulsory level of education for the entire population. The first six years of elementary school are taught by a single teacher, the other three years by specific subject teachers. After its completion, students take the so-called matriculation examination, a nationwide test for pupils. After high school, oral students can enter a lyceum or a specialized college. After completing high school, students take examinations and are eligible to continue their studies at universities (Lapada et al., 2020). Most upper secondary school graduates go on to universities. Note that Finland has no specialized secondary education, a fact that makes the transition to the Bologna model of unifying the status of higher education institutions much easier. Besides, in Finland, there is no strict division into the public and private sector of education, because there are very few non-state educational institutions.

In this system, the state holds the key by issuing the so-called curricula, which contain obligatory questions, topics, hours, and performance criteria (Vahtivuori-Hänninen, et al., 2014). Such documents are frameworks because they form the strategy of the educational movement. The curriculum entails describing the teaching of topics rather than subjects. This is done in order to explain certain processes, phenomena through the prism of different sciences to the student. This helps to make learning more focused on the formation of critical thinking, becoming more practical, taking into account the specifics of the terrain. The learning process itself is organized as a "spiral," that is, each new topic (new knowledge) is based on the previous one (Fromm et al., 2021). When organizing education in Finland, it is taken into account that the most effective format of education for children is the direct play form of learning. In the first three years of education, teachers focus on learning games. It should be noted that before the sixthgrade students are not evaluated (there is any assessment of academic performance) because in one class children with high mental abilities and children with better physical skills can study (Niemi & Kousa, 2020). Thus, the Finnish school system (including elementary education) focuses more on the development of students' creativity, critical thinking, social skills, and thinking



outside the box than on the acquisition of specific theoretical knowledge (Niemi & Kousa, 2020).

So, a key trend in the Finnish educational system is the process of objectification of education, the content of which was the integration of children with different conditions in a single school with the aim of full internal differentiation of learning (Korhonen et al., 2021). It is about the fact that the student enters the school of residence, thus eliminating the criterion of "statutory" schools because all educational institutions are equipped with the same material and technical base (which based on innovative technological innovations). One of the objectives of school education is to develop students' self-esteem and critical thinking skills. At the same time, the goal of providing increased self-awareness and learning skills through an understanding of the importance of academic progress in students' mastery of academic topics is realized.

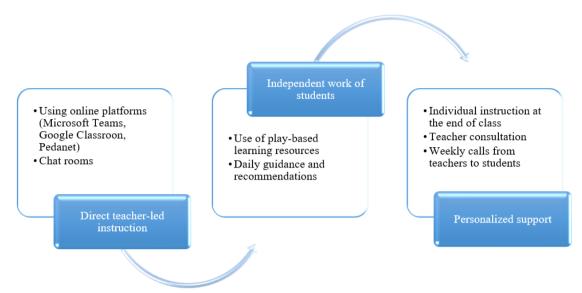
The trend toward digitalization of education began with the beginning of the Covid-19 Kutishchev pandemic (Honcharova, Berezovskaya, 2020). Teachers in Finnish schools were given basic digital tools to organize distance learning: phones and laptops. Devices, software is important for the structure of the digital school day. Teachers described the use of different ways of communication, in particular chat rooms such as Wilma, WhatsApp are common in Finland. At the same time, distance learning was organized on the basis and online platforms, in particular: Microsoft Teams, Google Classroom, Pedanet, etc. (Korhonen et al., 2021).

In Finland, there are several forms of digital learning in primary and secondary schools: in particular, teacher-led learning, which includes videoconferencing with various innovative educational tools. Teachers predominantly follow the typical lesson structure, which starts with a homework check (Lapada et al., 2020). A

key feature of digital education in Finland is that teachers use many game resources and tools, which improves students' attention and motivation to learn, especially at the elementary level. A special feature of Finnish distance schooling is that teachers set special tasks for students to reflect on, after which they were allowed to leave the collaborative session and reflect on the solution of an issue on their own or to stay online and get help from the teacher.

A separate important part of digital education is student independent work. Teachers guided students to work independently using daily tutorials and guidance in core subjects (Cavalcanti et al., 2021). In doing so, older students are allowed to choose a topic for independent work to be presented later in an online meeting. The importance of independent work in art and work-based learning is particularly important. Basic guidelines for independent tasks are posted on a platform accessible to students. Note that the same guidelines and instructions were usually also communicated to parents via the Wilma platform (Korhonen et al., 2021).

A separate form of digital work organization is individual guidance. The main goal of individual guidance is to "befriend" the students and to notice everyone's individuality. In Finland, there are several methods of providing individual guidance, in particular, it can be implemented by personal tutoring at the end of online classes. Another type of individualized guidance is when students can call the teacher at a specific time. Individual guidance can also take place at the teacher's initiative: when the teacher notices that a student needs support (Korhonen et al., 2021). In Finland, the practice of teachers calling students weekly for the duration of quarantine restrictions was in effect, so that they would know about possible needs for counseling or support (See Figure 2).



*Figure 2.* A model for the implementation of digital learning in schools in Finland. *Authors' development* 

At present, the organization of stable digital education on online platforms is not active (compared to the period of quarantine restrictions). However, the digitalization of school education in Finland has received several other manifestations, in particular, teachers often set different tasks using modern educationalgame resources. The practice of digital communication between student and teacher is also relevant (Fromm et al., 2021). In Finland, digitalization of educational organization of digital workflow, implementation of digital management in the education management system are actively taking place.

## **Discussion**

As has been demonstrated in the results, modern Finnish teachers have broad autonomy and autonomy in their teaching. Many European and, importantly, Finnish researchers agree with this statement (Korhonen et al., 2021: O'Leary et al., 2019). This, in turn, affects the formation of the trend of decentralization of the educational system in Finland. According to Lavonen (2020), decentralization directly allows teachers to address issues at the local level in the global context of the national curriculum, strategy, and program implementation. Note that the processes of centralization and autonomy are closely related to the Finnish model of explaining teacher professionalism as well as the status and importance of teachers and education in Finnish society. However, let us agree with Lavonen (2020) that decentralization and the relative autonomy of teachers influences the fact that the preparation of national strategies is difficult.

Vahtivuori-Hänninen et al., (2014) demonstrated that in the Republic of Finland, the core competencies of the 21st century have been introduced into the school system through the development and implementation of a common national educational program. However, studies by Finnish scholars have pointed out that despite current trends in the development of digital education, there is still a need to develop digipedagogical skills in Finland. requirement requires the updating of curricula. However, now in Finland the digitalization of education takes place not at the level of the learning environment, but at the level of organization and management of educational services. Nevertheless, the current curriculum does require teachers to develop digital skills. According to Lavonen (2020), this curriculum is prepared at the national level, but it is implemented at the local levels. Consequently, teachers improve their digital skills through participation in international educational projects, internships, and digital and information literacy courses.

Note that the major teaching institutions are responsible for overseeing the professional training of teachers. Mandatory secondary education is supported in many ways. First, teachers are involved in preparing the curriculum and influencing the development of teacher education in general. They can also organize professional learning through the mentoring system and the organization of various pilot projects. In addition, teachers can participate in many meetings, conferences at the national and local levels, they can also organize special seminars to support communication between



teachers and the development of school education in general. Consequently, we believe that modern educational reforms in Finland are aimed at creating a favorable environment for teachers to develop competencies of the 21st century: digital literacy, social skills, critical thinking, logical thinking, etc. Accordingly, modern curricula are aimed at developing and shaping these skills in both teachers and students.

## Conclusions

Thus, the main fundamental aspects of the reform of the Finnish educational system are the autonomy and autonomy of teachers, which is manifested in the fact that teachers independently form courses and programs of subjects, independently decide when and how to study a particular topic. Teachers also choose their own textbooks, manuals, and other teaching materials. The trend of consistency in school education implies the coordinated activity of educational spheres, which forms the basic conditions for stable management of education. In spite of this, all of the changes that have taken place in Finland's educational reform system have taken into account the principle of equity: in all periods of reform, the creation and support of a socially equitable school network has taken place.

Since the spread of the Covid-19 pandemic, there have been trends toward the digitalization of all education. Finnish learning in distinguishes this country's digital schooling from other European countries is that educators, despite the online format, have managed to implement play-based activities using a variety of learning and game resources. A separate trend in the development of Finnish digital education is a person-centered approach implemented not only in the learning process but also in the psychological adaptation of students and their parents to the new digital environment.

An important trend in the Finnish educational system is the individualization of learning, the essence of which was the process of integrating students with different data and conditions in a single school. This is implemented in order to complete the internal differentiation of learning. At the same time teachers use different teaching methods in order to improve the attention, motivation of students. Despite this, the main factor in the reform of Finnish education is the factor of practicality: Finnish teachers are based not on the assimilation of theoretical knowledge by students, as it happens in other countries, but on getting practical skills, which will be useful for them in adult life.

## **Bibliographic references**

- Antikainen, A. (1990). The Rise and Change of Comprehensive Planning: The Finnish Experience. European Journal of Education, 25(1), 75. doi: https://doi.org/10.2307/1502707
- Babych, V., Dubovoi, O., Zaitsev, V., Rydzel, Y., Saienko, V., Dubovoi, V., & Babych, L. (2022). Improvement of teaching methods of the theoretical component of physical education (with the application of author teaching techniques) in the context of improving the level of social health of students of the special medical group. Journal for Educators, Teachers, and Trainers, 13(5), 1-9. doi: 10.47750/jett.2022.13.05.001
- Bešić, E. (2020). Intersectionality: A pathway towards inclusive education? Prospects, 49(3-4), 111–122. https://doi.org/10.1007/s11125-020-09461-6
- Bohuta, V. (2022). Freedom-oriented component of the humanistic educational system of forming the personality of a junior high school student. Innovations in primary education: problems, prospects, responses to today's challenges (pp. 6–9). Poltava. Available at: https://sites.google.com/view/pnpu15/%D0 %B7%D0%B1%D1%96%D1%80%D0%BD%D0%B8%D0%BA
- Cavalcanti, A. P., Barbosa, A., Carvalho, R., Freitas, F., Tsai, Y.-S., Gašević, D., & Mello, R. F. (2021). Automatic feedback in online learning environments: A systematic literature review. Computers and Education: Artificial Intelligence, 2, 100027. doi: https://doi.org/10.1016/j.caeai.2021.100027
- Fromm, J., Radianti, J., Wehking, C., Stieglitz, S., Majchrzak, T. A., & vom Brocke, J. (2021). More than experience? On the unique opportunities of virtual reality to afford a holistic experiential learning cycle. The Internet and Higher Education, 50, 100804. doi: https://doi.org/10.1016/j.iheduc.2021.10080
- Honcharova, O., Kutishchev, P., & Berezovskaya, K. (2020). Practical aspects of aquaculture under the conditions of euro integration. In Abstracts of VI International Scientific and Practical Conference (pp.18–21). Milan. doi: https://doi.org/10.46299/ISG.2020.II.VI
- Korhonen, T., Juurola, L., Salo, L., & Airaksinen, J. (2021). Digitisation or digitalisation: Diverse practices of the distance education period in Finland. Center



- for Educational Policy Studies Journal, 11(Sp.Issue). doi: https://doi.org/10.26529/cepsj.1125
- Kosenchuk, Y. (2022). Finnish support for education in Ukraine during the conditions of war. Bulletin of Postgraduate education. Educational Sciences Series, 21(50), 124–143. https://doi.org/10.32405/2218-7650-2022-21(50)-124-143
- Lapada, A. A., Miguel, F. F., Robledo, D. A. R., & Alam, Z. F. (2020). Teachers' covid-19 awareness, distance learning education experiences and perceptions towards institutional readiness and challenges. International Journal of Learning, Teaching and Educational Research, 19(6), 127–144. doi: https://doi.org/10.26803/ijlter.19.6.8
- Lavonen, J. (2020). Curriculum and teacher education reforms in Finland that support the development of competences for the twenty-first century. In Audacious Education Purposes (pp. 65–80). Cham: Springer International Publishing. doi: https://doi.org/10.1007/978-3-030-41882-3 3
- Lemeshchuk, M., Pisnyak, V., Berezan, V., Stokolos-Voronchuk, O., & Yurystovska, N. (2022). European practices of inclusive education (experience for Ukraine). Amazonia Investiga, 11(55), 80–88. doi: https://doi.org/10.34069/ai/2022.55.07.8
- Maier, R., & Schmidt, A. (2015). Explaining organizational knowledge creation with a knowledge maturing model. Knowledge Management Research & Practice, 13(4), 361–381. doi: https://doi.org/10.1057/kmrp.2013.56
- Niemi, H. M., & Kousa, P. (2020). A case study of students' and teachers' perceptions in a finnish high school during the COVID pandemic. International Journal of Technology in Education and Science, 4(4), 352–369. doi: https://doi.org/10.46328/ijtes.v4i4.167
- O'Leary, E. S., Shapiro, C., Toma, S., Sayson, H. W., Levis-Fitzgerald, M., Johnson, T., & Pulkkinen, J., Räikkönen, E., Jahnukainen, M., & Pirttimaa, R. (2019). How do educational reforms change the share of students in special education? Trends in

- special education in Finland. European Educational Research Journal, 19(4), 364–384. doi: https://doi.org/10.1177/1474904119892734
- Prokopenko, O. (2021). Technological challenges of our time in the digitalization of the education of the future. Futurity Education, 1(2), 4–13. https://doi.org/10.57125/FED/2022.10.1
- Rak-Młynarska, E. (2022). Analysis of trends in the development of the educational environment: education of the future. Futurity Education, 2(2), 4–13. doi: https://doi.org/10.57125/FED/2022.10.11.24
- Saari, A., & Säntti, J. (2017). The rhetoric of the 'digital leap' in Finnish educational policy documents. European Educational Research Journal, 17(3), 442–457. doi: https://doi.org/10.1177/1474904117721373
- Sahlberg, P. (2010). Educational Change in Finland. In Second International Handbook of Educational Change (p. 323–348). Dordrecht: Springer Netherlands. doi: https://doi.org/10.1007/978-90-481-2660-6 19
- Skakun, I. (2021). Digital competencies of the teacher of the future. Futurity Education, 1(2), 39–48. doi: https://doi.org/10.57125/FED/2022.10.11.18
- Sork, V. L. (2020). Creating inclusive classrooms by engaging STEM faculty in culturally responsive teaching workshops. International Journal of STEM Education, 7(1). doi: https://doi.org/10.1186/s40594-020-00230-7
- Vahtivuori-Hänninen, S., Halinen, I., Niemi, H., Lavonen, J., & Lipponen, L. (2014). A new finnish national core curriculum for basic education (2014) and technology as an integrated tool for learning. In Finnish innovations and technologies in schools (pp. 21–32). Rotterdam: SensePublishers. doi: https://doi.org/10.1007/978-94-6209-749-02
- Zhang, K., & Aslan, A. B. (2021). AI technologies for education: Recent research & future directions. Computers and Education: Artificial Intelligence, 2, 100025. https://doi.org/10.1016/j.caeai.2021. 100025



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# "Russian World" as a political and cultural weapon of modern Russia

# "Русский мир" як політико-культурна зброя сучасної Росії

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Written by:

Tetiana Poiarkova<sup>32</sup>

https://orcid.org/0000-0003-2272-490X

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## **Abstract**

This article raises the question of "Russian world" political and cultural concept that is the mobilizing and legitimating factor not only for citizens of Russia but also for Russian speaking people from other countries in the Russian-Ukrainian war. The author grounds the idea that the political concept of "Russian world" is conditioned by: the potential that is a pledge of power and survival keeping for the regime of post-communist Russia: the ability to create new solidarity beyond territory and history that will compensate psychological consequences of dramatic concatenation of political humiliation, economic decline, cultural nihilism and general chaos after the defeat in the Cold War and ruining of the USSR; striving for justification of military invasion into the territory of independent Ukraine and system terror against civilian population. The article answers the question why in the Russian-Ukrainian confrontation we can see the dehumanization of Ukrainians as an enemy and the increase in the infringement of all the rules of modern war (mass marauding, assaults and shootings, moving of civilian population to filtration camps and total destruction of social infrastructure in just those cities where the majority of population speak Russian and are well disposed to the concept of "Russian world").

**Keywords:** "Russian world", Russian-Ukrainian war, "ruscism" (Russian fascism).

## Introduction

The Russian-Ukrainian war (begun in March 2014 and has been conducted up to the present

## Анотація

У статті висвітлюється політико-культурна природа концепції "Русский мир", що  $\epsilon$ мобілізуючим і легітимуючим фактором для учасників російськоросійськомовних української війни. Автор обґрунтовує думку про те, що привабливість концепції "Русский мир" зумовлена: потенціалом, запорукою могутності, збереження виживання режиму посткомуністичної Росії на підставі здатності створити нову солідарність поза межами території й історії, що компенсує психологічні наслілки драматичного політичного приниження, поєднання економічного занепаду, культурного нігілізму і загального хаосу, які виникли після поразки у "Холодній війні" та розпаду СРСР; прагненням до виправдання військового вторгнення на територію незалежної України й системного терору проти мирного населення. Стаття відповідає на питання, чому в російськоукраїнському протистоянні: відбувається дегуманізація українців як ворога, порушуються правила ведення сучасної війни розстріли, (масові мародерства, напади, переселення мирного населення фільтраційних таборів); знищується соціальна й культурна інфраструктура саме в тих містах, де більшість населення розмовляла російською мовою і поділяла цінності "Русского мира".

**Ключові слова:** "Русский мир", російськоукраїнська війна, "рашизм" (російський фашизм).

time) is one of the most actual questions of political science. It is connected with

<sup>&</sup>lt;sup>32</sup> Doctor of Political Sciences, Professor. Head of the Department of Political Science and Sociology Departments of the Faculty of Social Sciences and Humanities at the Borys Grinchenko Kyiv University, Kyiv, Ukraine.



peculiarities of this military conflict which has two phases. The first one is the prolonged period (from February 2014 to February 2022), when military operations were concentrated in so-called Lugansk and Donetsk People's Republics (further LPR and DPR) being under control of the RF. The second phase began on 24.02.22. Of that day V. Putin made the announcement: "I have approved the decision to conduct the special military operation. Its aim is to defend people who have been suffering from genocide of Kyiv regime for eight years. To stop this we will long for demilitarization and denazification of Ukraine" (Putin, 2022).

An actualizing factor is the character of Russian-Ukrainian confrontation that unites fierce fighting and massive information impact. These circumstances determine the arguments for the consequence of the ideas of "Russian World" that not only legitimate Russian policy, but also are the factor to mobilise the social thought of Russian society against Ukraine.In our opinion, the Russian-Ukrainian confrontation actualizes the consideration of the Russian world as a means of defeating this war. It is important that "Russian world" embraces both individual and social outlooks, taken together, motivate the justification of Russian-Ukrainian military confrontation. In other words, the course of Russian-Ukrainian war actualizes the study of "Russian world" as an ideological and world outlook means of its legitimization.

The hypothesis of our research was the assumption that "Russian world" turned into an informational weapon of the Russian-Ukrainian war, as it acted as a foundation: 1) for the solidarity of Russian society based on the picture of the world, which is common to the post-Soviet space; 2) universal meaningful life guidelines that replaced ideological schemes with a generalization of the common experience of survival in the USSR; 3) subjectivity of Russians, which allowed them to join world history and build their own identity.

# Theoretical Framework

Our article is based on the assumption that "Russian world" refers to ambiguous concepts that, without a final definition, have several general approaches to interpretation.

For example, collective article "Who identifies with the "Russian World"?..." believe that the term "Russian World" has ancient historical roots and a practical definition, however, the geopolitical design of this term was discussed

and refined in Russian political and cultural circles during Putin's presidency (O'Loughlina, Toalb & Kolosovc, 2016).

B. Özpek in his work "The Role of Democracy in the Recognition of De Facto States: An Empirical Assessment" interpreted "Russian World" as oblast or de facto state-like entities that are part of the influence of the RF (Özpek, 2014). De facto states are considered as political authorities operating in a certain territory without international legal recognition. However, de facto states strive to achieve the recognition of other states in order to be considered legitimate participants in the international system.

Some authors within the framework of the proposed approach Ukraine is classified as a "gray zone" country (Sergunin, 2004). Let's remind that Th. Carothers, outlining his vision of the gray area, warned this regime exists in two phases, the first phase being a flawed, unproductive pluralism, and the second phase being dominated by a single political force or central authority (Carothers, 2002).

Within these frameworks Ukraine is a typical example of a "gray zone" state because democratic institutions are present in the political system, but the actual rules by which this system functions are far from democratic standards. The reality of the functioning of various institutions introduced into the political system in the gray zone largely depends on local economic, cultural and historical conditions, as well as on the experience accumulated in the process of transformation.

"Russian world" as a rallying point for selfdetermination after the collapse of the Soviet Union, which simultaneously has and geopolitical context and plays the role of a substitute for the "national idea". Here, the "Russian world" is based on the following ideas:

- the priority of Russia's national interests; the secondary role of "all-human" or cosmopolitan values;
- Russia should remain a great power with a major voice in the international community;
- Russia's main national interest consists of ensuring the country's security and territorial integrity.

Another interpretation of "Russian World" is based on the positioning RF of the as the antithesis of the modern West (Fedoseeva & Solomatin, 2015). The phenomenon of courage, its use as a resource in the global civilizational



competition is considered. The emasculation of masculinity is the reverse side of the development of Western civilization, which claims to have a global meaning. A number of factors with a historical dimension and a complex influence on the decline of manhood are proposed. Russia can and should take advantage of this de-passionization of the West in the course of civilizational competition, which is intensifying now.

The understanding of "Russian world" as a cultural and spiritual unity of "Orthodox peoples" is gaining popularity (Ksenofontov, 2018). In modern conditions both in Russia and abroad the church acted and acts as a support of the Russian culture, traditions and Russian identity. It should be noted that it is actively included in the general cultural processes of the global and regional levels.

So, in the Russian world, national holidays have become Days of Slavic writing and culture, Christmas, Easter, Epiphany celebrations. It is characteristic that such important Orthodox holidays that arose in the historical past are carefully are preserved not only in neighboring countries, but also far. They are especially revered in countries where a fairly large population professing Orthodoxy lives. Among these countries, we note First of all, Serbia, where more than 6 million Orthodox; Bulgaria, where over 80% of the population is Orthodox; Greece, where 8 million residents adhere to Orthodoxy.

At present, within Russian society interaction between state and church in a number of areas. based on organizational bases of joint commissions and committees. Among them such

- activities for the restoration and return to service of unique historical and cultural monuments;
- regular holding of joint cultural, creative actions, competitions, festivals;
- Church also actively manifests itself in the fight against alcoholism, neglect, crime;
- promotes the formation, especially among young people, of a culture of interethnic and interfaith relations, fight against extremism and nationalism.

It must be stated that the "Russian world" as a component of the military confrontation between the RF and Ukraine receives a different definition depending on the definition of the essence of this war.

So, some representatives of scientific society (Datsyuk, 2014; Magda, 2015; Pocheptsov, 2018) regard this military conflict as a "hybrid war" dominating by such peculiarities of its conducting as: 1) asymmetry of actions that let grade enemy's advantages in military conflict; 2) stake on information component that leads to factual conquest of one state by another with formal saving of sovereignty.

At the same time there is a scientific school which is built around works by Ch. Tilly, A. Toffler, M. vanCreveld; M. Kaldor and certifies the appearance of "new wars" (Van Creveld, 1991; Tilly, 1993; Toffler, 1993; Kaldor, 1999). The characteristic feature of such wars is the fact that they are conducted by means of "cleaning-up the territory" on the grounds of irredentism - ethnic mobilization by the reunification of areas, where ethnic minorities live, with the areas, where this ethnos is in majority.

To our mind, precisely such a combination of these two views understanding of wars of XX-XXI centuries let depict the peculiarities of the Russian-Ukrainian war. Namely, broad support

- actions by Russian citizens in relation to Ukraine from the annexation of the Crimea to military support of LPR and DPR;
- terror against the civilian population from persecution and criminal encroachment to looting committed by residents of the post-Soviet space, to which migrants of different generations - from both the USSR and the RF.

# Methodology

The purpose of our work is to study the "Russian world" as a complex political and cultural concept, which has different definitions depending on: 1) memory, where of great importance are knowing of own history parental, realized assertion of strongholds in the formation of own independence history, achievement of social and science consensus concerning important events in the history of the country, detailed analysis of Russian history; 2) realities, where communications serve as channels complementing historical, philosophical and religious discourses in order to create cultural space; 3) creation of strategies for the future which takes place on the ontological grounds.

All this, in its turn, determines the methodological focus of the analysis that should



consider the impossibility to give "Russian world" just only one determination, such as 1) ethnographic definition of similarity between East Slavic peoples; 2) political and legitimate definition of genealogy definition of "Russian state" and "Russian church"; 3) ethno-nationalist definition of the "network of Russian speaking and Russian culture societies".

So, can agree with Volkovskyis thought, the analysis of "Russian world" as the legitimating accompaniment of Russian-Ukrainian military confrontation conditions the necessity to combine the analysis of ideas, systems of categories, outlook values, logic and argumentation with the study of alogisms and absurdity (Volkovskyi, 2021).

All these circumstances ground the methodological frames for scientific research of "Russian world" as a complicated cultural concept that combines general philosophic methods, phenomenology and hermeneutics with the analysis of the historical context of this doctrine creation taking into account the systemic grounds for spreading of individual and collective consciousness patterns.

## **Results and Discussion**

All this determines the need to consider "Russian world" as a unique witnessing and socio-cultural experience that served as the basis for the legitimization of the war against Ukrainians. And this, in turn, leads to the definition of the essence of war, where the weapon is the assimilation and interpretation of collective ideas about modernity, which took place on the basis of stereotypes of thoughts and actions that are stable in public memory.

This is due to the fact that "Russian world" is positioned as a "reproduction of historical justice" – at the same time as an imperial irredenta in the borders of 1913, and as the Soviet irredenta in the borders of 1989. Really demonstrative is V. Putin's speech: "Russia would have won the war without Ukraine" from 16.12.2010, where he depreciated not only the contribution of Ukrainians into the Victory in the World War II but also the quantity of losses (when every ninth Ukrainian was lost) (Ligostova, 2010). It is important that as to the Russian official propaganda the traitors/collaborators in this war are Ukrainian nationalists. But they suppress information about Russian Liberation Army (RLA) collaborative company formed of Soviet prisoners of war during World War II in

Germany headed by lieutenant-general A. Vlasov. In such disrespectful tone RF's official propaganda treats the creation of independent Ukraine in 1991 – as a result of the greatest geopolitical injustice – ruining of the USSR.

Such a fatal absence of critical perception of the Russian-Ukrainian war by "Russian world" supporters (both in the RF and Ukraine) is based on the manipulative interpretation of history and on the notions about Ukraine as a failed state and recognition of Ukrainians as secondary nation constantly dependant from Russian imperial projects.

Cynicism of "Russian world" world outlook is demonstratively incarnated in Putin's statement that: 1) "the real sovereignty of Ukraine is possible only in the partnership with Russia"; 2) relations between Russians and Ukrainians had been forming for centuries; 3) "Together we always were and will be much stronger and more successful, as we are one nation" (Putin, 2021).

The quintessence of "Russian world" is presented in Putin's words spoken on the 16.03.2022: "Appearance of Russian troops near Kyiv and other cities of Ukraine is not connected with the intention to occupy this country, we do not have such an aim" (Putin, 2022).

The real values of "Russian world" world outlook construction is testified by the events have been happening since the 24.02.2022, where the ambitions on great spirituality totally smashed onto the realities of bombing of residential areas and medical establishments, terror against civilian population, making of filtration camps for displaced people and mocking at prisoners of war. And all these against a background of full-scale ruining of cities and villages, residents of which were Russian speaking citizens of Ukraine.

It is important to understand the essence of the "Russian world", this interpretation of it as a part of geopolitical reality. When in the frames of world-systematic approach by I. Wallerstein they assume the unique belonging of Russia to two world systems: Eurasian and Orthodox (Wallerstein, 1991, 1974).

This fact turns "Russian world" into social super system, reproduction of which is supplied by the interlacing of geopolitical interests, economies, social roles of cultural space, influence of spiritual system with personal vision of interpersonal relations, ideals and models of



behavior. As to the place in modern geopolitical environment, the role of second and third sort countries is connected only with countries' interests that make the nucleus in west-centric world system.

The mentioned above definition of "Russian world" is related to its understanding as the result of turning Russia from object into subject of world policy, that was certified firstly by occupation and further annexation of Crimean peninsula. Namely from this point of view "Russian word" was studied in the work by V. Katasonov "America vs Russia. Cold War 2.0." (Katasonov, 2014). Here "Russian world" is a product of world oligarchy's backdrop to the regeneration of Russia that was realized into the war with the USA under the banner of globalization and is conducted in Malorossiva as a part of "Russian world". Under such conditions military assistance to LPR-DPR is moralhumanitarian help of "Russian world" to its own parts, and in such a way it renovates political and economical power.

The aim of special military operation is not less demonstrative – "Our main point is to defend the RF from military threat that is made by western countries which make attempts to use Ukrainian people in the battle against our country" (Koval, 2022). The fact that followers of "Russian world" ideas live in countries with different political foundations and with striking differences in level and style of life and belong to different political realities brings into question the explanation of this concept's success only by the adequacy of propaganda attempts to basic national identification.

A. de Tangi in her book "The Great Migration: Russia and Russians after the Fall of the Iron Curtain" passes an opinion that irredentism of Russian- authorities of the RF sees the area of former USSR as the natural sphere of their influence (Tangi, 2012, p. 17). Distinctive feature of Russian migrants' behavior is in demonstration of general tendency of global world, where "migrants can be active actors of transnational policy", and "migrations can transform the system of international relations making new areas not coinciding with national borders" (Tangi, 2012, p. 18-19).

In this context, it is important that S. Pereslegin in his article "Self-instruction manual for playing on the "world chessboard". Classics of geopolitics, XIX century" introduced the notion "anthropoflows" which connects demographic migrations and "social processes that carry

identity". They at the same time form the geopolitical map of the world and are the source of ethno-cultural groups' movement (Pereslegin, 2003, p. 697).

Russian-Ukrainian confrontation demonstrates how "Russian world" is turning into the weapon on the grounds of the sacralization of Russia that causes identity changes not only in Russia but in Ukraine as well. It is popular to consider "Russian world" to be the unique moral oriented unit of world civilization that is opposed to western empires, directed on the exploitation of colonies by means of break and out-recoding of civilizational grounds and traditions of other peoples (Filimonov & Danyuk, 2016, p. 98). "Russian world" is a harmonious community that serves like a substratum for the development of peoples who voluntary joined the empire.

The imperative of the existence of "Russian world" is maxim - "Russians don't desert their own". The grounds for this are assertion about metaphysical and political unity of RF's image, general mythologization of everything, that is Russian a sign of special valour in opposition to evil as a whole (fascism in particular) and the fact of cultural opposition of RF to NATO countries (Poiarkova, 2022). For understanding of the essence of "Russian world" it is important to state that the rules of the existence of "Russian world" - unity and equality of different ethnic groups and cultures of empire under the leading role of Russian people – were formed by I. Stalin in 1945.

The definition of "Russian world" as the ideology of post-Soviet space was given by Patriarch Kyryl at the opening ceremony of the 3-d Assembly of Russian world on 3.09.2009. He sees "Russian world" as a complicated phenomenon that, firstly, unites the flock of Russia Orthodox Church and takes Russian culture as the basis of national identity. Secondly, this is the answer to globalization questions as an attempt to make an independent subject of world formation on the basis of cultural and national identity (Patriarch Kyryl, 2009).

To Patriarch Kyryl's mind, the existence of "Russian world" as combined civilizational space is focused around the nucleus made of Russia, Ukraine and Belarus (without common political institutions) and demands overcoming such tasks of different levels as: cooperation of civil societies and creation of strong relationship between elites of different countries which are parts of this civilizational space.

The opinion that "Russian world" is a system of shared values of traditional society that is opposed to individual liberal one is rather widespread. For instance, G. Zaporozhtseva (former citizen of Kyiv, now she is a political émigré) in the article "On the ways of returning Ukraine to the bosom of the Russian world' considers Maidan to be the event caused by mass hysteria premised by existential crisis of modern liberal society's crisis (Zaporozhtseva, 2016, p.122). Maidan is an antithesis of "Russian world" as it made the atmosphere of unity by means of happy-enzyme, and this can explain the euphoria of tens of thousands of people which led to dreadful political consequences - falling out of the unified civilizational oykumena.

article written N.Ovchinnikova. Y.Kovalchuk (by the "citizens of LRR-DPR") "On the cultural fronts of the Russian spring" – "Russian world" is treated as a changing factor of the conception of the world. The authors, who are contemporaries of the events an 2014, state that "Russian world" is a project that "changed the essence of life" for Russian speaking people in the east of Ukraine because "among members of people's volunteer corps there were anarchists, communists, neopagans, monarchists, socialists, skinheads, "professional Russians" and others", in the minds of which "there was real chaos. And even those, who were devoted to personal persuasions from now and then, lost his or her belief..." (Ovchinnikova, & Kovalchuk, 2016, p.49-50).

In our opinion, to understand the essence of the "Russian world" as a cultural project it is necessary to consider its role in gaining and keeping of Putin regime's power. From this viewpoint the three-volume edition "Project Russia" by anonymous author is demonstrative (2008-2009). The edition was marked by extralarge number of printed copies and multiple reprints, that indicates he order from ruling stratum of the RF. In that anonymous work they proposed to unite elements of inheritance and appointment by election in order to unite "the best qualities of monarchy" and "the best qualities of Soviet system" (Anonymous, 2008, p. 344). The advantages of the mentioned above proposition were as follows: 1) to achieve the maximum authority of regime; 2) to liquidate the disadvantages of monarchy; 3) to form real elitism by means of participation of only privileged people in elections. The main pledge of success in advancement of RF's project as a "New kingdom" was going to be the ability to orientate modern people to take decisions by "heart", being supported by Orthodox tradition,

not by "stomach", based on democratic postulates, because "the tsar authorities is the power of secular institution in the person of Tsar and spiritual institution in he person of Patriarch, and these two institutions balance each other" (Anonymous, 2008, p.346).

H. Pirchner in his work "Post Putin: Succession, Stability, and Russia's Future" distinguished such stride that became the ground for Putin's power and his supporters (Pirchner, 2019, p.90-99). First of all, this is the strengthening of KGB former structures letting them control private business (e.g. FSB (Federal Security Service).

Secondly, it is the centralization of power in the frames of FSB and FIS (Foreign Intelligence Service), power restrictions for regional of President governors, appointing representatives in regions. President representatives started to control patronage service in their regions - including the right to appoint the chiefs of militia in those regions. In the same way the consolidation of power is supplied by the Law "About Political Parties", which restricts the number of parties recognized by the state. It is quite significant that in 2004 the elections of regional governors were abolished. Since 2000s, there have been taken some measures concerning the prohibition for civil servants to have assets abroad. Since 2018, they have made structures of prior collection of information about dissidence among military men.

Thirdly, political influence of oligarchs was restricted by criminal prosecutions and giving preference to those who supported the Kremlin. Fourthly, it is the suppression of mass media by means of intimidation, physical persecution and criminal homicides amid the creation of FSB structures that make federal supervision over radio and TV.

Fifthly, high emphasis was placed on the upbringing of young people that implies two directions. The first one is the system of measures pointed to form beliefs and ideas concerning history, where the role of I. Stalin is presented as an essential condition for the victory in the Second World War, but repressions (e.g. activity of GULAG (Directory-General for camps, the unified camp system of the USSR. The full name is the Directory-General of forced labour camp and correctional labour settlements) practically isn't explained. And the network of nationwide organizations (similar to the Soviet Young Pioneers and Young Communist League) based on putinism have been made.



Sixthly, the campaign against religious organizations (except those which are loyal) and non-governmental organizations based on threats to national security (the closing of human rights activists' organization "Memorial" is very revealing. It was created by the Nobel laureate A. Sacharov).

Seventhly, this is the persecution of dissidents which is done in two ways: by means of control electoral process and increase in imprisonments for unauthorized rallies, for information in social networks. Especially indicative is the creation of Investigation Committee of the RF in 2011, where ordinary citizens are encouraged to write dilations.

So, in the RF a vicious circle was formed – when the condition of regime survival is "Russian world" as nationalistic-imperialistic ideology which causes territorial expansion to demonstrate the viability of Putin regime to in-country population. To fulfil the regulation they linked bribery of elites and structures- successor of KGB, redistribution of money gained from oil and gas selling and removal of population from politics by means of intimidation.

All these circumstances together make multilayered concept of Russian world that combines political powerlessness of Russian people and which T. Snyder in his work "The War in Ukraine Has Unleashed a New Word" called demonstrative messianic cynicism aimed to discredit common to mankind values, democratic procedures and standards, promotion RF's edge over the whole world (Snyder, 2022). Just this, as T. Snyder thinks, conditions the fact that "Putin's ethnic imperialism insists that Ukrainians must be Russians because they speak Russian. They do - and they speak Ukrainian. But Ukrainian identity has as much to do with an ability to live between languages than it does with the use of any one of them". In this context we can agree with the statement that "The War in Ukraine Is the True Culture War" because "Russians do not understand Ukrainian, because they have not learned it. Ukrainians do understand Russian, because they have learned it. This fact has battlefield implications. Ukrainian soldiers often speak Russian, though they are instructed to use Ukrainian to spot infiltrators and spies. This is a drastic example of a general practice of codeswitching".

Neocolonial character of the Russian-Ukrainian war has one more symptom which isn't often noticed and consequently isn't taken into consideration. To T. Snyder's mind this is "the imperial character of the Russian state, a very high proportion of the Russian soldiers in Ukraine belong to national minorities. This suggests a deeper problem, which is that even soldiers dying for a fascist cause need not be fascists themselves" (Snyder, 2022).

All mentioned above simulacra reveals the disrespect to Ukrainians because of their colonial secondariness and explains the animal behaviour of Russian invaders in Ukraine. So, it is not a contingency that the RF is systematically ruining culture infrastructure as the basis of collective memory, including museums, educational establishments, theatres, houses, parks, shopping centres. Very characteristic for "Russian world" is the promise to liberate "their own people" realised in the frames of the Russian-Ukrainian military confrontation and where the list of completely destroyed cities - Chernigiv, Mariupol, Irpin, Severodonetsk - fixes the crimes against mainly Russian speaking civilian population.

Such regressions of socio-political mind, which testify the breaking up of individual morality and intellectual self-control and make recall the nature of such phenomena as the manifestation of social traumas compensation by means of turning to the initial archetypes: cruelty and violence. In this context, it is to the point to appeal to the opinion of W. Reich, who was a contemporary and researcher of the nature of fascism and thought that fascism substituted grounds for social solidarity (Reich, 1980). The reasons for such a situation were, first of all, in chaos of political and economic life that facilitated the formation of "childish necessity in defense" and focus transmission from personal life to "Führer". The other reason was in the specific structure of German society, where the First World War ruined the considerable part of middle class, and minor bourgeois, bureaucrats and employees became dependant from state power (Reich, 1980, p. 117, 95).

The attractiveness of such a situation is in simple explanations that might be given to drawbacks of the world. So, reasons of social failures are in actions of enemies, driving force of which is the envy to wealth, special history and extraordinary spirituality of Russia as the successor of the USSR. In its turn, giving simple explanations to complicated problems of the present time gives a chance to an average person to answer for nothing.

In this context the pantheon of heroes and glorious victories of "Russian world" are rather



demonstrative and embrace not only different layers of history but also reconcile irreconcilable antipodes. All these features are transformed into traits of real heroes who came to Ukraine as marginal people and quickly transformed into transmitters of special spirituality of fighters with fascism and gain the indulgence concerning criminal assaults and proper material supply in the form of stolen belongings having belonged to supporters of Ukrainian junta.

To our mind, mentioned above let suppose that the attractiveness of "Russian world" may be based on new, implemented by globalization, social processes which help make a new type of solidarity beyond the territory and time (by means of concentration on the past). This confirms A. Toffler's remark that technological achievements desynchronize time and space characteristics and on this basis they form new types of relations, overcoming any space and time restrictions (Toffler & Toffler, 2006, 51).

of Indeed, new means communication (instruments of which are social networks) transform into adaptive means of adaptation to the present time, that is chaotically changing and makes t easier to appeal to something which is taken as an unbreakable rule and turn into the guaranty of survival. On the other hand, an attempt to find the support in the past stipulates for general loss the meaning of life as the imitation of the USSR experience in rearmament, army and interminable trainings of military men, unification of population against inner and outer enemies - are the actions which hide the lack of desired image of the future.

This explains the amorphism of "Russian world" ideology, where the aspiration for having a powerful state by any means and for any price is the means toreach the ideals. Under the circumstances of diffusiveness of ideological guiding, compensatory process conditions on the search of such world outlook constructions, which would be able to be "supplemented reality" (a border between reality and virtuality), as it will give the sense of existence in permanently traumatizing reality.

To our mind, to properly understand the cultural concept of "Russian world" it is necessary to pay attention on the fact that unprecedented losses of the RF in the Russian-Ukrainian war cause consolidation of Russians against Ukrainians, who are seen as an existential threat demanding the only scenario of war "to the victory".

In this context, it is also indicative that among those Russians who quickly fled abroad from the "partial mobilization" (announced) – the motives were not so much protest against the war with Ukraine itself, but rather disagreement to directly take part in it. A similar motivation is inherent in Russian mothers, who are outraged not by the war with Ukraine itself, but by the violation of promises not to attract conscripts to participate in hostilities in Ukraine.

As we can see, dehumanisation of the enemy leads to stopping of critical thinking, when instead of focusing the efforts against putinism Russian society shows the behaviour of "social animals". This collective move resembles the animal behavior and is distinguished by the unity of direction, solidarity and follow the patterns and regurgitate the arguments given by Russian mass media propaganda as to the demarcation into "their own and others".

Most tellingly, this inclination to mass and copied behaviour in Russian society manifests itself in hatred against the dissidents and making of detachments to harass Russians who speak out against the war with Ukraine. Thus, activity of so called "Putin's troops" made of aged supporters is very demonstrative.

#### Conclusions

So, Russian world is a synonym of Russian fascism the essence of which is noteworthy implemented into the practice Dehumanization of everything that is Ukrainian. That's why the heated phase of the Russian-Ukrainian war (from 24.02.2022 to nowadays) is under the slogans of endless lies that includes such narratives as "everything is Ukrainians' fault" and bombing and shootings of civilian population are theatrical productions, where Armed Forces of Ukraine are shelling their countrymen and then place corpses stealthily in order to accuse the liberating mission of the RF of everything.

All mentioned above indicate that "Russian world" is noted for different interpretations made on common principles, such as: Orthodox faith, Russian culture and language, common historical memory and views on social development.

In our opinion, interpretations of "Russian world" – common political environment, part of geopolitical reality, reproduction of historical truth, world outlook surrogate – all these together let the fragment of different periods' essences to coexist without conflicts – an original "symbiosis



of incompatible" made of mixture of symbols, persuasions and ideas.

In other words, Multilayer interpretation of "Russian world" includes: 1) unified church which formed civilizatinal unity; 2) territory of common language; 3) unity on the basis of common history, where the best way of existence was empire.

As we can see, undeniable advantage of "Russian world" construc is the ability to adapt to the traumatizing reality by means of concealing the responsibilities for the present time. Thus, the conception of "strong power" is the main factor organizing the being, where person's role is reduced to a small screw.

It is not an element of chance that "Russian world" is based on the transformation of conception about the past. The reason of this is in search for solving of present time problems in the past - in the space of familiar images and readymade excuses. The result of such an approach is losing the grip of present time reality. Undoubtedly, "Russian world" bears the imprint of nostalgia for idealized life in the USSR, where the total irresponsibility was compensated by guarantees, and right responsibility. This is an unwillingness to grow up, public permission to be social teenager and believe that rules can be broken for the sake of "our own people".

Different interpretations of "Russian world" let abstract this concept in understanding of common political environment which appeared on the basis of residual unity of civilizing. social. family. production, cultural. infrastructural and economic relations, existing in spite of borders that appeared after the dissolution of the USSR. In these frames there is the inner circle of "Russian world" in the form of the RF and the outer one which include Russian speaking people abroad.

Russian peace is a worldview concept that acts as a substitute stability of the existence of the statehood of the RF and is determined by fixations in concrete-historical ideology and with the help of traditions preserved in public consciousness.

Russian peace is a means of objectifying social consciousness as a result of the cognitive activity of a certain set of individuals united by cultural heritage, language, mentality, time and space. The Russian world is an interrelationship of social consciousness and worldview traditions

that are fixed historically, where worldview traditions are always concrete and belong to the historical time of the post-Soviet society of the modern RF.

It is important that the subjects who fall into the sphere of political and cultural influence of "Russian World" have the opportunity to continue the socio-cognitive creative process of assimilation of the post-Soviet space and time by their own or joint efforts, creating a real relationship between human thoughts, words and deeds. "Russian world is a proposition of feeling of unity for former citizens of the USSR based on struggle for justice for "their own people", that justify law-breakings as it turns marginal person into hero, and Internet spreads popularity, and stolen belongings make the illusion of successful

If we consider mentality not only as an image and a way of thinking, but also an image and a way of acting - "thought" (and such a combination is legitimate, since mental stereotypes perceived unconsciously, where they assume critical discursive thinking, but give rise to only spontaneous, unconscious actions of the individual), then the "Russian world" can be considered as a substitute for historical heredity, which allows the traumatized post-Soviet society of Russia to preserve its integrity in the process of socio-historical development, which is impossible without the transmission provided by the traditions from generation to generation of axiological, semantic and teleological worldview elements. It is this continuity that makes representatives of the "Russian world" subjects of world history, determining their historicity. Heredity in social consciousness ensures the connection of eras, moreover, the historical past can act as a real factor in the formation and development of the social system only because such continuity exists.

Thus, world outlook construct of "Russian world" changed into weapon against Ukraine through the potential of its own – ability to form new solidarity beyond territory and time, which can compensate dramatic coincidence of military defeat, political humiliation, economic fall, cultural nihilism and general chaos.

#### **Bibliographic references**

Anonymous, (2008). Project Russia. Moscow: Eksmo, 384 p. (In Russian) ISBN: 978-5-699-21307-8

- Arbeláez-Campillo, D., Tatsiy, V., Rojas-Bahamón, M., & Danilyan, O. (2020). Contributions of critical thinking as a form of participation and political deliberation. Amazonia Investiga, 9(27), 5-12. https://doi.org/10.34069/AI/2020.27.03.1
- Carothers, T. (2002). The End of the Transition Paradigm. Journal of Democracy, 13(1), 1-17. Retrieved from https://www.journalofdemocracy.org/wp-content/uploads/2012/02/Carothers-13-1.pdf
- Datsyuk, S. (2014). Russia's War against Ukraine: Three Components. Independent culturological hour painting. http://www.ji-magazine.lviv.ua/anons2014/Datsyuk\_Vojna\_Rosii\_protiv\_Ukrainy\_tri\_sostavlyayuschiy e.htm (In Russian)
- Fedoseeva, I.A., & Solomatin, E.V. (2015).

  Transformation of masculinity in Russian society. Scientific and Practical Journal "Humanization of Education". Retrieved from
  - https://cyberleninka.ru/article/n/transformats iya-muzhestvennosti-v-rossiyskomobschestve (in Russian)
- Filimonov, G., & Danyuk, N. (2016). The Russian world is at the epicenter of a geopolitical war. Izborsky club. Russian strategies. Doctrine of the Russian world, No. 6-7 (42-43), 98-109. (In Russian)
- Kaldor, M. (1999). New and Old Wars:Organized Violence in a Global Era.Stanford. University Press, 216 p.
- Katasonov, V. (2014). America vs Russia. Cold War 2.0. Moscow. "Book World", 447 p. Retrieved from https://acortar.link/lj3PfU (in Russian)
- Koval, O. (2022). Putin announced a special operation against Ukraine after the appeal of the leaders of the "LPR-DPR". Ua.news. https://ua.news/ru/ukraine/putin-obyavil-provedenit-spetsoperatsii-protiv-ukrainy-posle-obrashheniya-glavarej-l-dnr. (In Russian)
- Ksenofontov, V. (2018). Russian world and the orthodox base. Russian world and its orthodox foundation, № 3, 207-210. Retrieved from https://cyberleninka.ru/article/n/russkiy-miri-ego-pravoslavnoe-osnovanie (in Russian)
- Ligostova, O. (2010). Russia would have won the war even without Ukraine. Voz de América. https://ukrainian.voanews.com/a/putin-2010-12-16-112019064/237398.html (in Ukrainian)
- Magda, E. (2015). Hybrid Warfare. Survive and win. http://bookshelf.ucoz.ua/news/magda\_e\_v\_g

- ibridnaja\_vojna\_vyzhit\_i\_pobedit\_2015\_rtf\_pdf/2016-08-18-13547 (in Russian)
- O'Loughlina J., Toalb, G., & Kolosovc V. (2016). Who identifies with the "Russian World"? Geopolitical attitudes in southeastern Ukraine, Crimea, Abkhazia, South Ossetia, and Transnistria Eurasian Geography and Economics, 57(6), 745-778 http://dx.doi.org/10.1080/15387216.2017.12
  - http://dx.doi.org/10.1080/15387216.2017.12 95275
- Ovchinnikova, N., & Kovalchuk, Y. (2016). On the cultural fronts of the Russian spring. Izborsky club. Russian strategies. Cultural power of the Russian world, No. 5(41), 48-65. (In Russian)
- Özpek, B. B. (2014). The Role of Democracy in the Recognition of De Facto States: An Empirical Assessment. Global Governance, 20(4) (Oct.-Dec.), 585-599.
- Patriarch Kyryl. (2009). Speech by His Holiness Patriarch Kyryl at the grand opening of the III Assembly of the Russian World. Official website of the Moscow Patriarchate. http://www.patriarchia.ru/db/text/928446.ht ml. (In Russian)
- Pereslegin, S. (2003). Self-instruction manual for playing on the "world chessboard". Classics of geopolitics, XIX century. Moscow: AST, 697-700. (In Russian)
- Pirchner, H. (2019). Post Putin: succession, stability, and Russia's future. American Foreign Policy Council: Rowman & Littlefield publishers, 122 p.
- Pocheptsov, G. (2018). Cognitive Attacks in Russian Hybrid Warfare. Information & Security: An International Journal, 41, 37-43. https://doi.org/10.11610/isii.4103
- Poiarkova, T. (2022). "Others" in the Ukrainian society as a result of the modern Russian-Ukrainian war. in: European journal of sustainable development, 11(1), 20-30. https://doi.org/10.14207/ejsd.2022.v11n1p20
- Putin, V. (2021). "Russians and Ukrainians are one people. Together we are stronger and more successful". Fontanka. https://www.fontanka.ru/2021/07/12/700210 85/ (In Russian)
- Putin, V. (2022). About the situation in Ukraine. https://eadaily.com/ru/news/2022/03/16/vlad imir-putin-o-situacii-na-ukraine-polnyy-tekst (In Russian)
- Reich, W. (1980). The Mass Psychology of Fascism. Editorial: Farrar, Straus and Giroux. 395 p.
- Sergunin, Al. (2004). Discussions of international relations in post-communist Russia. Communist and Post-Communist



- Studies. 37(1), March, 19-35. doi: 10.1016/j.postcomstud.2003.12.007
- Snyder, T. (2022). The war in Ukraine has unleashed a new word. in: the New York times magazine. https://www.nytimes.com/2022/04/22/magaz ine/ruscism-ukraine-russia-war.html
- Tangi A., de. (2012). The Great Migration: Russia and Russians after the Fall of the Iron Curtain. Moscow: Russian Political Encyclopedia (ROSSPEN). 479 p. (in Russian)
- Tilly, Ch. (1993). Coercion, Capital and European States, A.D. 990-1990. Wiley-Blackwell Paperback. 284 p.
- Toffler, A. (1993). War and Anti-War: Survival at the Dawn of the 21st Century. Little Brown and Company, 302 p.
- Toffler, A., & Toffler, H. (2006). Revolutionary wealth how it will be created and how it will change our lives. Curtis Brown Ltd. 490 p.

- Van Creveld, M. (1991). Transformation of War. New York: Free Press, 243 p.
- Volkovskyi, V. (2021). Independence in opposition to the "Russian world": a world. Philosophy philosophical Education, 27(1),https://doi.org/10.31874/2309-1606-2021-27-1-4
- Wallerstein, I. (1974). The modern worldsystem. Vol. I: Capitalist agriculture andthe origins of the European world-economy in the sixteenth century. San Diego: Academic Press, 440 p.
- Wallerstein, I. (1991). Geopolitics geoculture: Essays on the changing worldsystem. Cambridge, England: Cambridge University Press, 252 p.
- Zaporozhtseva, G. (2016). On the ways of returning Ukraine to the bosom of the Russian world. Izborsky club. Russian strategies. Doctrine of the Russian world, No. 6-7 (42-43), 120-127. (In Russian)

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## Monitoring of the life quality of population in Europe and Ukraine in the war conditions

#### Моніторинг якості життя населення в Європі та в Україні в умовах війни

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https://orcid.org/0000-0003-0121-621X

#### **Abstract**

This scientific work is dedicated to highlighting important economic issues related to the quality of life of the population in Europe. The results of this work were obtained through the prism of the research of scientific approaches to the analysis of the quality of life, which made it possible to analyze the indices' values of the quality of life of the population in the cities and countries of Eastern Europe, as well as Ukraine today, when it is suffering from full-scale Russian military aggression and is fighting for its survival. The authors highlighted three planes of the general architecture of the concept based on social quality of life of the population in Ukraine and visualized the scientific concept of social quality of life with a European orientation.

**Keywords:** quality of life, population, monitoring, military actions, Ukraine, indices, cities and countries of Europe.

#### Анотація

Дана наукова робота присвячена висвітленню важливих економічних питань, пов'язаних із якістю життя населення на території Європи. Результати даної роботи отримано крізь призму дослідження наукових підходів до аналізу якості життя, що дало можливість проаналізувати значення індексів якості життя населення в містах та країнах східної Європи, а також України у сьогоденні, коли вона потерпає від повномасштабної російської військової агресії та бореться за своє виживання. Авторами виділено три площини загальної архітектури концепції соціальної якості життя населення в Україні та візуалізовано наукову концепцію соціальної якості життя з європейською орієнтацією.

**Ключові слова:** якість життя, населення, моніторинг, воєнні дії, Україна, індекси, міста та країни Європи.

<sup>&</sup>lt;sup>37</sup> Candidate of Economic Sciences, Docent, Associate professor of the Department of Marketing and Behavioral Economics, KROK University of Economics and Law, Ukraine.



<sup>&</sup>lt;sup>33</sup> Doctor of Economic Sciences, Professor, Head of the Luhansk branch of the State Organization "V. Mamutov Institute of Economic and Legal Research of the National Academy of Sciences of Ukraine", Ukraine.

<sup>&</sup>lt;sup>34</sup> Doctor of Economic Sciences, Senior Researcher, Deputy Head of the Department of Interregional Cooperation Issues, State Organization "V. Mamutov Institute of Economic and Legal Research of the National Academy of Sciences of Ukraine", Ukraine.
<sup>35</sup> Doctor of Economic Sciences, Professor, Head of the Department of Socio-Economic Problems of Labor of the State Organization "Institute for Economics and Forecasting of the National Academy of Sciences of Ukraine", Ukraine.

<sup>&</sup>lt;sup>36</sup> Doctor of Economic Sciences, Professor, Professor of the Department of Management and Smart-Innovations, Kyiv National University of Technology and Design, Ukraine.



#### Introduction

In the modern world, a person's perception of his position in life in the context of the culture and value systems in which he lives is the main criterion and goal of economic development of any country in the world. This perception is closely related to the quality of life among population as is an economic-philosophical category, which constantly evolves and defines material and spiritual comfort of people living. However, each social and political system provides a certain level and character of life quality, which is impeach dependent on the state of economy of a particular state. Therefore, there is a direct dependence of the person or society expectation for a good life on a territorial socioeconomic development.

Ukraine's aspiration to Europe and accession to the European Union is impossible without a significant improvement in the concept of health, comfort, and happiness experienced by the population. At the same time, this process depends on the social and political system, and thus on the prospects of the state's development. But one can state that today in practice of management of social and economic development of Ukraine the level and quality of life among population has a strategic character because of the war that Russia has waged and the destruction of the country.

Because of the war, every Ukrainian has a subjective sense of himself and his life depending on the territory of residence, and a wide range of indicators and indices are used to obtain an objective assessment of these processes. They are usually grouped into three blocks: economic, ecological and social, that is, in the context of sustainable development. Therefore, constant monitoring of indicators (indices) of the quality of life of the population allows to determine the place of each country among other countries of the world or Europe. As for Ukraine, in these difficult conditions, it is even more important due to the need to restore infrastructure in the country's destroyed cities to ensure high quality of life for people. To eliminate the indicated negative war consequences, it is important to analyze the key indicators that characterize the efficiency of all aspects of human life, the level of satisfaction of material, spiritual and social needs, the level of intellectual, cultural and physical development, as well as the degree of life security as a recovery driver of Ukrainian territories. In this way, the purpose of this work is to get the results of monitoring of the qualityof-life indices of the population in the European

countries and to highlight this process in the cities of Ukraine in the conditions of war in order to make more informed management decisions in the affected territories.

#### Theoretical Framework or Literature Review

The issues of analysis and estimation of the quality of population life are considered in the works of foreign scientists. Bayle et al., (2000), Campbell, A. (1981), Charlemagne-Badal, S.J., Lee, J.W. et al., (2015), D'Souza, R. (2021) investigated the general theoretical issues related to the quality of life of the population. Instead, the scientific and methodological principles of assessing the standard of living of the population found their coverage in scientific works of Liu, B. (1976), Marsella, A.J., Levi, L. & Ekblad, S. (1997), Matanov et al. (2013), Montfort, M., Tapsoba, R., Tapsoba, S. (2015), Petróczy, D. (2021). There are also studies related to the conceptual provisions of the quality of life of the population through the prism of the geosystem approach and the main provisions of the concept of sustainable (balanced) development. Among the authors of these works: Sollis, K., Yap, M., Campbell, P., Biddle, N. Van der Boor, C.F., Amos, R., Nevitt, S. (2020) and others.

Ukrainian scientists also have an experience in a scientific issue about the quality of life with reference to the development of territories during the war in Ukraine as well as the typification of the west regions according to the specifics of the political component of this process. Among the scientists of our country dealing with this issue: Heyets, V. (2021), Zablodska, I., Sieriebriak, K., Balakireva, O. (2022), Rohozian Hrechana S., Kuzmenko O. et al., (2020), Sitnikova, N. (2017), Shults, S., Lutskiv, O., Simkiv, L., & Andrusiv, U. (2021) and others. Recognizing the significant scientific results of these scientists, it is important to note that the issue of monitoring and analyzing the standard of living of the population of Ukraine under martial law is insufficiently covered in the domestic economic literature, and foreign developments require adaptation to the realities of the modern economy, taking into account its specificities. At the same time, the existing achievements do not correlate the quality of life in Europe and Ukraine, which is very important for the implementation of the Association Agreement between the EU and our country, as well as for the improvement of the life of the population of the war-affected territories.



#### Methodology

Methodology of this research is based on four levels of knowledge: the general philosophical level (set of joint views and knowledge about phenomena connected with the concept of quality of life); general scientific level (understanding of common approaches, principles, instruments, indicators, indices for measuring the quality of life amid population) and specific science methodology (combined Ukrainian and European experience in the quality of life among population in the military conditions).

It is advisable to conduct such monitoring in the conditions of using the data of the site Numdeo, which contains the world's largest database of life (Numbeo, 2022). Numdeo is a crowdsourcing global data base on quality of life: Living indicators, crime rates, health care quality, transport quality, and other statistical data. Numdeo allows you to compare information about quality of life in cities and countries of the world. The methods of comparative analysis, grouping, graphic visualization etc. are also used for this research.

In general, the methodology of assessing the quality of population life is an important analytical and monitoring tool of public administration, which allows to set the strategic development of the country for the medium term, develop social and economic policy (International Association on Social Quality, 2020), taking into account its influence on the quality of life, first of all, the most vulnerable groups of the population; to carry out analysis of the current level of socio-economic development of the country; assess social progress, etc. In addition, the work uses methods of comparison and analysis (in the context of practical experience of quality of life among population in cities and countries of Europe), groups and graphic method of information processing (in the context of quality-of-life measurement and the national matrix of its indicators), official normative-legal acts, scientific-practical researches of leading scientists and economists.

#### **Results and Discussion**

1. Scientific approaches to the analysis of the quality of population life

The work carried out within the framework of the Club of Rome contributed to the wide discussion of problems of quality of life and quality of population in relation to economic growth.

However, only in the last decades of the XX century there was a significant turn to these problems in economic theory. There is an obvious limitation of the increasingly neoclassical approach to development problems, which is especially characterized by the subordination of the human to economic goals and objectives; the sharp deepening of social contradictions and the inability to solve them on the basis of traditional approaches of economic theory; the rapid development of institutional nationalism and the expansion of the scope of institutional approach; change of the role of man in ensuring economic growth, strengthening of the influence of sociology on economic science. That is why the end of 80s and the beginning of 90s were marked by the formation of concepts and theories in which the role of man was considered in a new way. First of all, it is the concept of sustainable development and the concept of human development, whose primary idea is that a person is the goal of economic growth, not his resource. The unifying component of both concepts is the quality of life, which in the first case acts as a criterion, and in the second, as a necessary condition. The study was initiated by UN agencies. Theoretical constructions were supplemented methodological of uniform development principles of estimation of corresponding indicators. According to the World Bank's estimates, the increase in human development costs is now a strategic line of development in most countries. Indicators of quality of life and human development become the criterion of decision-making in the sphere of economic and social policy in the activity of an increasing number of states and intergovernmental organizations (Sitnikova, 2017).

The quality-of-life philosophy at the beginning of the XX century comes to the fore in strategic planning in the most developed countries of the world, for instance, in Canada, the United Kingdom, Sweden, Japan, New Zealand, etc., because due to quality of life it is possible to carry out an integral evaluation of management effectiveness in conditions of transition to a postindustrial society. The quality of life is interpreted as a complex integral characteristic of the ways of interaction of a person with its social environment, which reflects the level of realization of human rights and its social freedom. possibilities of comprehensive development of a person, a combination of material, cultural and spiritual values.

However, the quality of life amid population in the countries and cities of Europe must be



monitored and analyzed constantly and systematically, taking into account the consequences of the war that intensified in Ukraine in February 2022, which underscores the importance of conducting this research.

The quality-of-life assessment is carried out directly with the help of indicators and indices aimed at studying individual aspects of human and social life, table 1.

However, in recent decades the concept of social quality of life has become more relevant, which

**Table 1.** *Quality of life Estimations Indices* 

consists in comprehensive research and understanding of modern social processes with the aim of establishing mutual understanding between social structures and actions of citizens and taking into account the prospects of expanding the rights and opportunities of citizens; strengthening the role of citizens in their communities; promoting personal development of citizens so that they can develop their own requirements for social quality of living conditions every day.

Name	The entity that performs the calculation	Calculation principle	Indicators	Number of countries covered
Human Development Index	United Nations Development Programme (UNDP)	Geometric mean of three indices	Life expectancy, education, gross national income	187
Prosperity Index	Research organization Legatum Institute	Integrated assessment of parameters	Economy, business development and opportunities level, public administration, education, health care, security level, personal freedom, social capital	110
Index/rating of cities with the highest quality of life	Consulting company Mercer Human Resource Consulting	Rating assessments	39 criteria of assessment: political and social environment, economic indicators, availability of certain restrictions, quality of health care system, quality of education system, availability and cost of housing, cultural life, climate and probability of natural disasters	215 cities of the world
Gallup life Quality Index	Gallup Institute	Sociological survey of quality of life	Health, education, material wealth, civic activity, political freedom, social, environmental, economic and physical security	Changes from year to year
National matrix of indicators of the quality of population life in Ukraine	M.V. Ptukha Institute for Demography and Social Studies	Human Development Index according to the Method of monitoring of regional human development	Six blocks, 33 indicators	1

(Source: Libanova et al., 2013)

In order to ensure an adequate assessment, Ukraine uses the national matrix of indicators as adapted to state statistics as much as possible, table 2.



**Table 2.** *National indicator matrix of quality of life* 

	Blocks		
Environment	Objective evaluation State	Current situation	Subjective evaluation
Nature environment			
Ecology	Nature environment	Environmental situation	Assessment of environmental situation
Social environment			
Health	Health care system	Health of the population	Assessment of the health care system and own health
Education	Education system	Education of the population	Evaluation of education system and own education
Security	The Crimean-genic environment	The Crimean situation	Assessment of personal safety
Culture, art, rest	Sphere of culture, art, tourism	Activity of population in the sphere of culture, art, tourism	Attitude to culture, art, tourism
Housing	Housing market	Housing conditions	Assessment of living conditions and amenities
Transport	Transport infrastructure	Transport safety	Assessment of transport operations
Economic environment			•
Economy	The state of the economy	Welfare	Assessment of financial situation
Employment	Labor market	Employment and working conditions	Assessment of employment situation
Social and political envir	ronment	Ü	
Civil activity	Development of civil society	Social and political situation	Assessment of socio- political situation
Social environment	The state of the social environment	Social identity	Social well-being

(Source: Libanova et al., 2013)

Libanova, E.M., Hladun, O.M., Lisohor, L.S. they distinguish five consecutive stages of theoretical re-thinking of social quality of life (Libanova et al., 2013):

- 1. The end of 1940 is the beginning of 1960 years. During this period, as social indicators, indicators of social accounts systems, etc. were used.
- 1960-th years the period of creation of the first complex systems of social indicators; indices of personal satisfaction, different spheres of life activity are developed. Social indicators receive practical application during the determination of social policy goals, for evaluation of various social programs.
- 1970–1990-th years this period is characterized by setting of tasks of development of a complex of social indicators and formation of general requirements to systems of social indicators.
- 4. 1990-ies 2014 is characterized by attention to issues of social and economic planning, improvement of welfare, improvement of living conditions and quality of life. The quality of life becomes

- an integrated indicator of social programs, projects evaluation, determines the living conditions.
- 5. The modern stage from 2014 till now is the concept of European quality of life.

The implementation of the basic provisions of the scientific concept of social quality in Ukraine is carried out through the implementation of the Human Development Strategy till 2025, which provides for the analysis of the dimensions of social quality of life in Ukraine in terms of the following: social and economic security, social cohesion, social inclusion, social opportunities.

By Presidential Decree No. 225/2021 of June 2, 2021, the Human Development Strategy till 2025 (Decree No. 225/2021, 2021) was approved.

The aim of the Strategy implementation is to create conditions for the comprehensive development of the person during life, to expand opportunities for realization of potential and freedom of the person, its civic activity for the sake of forming a cohesive community of citizens capable of active creative collaboration in harmonious, balanced and sustainable



development of the state. The achievement of this goal is expected to improve the key indicators of human development, such as life expectancy, access to high-quality physical and sports services, access to quality life-long education, decent living standards, and optimization of the link between economic growth and human development, in particular by increasing investments in quality infrastructure renovation of key areas of human development, Development of social sphere and equitable distribution of economic resources (Decree No. 225/2021, 2021).

The general architecture of the concept of social quality of population life, according to Gubaidullina, N.K. defined in three fillers.

These are, first, processes, which are caused by the basic factors, which have cognitive or emotional coloring: personal security; public recognition; social reaction; personal abilities.

Secondly, the orientations, which are determined by the following normative factors: social justice (equality); solidarity; equality of approaches of social evaluation; human dignity.

Third, opportunities characterized by the following factors: social and economic security; social cohesion, which is manifested through partnership and cooperation; social inclusion (inclusion); empowerment (social opportunities)

of human beings. The latter area defines the conditions of social-qualitative functioning of society, which is manifested by interdependency of individual persons selfrealization and the level of development of social relations: people have access to the necessary material base and socio-economic benefits (social and economic protection of the population connected with employment, social guarantees, education, health care, Personal security, etc.); people have the opportunity to interact with each other (empowerment that means the ability of citizens to realize individual potential, control their own lives and to use all their possibilities); people have access to the necessary social institutions, including schools, labor market, public organizations, etc. (the institution); people adhere to norms and maintain social values (social cohesion and partnership) (Gubaidullina, 2014).

Thus, the concept of social quality of the population life is a new standard, intended for assessment of economic (welfare), socialcultural (realization of creative potential) and social (public activity) aspects of human life. Such a standard improves democratic relations at the national level, promotes social justice and equality in communities and society as a whole.

The scientific concept of social quality of life with European orientation is presented on Fig. 1.

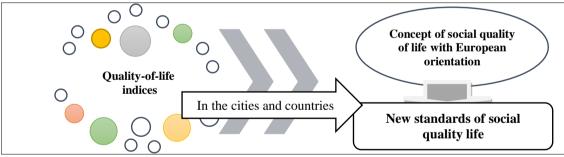


Figure 1. Dualism of features of efficient special mode of economic development after war (Source: own processing)

The concept of social quality of life with European orientation provides analysis of quality-of-life indices among population in cities and countries of Europe.

2. Analysis results of quality-of-life indices in cities and countries of Europe

The social quality-of-life index is estimated by the following dimensions: cost of life, purchasing power, safety, health care, ratio of real estate price and income, travel time, pollution level,

climatic conditions. The quality-of-life index is an estimation of the overall quality of life by means of an assessment formula that takes into account the Purchasing power index (the higher the better), Pollution index (the lower the better), the ratio of real estate price and income (the better), the Cost-of-living index (the lower the better), Index security (the higher the better), the Health care index (the higher the better), the Travel time index (lower the better), and the Climate Index (the higher the better) (Numbeo, 2022).

The monitoring and ranking of the world population's quality-of-life indices (in 2022) proves that the best quality of life in Australia

(228,41) and the worst in Philippines (47,5) (Numbeo, 2022).



*Figure 2.* Map of Ukraine and cities where the measure of quality of life was conducted. (Source: Numbeo, 2022)

Table 3 shows the results of monitoring the quality-of-life indices in Eastern Europe in 2022. The best quality of life in Prague (Czech Republic) is 161,59, the worst in Russia (Novosibirsk) is 82,31. As for Ukraine, the Lviv quality-of-life index is 134,53, in Kharkiv - 111,78, in Kyiv 108,80, in Odesa - 106,88 and in

the Dnipro - 99,30 (Numbeo, 2022). If you look at the map of Ukraine (Fig. 2) and the city where the measure of quality of life in the conditions of war was carried out, it is obvious that in front-line cities (in the South and East) the standard of living will be lower.



**Table 3.** *Monitoring results of quality-of-life indices in cities/countries of Eastern Europe* 

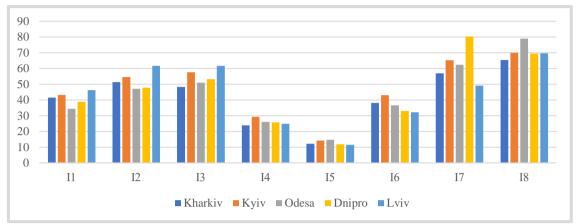
Rank	City / Country	Quality-of-life index	Purchasing power index	Index security	Health care index	Cost-of- living index	The ratio of real estate price and income	Travel time index	Pollution index	Climatic index
1	Prague, Czech Republic	161.59	75.28	75.42	74.66	48.60	19.44	32.15	33.92	80.67
2	Brno, Czech Republic	160.20	74.94	74.01	74.26	44.52	16.61	25.88	42.82	78.17
3	Timisoara, Romania	155.86	61.91	76.55	71.43	34.10	10.57	23.33	56.18	82.05
4	Bratislava, Slovakia	150.22	69.25	70.17	57,38	47.07	15.93	31.01	39.41	80.72
5	Cluj-Napoca, Romania	149.39	57.71	77.80	64,35	38.21	15.16	29.54	44.05	74.35
6	Nizhny Novgorod, Russia	145.58	43.25	71.65	76.35	46.13	14.25	27.27	31.13	45.51
7	Varna, Bulgaria	139.00	54.94	63.37	62.47	35.28	9.28	29.53	60.65	85.08
8	Lviv, Ukraine	134.53	46.32	61.65	61.74	24.96	11.43	32.10	49.12	69,61
9	Warsaw, Poland	133.35	67.34	71.75	58.15	39.94	15.04	35.38	61.30	74.61
10	Kaliningrad, Russia	131.75	42.23	68,66	55.39	44,64	13.30	32.57	48.22	73.69
11	Lasi, Romania	130.93	51.98	68.87	56.33	34.65	11.72	34.26	58.28	73.04
12	Gdansk, Poland	130.47	65.40	67.12	49.71	36.83	16.37	31.86	57.49	75.51
13	Budapest, Hungary	129.29	59,62	65.00	52.50	40.07	14.74	39.15	53.80	78,41
14	Wroclaw, Poland	127.98	61.85	67.71	51.76	38.16	13.15	34.80	64,62	78,39
15	Poznań, Poland	127.61	65.13	67.72	50.65	35.30	14.97	32.92	65.10	77.41
16	Sofia, Bulgaria	126.41	62.18	57.77	57.55	42.38	10.23	30.49	68.98	76.01
17	Krakow, Poland	124.86	68,41	70.02	53.16	38.09	15.06	31.42	73.22	73.86
18	Lodz, Poland	122.83	64.18	57.07	50.28	33.94	11.33	35,66	66.91	77.02
19	Bucharest, Romania	121.86	60.22	72.06	55.01	39.19	10.81	41.00	75.35	75.61
20	Katowice, Poland	121.11	70.88	57.35	40.67	36.78	11.20	33.17	67.32	72.49
21	Chisinau, Moldova	120.37	40.93	55.55	50.99	31.29	10.46	27.41	63.77	76.91
22	Moscow, Russia	116.48	66,62	63.11	65,96	51,59	19.19	50.44	55.72	55.83
23	Minsk, Belarus	115.14	38,47	41.56	47.63	36.82	14.90	29.93	41.99	64.37
24	Kharkiv, Ukraine	111.78	41.50	51.36	48.24	23.81	12.11	38.18	57.00	65.35
25	Kyiv, Ukraine	108.80	43.20	54,55	57.55	29.30	14.13	43.06	65.26	69.95
26	Odesa, Ukraine	106.88	34.29	47.16	50.93	25.98	14.71	36,56	62.30	79.00
27	Saint Petersburg, Russia	100.81	45.41	60.41	60.54	54.05	21.39	47.90	61.85	60,64
28	Yekaterinburg, Russia	99.78	67,48	53.75	51.12	49.35	8.74	37.93	73.49	21.33
29	Dnipro, Ukraine	99.30	38.73	47.69	53.17	25.78	11.82	33.00	80.37	69.52
30	Novosibirsk, Russia	82.31	37.33	52,73	56,62	48.88	15.10	40.00	70.55	16.14

(Source: Numbeo, 2022)



One should pay attention to the Index security, which is low in cities under the attack of Russia. This index will decrease even more over time until the war continues. In Fig. 3 the results of the quality-of-life measurement in cities of Ukraine

are presented by complementary indices (Purchasing power index (I1), Pollution index (I2), the ratio of real estate price and income (I3), Cost-of-living index (I4), Index security (I5), Health care index (I6), Travel time index (I8).



*Figure 3.* The results of the quality-of-life measurement in cities of Ukraine with complementary índices. (Source: Zablodska et al., 2022)

Of course, the war in Ukraine has affected the quality of population life, but in Western Ukraine, Lviv, living standards are certainly higher than in the East, Central and South of the country. In 2022 the quality-of-life index in Lviv is equal to 134,53, in 2021 – 121,96, in 2020 –

119,16, that is, it is possible to say that despite the war quality of life amid population has increased. As for Ukraine as a whole, the results measured the quality of life in 2022 are shown in Table 4.

**Table 4.** *Quality of life measure in Ukraine in 2022* 

Measure	Index	Characteristic
Pollution index	62.15	High
Climatic index	70,69	High
The ratio of real estate price and income	12.23	High
Security index	53,58	Moderate
Health care index	55.33	Moderate
Travel time index	37,78	Moderate
Purchasing power index	41.47	Low
Cost-of-living index	25.02	Very low
Quality-of-life index:	114.01	Low

(Source: Numbeo, 2022)

Thus, in 2022 the quality-of-life index of the population trusted 114,01 (low), it is 24 among the countries of Europe, and seventh among the countries of Eastern Europe. In 2021, Ukraine also ranked seventh among Eastern European

countries (107, 8). In 2020, the index was 105,26, and the place was eighth. That is, the quality of life of the population in Ukraine has increased every year, over the last three years, Table 5.



**Table 5.**Dynamics of changes in the quality-of-life index in the countries of Eastern Europe

2020			2021			2022		
Rank	Countries	Index	Rank	Countries	Index	Rank	Countries	Index
1	Czech Republic	154,70	1	Czech Republic	157,49	1	Czech Republic	163,78
2	Slovakia	149,93	2	Slovakia	147.09	2	Slovakia	150,50
3	Belarus	133,52	3	Hungary	134,54	3	Hungary	136.22
4	Romania	131,69	4	Romania	130,86	4	Poland	132.16
5	Hungary	128,40	5	Poland	127,79	5	Romania	131.09
6	Bulgaria	127.14	6	Bulgaria	126,88	6	Bulgaria	128,96
7	Poland	125,20	7	Ukraine	107,80	7	Ukraine	114,01
8	Ukraine	105.26	8	Belarus	107,15	8	Belarus	109,60
9	Russia	101,57	9	Russia	97,91	9	Russia	103.19

(Source: own processing)

Thus, the monitoring of the quality-of-life indices among population in Ukraine and other European countries proved that in Ukraine the quality of life increased every year, but because of the war on the territories that are along the front line – the quality of life has significantly decreased. It is possible to assume that these facts became one of the arguments for the beginning of a full-scale aggression by Russia.

The results of this research were obtained within the framework of the scientific-research work of the National Academy of Sciences of Ukraine related to the construction of priority development areas in the context of armed conflict: assessment of resultiveness and efficiency. The armed conflict, which is now being developed on the territory of Ukraine, has forced the state authorities and local governments to reconsider some aspects of the development of the territories.

That is why the adoption of the Law of Ukraine "On amendments to certain Legislative acts of Ukraine concerning the principles of state regional policy and the policy of renewal of regions and territories" has recently resulted in substantial changes, which suspended the norms on the creation and functioning of priority development areas. Their functioning has been transformed into the creation types of territories on functional grounds, which is connected with the future processes of restoration and reconstruction of war-affected territories of Ukraine.

In accordance with these changes, it defines that for planning of restoration and stimulation of development of regions and territories, as well as with the purpose of introduction of special mechanisms and instruments by executive authorities and local self-government bodies, the following functional types of territories are defined: territory of restoration; regional poles of growth; territories with special conditions for development; territory of sustainable development.

The areas of recovery are microregions, territorial communities where the fighting took place and/or were temporarily occupied, and/or whose territories were destroyed by the destruction of critical infrastructure, social infrastructure, housing fund facilities as a result of the fighting, and also characterized by a sharp deterioration of the level of socio-economic development and significant movement of population to other regions and/or other countries.

The regional growth poles are microregions, territorial communities characterized by much better geographical, demographic, socioeconomic indicators of development compared to other similar regions of the region, and whose growth has a positive impact on neighbouring territories, regions and/or in general.

Territories with special conditions development are theatres, microregions, territorial communities, whose level of socioeconomic development is low or where there are natural, demographic, international, security or other objective restrictions on the use of the territory's potential for development. In order to apply differentiated development support measures, separate functional types of territories with special conditions for development are defined.

Sustainable development territories are selfsufficient micro-regions, territorial communities with existing socio-economic potential of the territories and are capable of balanced development in economic, social and environmental spheres.



Based on these provisions, it is assumed that it provides for territories where special economic conditions can be introduced for the full restoration of economy, where the indicator of the quality of life of the population will play a key role. The authors predict that the results of this research will form the basis of further scientific works, which will be devoted to theoretical and methodological principles and instruments of stimulation of development of depressed territories by encouraging the activity of economic entities in the defined settlements in order to improve the quality of life of residents of these territories. In order to assess the quality of population life  $\alpha$ f the and resultiveness/efficiency of development of affected areas from war, a pool of indicators, indices and indicators (especially economic ones) is needed, which requires further research.

#### Conclusions

Theoretical studies on the quality of population life have proved that the philosophy of quality of life is constantly developing and deepening. There is an obvious limitation of the neoclassical approach to human development problems due to the sharp deepening of social contradictions and inability to solve them on the basis of traditional approaches of economic theory. There is a change in the role of man in ensuring economic growth, and the influence of sociology on economic growth.

Many indicators and indices are used to analyse and monitor the quality of life and human development of the world, aimed at studying individual aspects of human and social life. In order to ensure an adequate assessment, Ukraine uses the national indicator matrix as adapted to state statistics as much as possible.

In recent decades, the concept of social quality of life has become more relevant, which consists in comprehensive research and understanding of modern social processes with the aim of establishing mutual understanding between social structures and actions of citizens and taking into account the prospects of expanding the rights and opportunities of citizens; strengthening the role of citizens in their communities; promoting personal development of citizens so that they can develop their own requirements for social quality of living conditions every day. And scientists identify five consecutive stages of theoretical re-thinking of social quality of life.

The implementation of the basic provisions of the scientific concept of social quality in Ukraine is carried out through the implementation of the Human Development Strategy till 2025, and the general architecture of the concept of social quality of life is defined in three layers: processes, orientations and opportunities. That is why the scientific concept of social quality of life with European orientation has been tested.

The social quality-of-life index is estimated by many dimensions/indices as: cost of life, purchasing power, security, health care, ratio of real estate price and income, travel time, pollution level, climatic conditions. The monitoring and ranking of the world's population's quality-of-life indices in 2022 proves that the best quality of life in Australia and the worst in Philippines. The best quality of life in Prague (Czech Republic) and the worst in Russia (Novosibirsk).

Of course, the war in Ukraine has affected the quality of life amid population, but in Western Ukraine, Lviv, living standards are certainly higher than in the East, Central and South of the country. Thus, in 2022 the quality-of-life index of the population is low, Ukraine has 24 place among the countries of Europe, and seventh place among the countries of Eastern Europe. However, the quality of life among the population in Ukraine has increased every year during the last three years, but on the territories that are along the front line – the quality of life has significantly decreased. And the quality-of-life index in Ukraine will decrease even more over time, while the war will continue.

#### Bibliographic references

Bayle, B., Kemoun, G., Migaud, H., & Thevenon, A. (2000). Comparison of two modes of administration of a personalized quality of life scale in a longitudinal study of total hip arthroplasty. Joint Bone Spine, 67(2), 101-106.

Campbell, A. (1981). The Sense of Well\_being in America: Recent Patterns and Trends. New York: McGraw\_Hill.

Charlemagne-Badal, S.J., Lee, J.W., Butler, T.L., & Fraser, G.E. (2015). Conceptual Domains Included in Wellbeing and Life Satisfaction Instruments: A Review. Applied Research in Quality of Life, 10(2), 305-328, https://doi.org/10.1007/s11482-014-9306-6

Decree No. 225/2021. On Human Development Strategy. Decree of the President of Ukraine dated June 2, 2021. Retrieved from



- https://zakon.rada.gov.ua/laws/show/225/20 21#n2 [In Ukranian].
- D'Souza, R. (2021). Quality of Life in the Perspectives of Teachers in COVID 19 Pandemic Era: Implications for Funding Allocation for Faculty Well-being Initiatives. Studies of Applied Economics, 39(12), 1-11. Retrieved from https://ojs.ual.es/ojs/index.php/eea/article/view/6315/5671
- Gubaidullina, N.K. (2014). European theory of social quality and quality of life theory. Bulletin of Economics, Law and Sociology, 1, 144-148. URL: https://cyberleninka.ru/article/n/evropeyskay a-teoriya-sotsialnogo-kachestva-i-teoriya-kachestva-zhizni [in Russian].
- Heyets, V. (2021). Endogenous Social Progress as a Source of Economic Growth. Economist, Polish Economic Society, 1, 167-181, https://doi.org/10.52335/dvqigjykfff6
- International Association on Social Quality. (2020). Elaboration of the Theory of Social Quality Retrieved from http://www.socialquality.org/theory/
- Libanova, E.M., Hladun, O.M., & Lisohor, L.S. (2013). Measuring the quality of life in Ukraine: Analytical Report [In Ukrainian], Retrieved from https://www.idss.org.ua/monografii/UNDP\_QoL\_2013\_ukr.pdf [In Ukranian].
- Liu, B. (1976). Social Quality of Life Indicators for Small Metropolitan Areas in America. International Journal of Social Economics, 3(3), 198-213. https://doi.org/10.1108/eb013800
- Marsella, A.J., Levi, L., & Ekblad, S. (1997). The importance of including quality-of-life indices in international social and economic development activities. Applied and Preventive Psychology, 6(2), 55-67, https://doi.org/10.1016/S0962-1849(05)80011-3
- Matanov, A., Giacco, D., Bogic, M., Ajdukovic, D., Franciskovic, T., Galeazzi, G. M., ... & Priebe, S. (2013). Subjective quality of life in war-affected populations. BMC Public Health, 13(624), https://doi.org/10.1186/1471-2458-13-624
- Montfort, M., Tapsoba, R., & Tapsoba, S. (2015). A Quest for Quality. Finance &

- Development, 52(2). Retrieved from https://www.imf.org/external/pubs/ft/fandd/2 015/06/mlachila.htm
- Numbeo. (2022). Quality of Life Retrieved from https://www.numbeo.com/quality-of-life/
- Petróczy, D.G. (2021). An alternative quality of life ranking on the basis of remittances. Socio-Economic Planning Sciences, 78, 101042.
  - https://doi.org/10.1016/j.seps.2021.101042
- Rohozian, Y., Hrechana, S., Kuzmenko, O., Derzhak, N., Kuchmenko, V., & Plietnov, M. (2020). Sustainable development management of local territories in the Eastern Ukraine in conditions of military conflict: identification criteria. European Journal of Sustainable Development, 9(3), 425-442, https://doi.org/10.14207/ejsd.2020.v9n3p425
- Shults, S., Lutskiv, O., Simkiv, L., & Andrusiv, U. (2021). Analysis of the Dynamics of Structural Processes in the Context of Ensuring Sustainable Development. European Journal of Sustainable Development, 10(1), 153-167, https://doi.org/10.14207/ejsd.2021.v10n1p15
- Sitnikova, N.P. (2017). Approaches to quality-of-life determination for use in the process of strategic planning of socio-economic development. Agroworld, 12, 49-53 [In Ukranian].
- Sollis, K., Yap, M., Campbell, P., & Biddle, N. (2022). Conceptualisations of wellbeing and quality of life: A systematic review of participatory studies. World Development, 160,
  - https://doi.org/10.1016/j.worlddev.2022.106 073
- Van der Boor, C.F., Amos, R., Nevitt, S., Dowrick, C., & White, R. (2020). Systematic review of factors associated with quality of life of asylum seekers and refugees in high-income countries. Confl Health, 14(48), https://doi.org/10.1186/s13031-020-00292-y
- Zablodska, I.V., Sieriebriak, K.I., & Balakireva, O.M. (2022). Concept of theoretical re-thinking of the social quality of life of Ukrainians. Journal of Economic Reforms, 1(45), 71-85, https://doi.org/10.32620/cher.2022.1.08 [In Ukranian].



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## Workplace harassment in psychosocial risks and teleworking in times of health crisis

### Acoso Laboral en los Riesgos Psicosociales y el Teletrabajo en Época de Crisis Sanitaria

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Written by:

Mónica Naranjo-Zambrano<sup>38</sup>
https://orcid.org/0000-0002-6396-8145

Mónica Llanos-Encalada<sup>39</sup>
https://orcid.org/0000-0003-3746-8910

Israel Morales-Naranjo<sup>40</sup>
https://orcid.org/0000-0003-0923-9803

Eduardo Ron-Amores<sup>41</sup>
https://orcid.org/0000-0003-1483-2994

Arnaldo Vergara-Romero<sup>42</sup>
https://orcid.org/0000-0001-8503-3685

#### **Abstract**

This study seeks to reflect on the relationship between teleworking, workplace harassment, and psychosocial risks in the context of labor resolutions adopted in Ecuador in the face of the Covid-19 pandemic. The purpose is to identify the relationship between mobbing in the telework modality and its effect on psychosocial risks. The following questions arise: how does mobbing manifest itself in telework? How not to confuse the results of teleworking with mobbing? Can mobbing be considered a psychosocial risk factor? For this, a systematic review of the literature and previous studies of the proposed variables and the analysis of the information from the Ministerio de Trabajo in Ecuador on a survey was conducted to evaluate the consequences of teleworking on workers. Despite the limitation of knowledge and relevant data, it has been established that workplace harassment or mobbing is also present in teleworking, with negative consequences; when the characteristics and conditions of work are not clearly defined, it is accessible to transition to mobbing, and, therefore, the increase in psychosocial risks in workers.

#### Resumen

El presente estudio busca reflexionar la relación entre el teletrabajo, acoso laboral y riesgos psicosociales en el contexto de las resoluciones laborales adoptadas en el Ecuador frente a la pandemia por Covid-19. Se plantea como objetivo el identificar la relación entre el mobbing en la modalidad de teletrabajo y su efecto en los riesgos psicosociales, de lo cual surgen las siguientes interrogantes: ¿de qué manera se manifiesta el mobbing en el teletrabajo?; ¿cómo no confundir los efectos del teletrabajo con el mobbing?; ¿se puede considerar el mobbing como factor de riesgo psicosocial? Para ello se realizó una revisión sistemática de la literatura y estudios precedentes de las variables planteadas y el análisis de la información del Ministerio de trabajo en Ecuador sobre una encuesta aplicada para evaluar las consecuencias del teletrabajo en los trabajadores. Pese a la limitación de información y datos relevantes, se ha establecido que el acoso laboral o moobing también está presente en el teletrabajo, con consecuencias negativas, cuando no están claramente delimitadas las características y condiciones del trabajo es fácil transitar al moobing y, por lo tanto, el incremento de riesgos psicosociales en los trabajadores.

<sup>&</sup>lt;sup>42</sup> Magister en Economía, Docente-Investigador de tiempo completo, Universidad Ecotec, Samborondón, Ecuador.



<sup>&</sup>lt;sup>38</sup> Magister en Administración del Talento Humano, Investigadora, Universidad Ecotec, Samborondón, Ecuador.

<sup>&</sup>lt;sup>39</sup> Doctora en Ciencias Económicas, Docente de tiempo completo, Universidad Ecotec, Samborondón, Ecuador.

<sup>&</sup>lt;sup>40</sup> Magister en Seguridad y Salud Ocupacional, Investigador, Universidad Espíritu Santo, Samborondón, Ecuador.

<sup>&</sup>lt;sup>41</sup> Magister en Administración de Empresas, Docente de tiempo completo, Universidad Ecotec, Samborondón, Ecuador.



Kevwords: Health Covid-19. crisis. teleworking, workplace bullying, psychosocial Palabras clave: Crisis sanitaria. Covid-19. teletrabajo, acoso laboral, riesgos psicosociales.

#### Introduction

The use of social networks and the Internet as technological tools in the personal sphere have produced a dynamic use of digital media which ease companies to integrate them as support resources for their employee's performance. This has facilitated the transition to teleworking. And therefore, to remote work. In this way, most companies, except for plant areas and operational or technical work, choose to develop this type of work modality, especially in times of the Covid-19 pandemic. Teleworking, in Europe at the end of the 90s, became one of the most flexible forms of work, for which the use of technological instruments such as computers, mobile phones, and sophisticated software became the primary work tools. (Tavares, 2017).

In the new labor trends, the difficulties of faceto-face work are not excepted, such as the phenomenon of mobbing or workplace problem affects harassment; this organizations and the worker, deteriorating their performance (Görgülü et al., 2014).

Workplace bullying harms the individual, psychologically and economically, since it is directly related to decreased productivity, absenteeism, and staff turnover (Instituto Nacional de Seguridad e Higiene en el Trabajo, 2009). Women are more vulnerable to sexual harassment and harassment, which is generally related to the structure of most organizations, where women are traditionally placed in a situation of subordination that makes them more prone to this type of violence (Saldaña-Orozco et al., 2022).

Mobbing is a problem of interest to public health; therefore, it is typified and cataloged within the main types of violence at work that affects workers' quality of life. Lanata-Fuenzalida (2018) affirms that mobbing in all kinds of organizations must have priority attention since it is a factor that is included within the psychosocial risks, becoming a problem that requires precise and defined regulations through laws. And rules that protect the employee in his workplace (Oviedo-Vega & Vásquez-Flores, 2016).

In Ecuador, the Labor Code (Asamblea Nacional, act. 2021), in article 1, mentions that all labor relations between employers and employees in all modalities and working conditions are regulated and aligned with the proposal of the Organización Internacional del Trabajo (ILO), which states that it is necessary to establish legal regulations that frame this activity through a contract that guarantees the interests of both the contractor and the worker (Organización Internacional del Trabajo, 2020). According to these definitions, work is subject to laws for the benefit of both parties involved, so mobbing captures interest since it threatens the rights and well-being of workers in the workplace. The state must take into account the psychological consequences that can occur in workers, such as stress, anxiety, fear, and loneliness, as well as the physical effects, such as some of the diseases developed during the health crisis in the families of Ecuadorian society (Naranjo-Zambrano et al., 2020).

The purpose is to identify the relationship between mobbing in the telework modality and its effect on psychosocial risks.

#### Literature Review

The relationship between mobbing and teleworking is described below, followed by an analysis of mobbing as a psychosocial risk

Mobbing and Teleworking

Teleworking is created with the help of new technologies; it refers to using these in daily tasks when doing remote work. This new way of working combines distance, position, and intensive use of Information and Communication Technologies (Osio-Havriluk, 2010).

Teleworking brings significant benefits to an organization. In the case of Ecuador, like other countries around the world, it is a measure that is increasing and constitutes one of the main protection measures for workers in the face of the threat of Covid-19. Alvarez & Harris (2020) generated unprecedented effects and forced organizations to resort to emerging plans such as teleworking.

Teleworking itself can cause feelings of isolation because it is possible for the worker to develop



the sensation of feeling separated from other people or the same company, since on some occasions, they come to consider that they lose their impact on it, coming to perceive that the organization forgets about him and is not taken into account like other workers (Acevedo et al., 2018).

Regarding mobbing, it refers to hostile or immoral behavior towards an employee in a specific organization, which, in addition to the physical and psychological consequences, brings with it a break in the social context, breaking the subject's interpersonal relationships (Carvajal-Orozco & Dávila-Londoño, 2013).

For Oviedo-Vega & Vásquez-Flores (2016) and Iñaki & Zabala (2015), mobbing causes severe psychological damage to the person who is harassed. When referring to this point, it does so in the following terms: workplace bullying is intended to intimidate, diminish, reduce, flatten, threaten, and emotionally and intellectually consume the victim, to eliminate them from the organization or satisfy the insatiable need to attack, control and destroy, which is usually presented by the harasser, who takes advantage of the opportunity offered by the particular organizational situation (reorganization, cost reduction, bureaucratization, dizzying changes, etc.) to channel a series of impulses and psychopathic tendencies (Iñaki & Zabala, 2015).

In the implementation of teleworking, there are also problems, such as abuse of power, work overload, and personal and organizational conflicts, which lead to workplace harassment or mobbing (Oviedo-Vega & Vásquez-Flores, 2016). If we realize there is a fine line between the disputes of teleworking and mobbing, leading one situation to another. Coming to be expressed as psychological violence, this can include verbal abuse, sexual or psychological harassment, intimidation, and threats, and in turn can consist of "... isolating people, manipulating reputations, withholding information, assigning tasks that do not match the capacities and assign goals and deadlines that are impossible to meet" (Moore, 2018). All this makes it a phenomenon that, by affecting people physically and psychologically, becomes challenging, and its study is critical.

In a study carried out by the Global Union in Commerce, Services and Related Sectors (UNI), an increase in technological and digital jobs is revealed that has an impact on well-being and dignity at work since the increased use of technology provides a sense of control and harassment, which causes stress in workers,

intensifying work and pressure, since the limits between personal time and work time become blurred, thus affecting the perception of decent work (Pilinger, 2017).

Teleworking has become a necessary tool for labor, social and economic transformation at a national and international level, considered a phenomenon of organizational development. It is there where it becomes crucial to emphasize health and safety at work because, for the Organización Internacional del Trabajo (ILO), it is a principle of protection for workers by organizations that monitor the prevention of occupational diseases and accidents, since according to the same entity, every year two million people die from these conditions (Bonilla-Prieto et al., 2014).

Studying the relationship between mobbing and teleworking is relevant since it directly affects the worker, causing physical, psychological, and social conditions. Given the importance and growing modality of teleworking, it becomes imperative to pay attention to the consequent problems in the area of Safety and Health at Work (OSH) since the main objective is to prevent injuries and illnesses caused by work circumstances, promote health, and improving their conditions in the work environment (Ministerio de Protección Social de Colombia, 2015).

The presence of mobbing in teleworking can be clarified according to (Oviedo-Vega & Vásquez-Flores, 2016), who states that the implementation of teleworking has modernized the management of organizations. However, it also brings negative implications, such as abuse of power or workplace harassment by the employer or any other colleague. Likewise, it can develop ascending, descending, or horizontally and involves the workers.

Therefore, as has been exposed, mobbing can occur in teleworking since it meets the characteristics of a regular job, such as: having bosses and colleagues; meeting goals; workload, among others. In the interaction process of the actors in this environment (bosses, subordinates, and colleagues), there is the possibility that this phenomenon occurs, and the future of abuse of power, exclusion, or creation of rumors, among others, affects the organizational climate and unleashes workplace bullying.



#### Moobing as a Psychosocial Risk

General approaches to occupational risks apply to the field of psychosocial risks. An occupational psychosocial risk is a fact, event, situation, or state that, due to the organizational form of work, has a high probability of affecting the worker's health, whose consequences are usually necessary. Psychosocial risks, unlike psychosocial factors, are not organizational conditions but facts, situations, or states of the consequent organism, with a high probability of damaging workers' health (Zachmann, 2014).

A characteristic of psychosocial risks is their high probability of causing significant harm. The consequences are more likely to appear and more likely to be more serious (Benavides, 2016).

Psychosocial risks do not refer to marginal or secondary aspects of the organizational conditions of work but to elements of people that can:

1. They affect the fundamental rights of the worker: physical and personal integrity,

- liberty, and health. The most cited psychosocial risks, and generally more admitted as such, are violence and workplace or sexual harassment that threaten physical or personal integrity, dignity, or privacy, elements of the fundamental rights of workers.
- Psychosocial risks affect worker health through stress response mechanisms (Peiró, 2001). As collected by the ILO and the WHO, such responses are mediated by perception and contextual mechanisms; the effects on worker health caused by stress are modulators (Organización Internacional del Trabajo, 2020).
- 3. Psychosocial risks have repercussions on the physical health of workers, with notable effects on mental health and adaptation processes, their mental stability, and balance. Current data indicates that anxiety, depression, and other indicators of poor mental health are associated with exposure to psychosocial risks (European Agency for Safety and Health at Work, 2000).

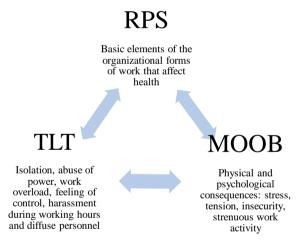


Figure 1. Relationship of study variables.

Note. Mobbing (MOOB), Psychosocial Risks (RPS), and Telecommuting (TLT). Source: Own elaboration.

After exposing the criteria regarding the implications of teleworking and mobbing, and the latter as a psychosocial risk, Figure 1 shows the relationship between the effects of these on the worker to establish points of agreement between them.

Mobbing can occur in teleworking as long as it allows the emergence of psychosocial risks; however, it doesn't need to happen. One of the types of mobbing that can most likely occur in

this work modality is the descending type since, with the use of ICTs, it is possible to have greater control and communication towards employees, turning this work into a more difficult task. Strenuous instead of making it more flexible (Oviedo-Vega & Vásquez-Flores, 2016).

Another study indicates that factors at work, such as support given by the organization; balance between work tasks and household tasks; changes in job demands; development of labor competencies and training; Job instability, and financial stress are associated with the development of different disorders, such as anxiety, depression, and burnout syndrome, the consequence of which is an increase in job stress and a decrease in the mental health of employees (Lulli et al., 2021). According to a study carried out at the beginning of 2020 on workers from six Latin American countries, Ecuador has the second highest stress levels in the region, 54%, surpassed by Venezuela with 63% (Mejía et al., 2020).

According to Robles-Acosta et al., (2020) in Mexico, the established measures resulted in changes in the employment situation of the workers of the organizations, generating different affectations depending on the activity

**Table 1.** *Matching points representing psychosocial risks.* 

they carry out, limiting the assistance of workers in the economic areas to their employment, adjusting the charges work and generating changes in interpersonal relationships and their possible effects on phenomena such as burnout.

As it has been possible to specify, there are coincident points between the study variables, making it clear that mobbing is categorized as one of the psychosocial risks.

The importance of psychosocial risks and their impact on workers' health has forced the development of legal coverage. Well, for a long time, the problems generated by psychosocial factors have been addressed generically. Currently, there is developing legislation that addresses stress, violence, and harassment.

Variable 1	Variable 2
MOOB	TLT
Break in your interpersonal relationships	Sense of isolation
Hostile or immoral conduct	Work overload
Psychological, verbal, or sexual abuse	Feeling of control and Harassment due to the use of technology
Intimidation/threats	Schedule flexibility
Abuse of power and control	Diffuse personal and work time
Decreased productivity, increased absenteeism, and turnover	Increased productivity, decreased absenteeism
Abuse of power and control	
Stress, tensión, insecurity	
Strenuous work activity	
Physical and psychological consequences	

**Note:** The characteristics of mobbing with teleworking have been specified to determine those common characteristics, which are part of the psychosocial risks. Source: Own elaboration.

In Ecuador, progress has been made to eradicate or reduce the danger of workplace harassment and its related risks through the promulgation of the Organic Law Reforming the Organic Law of Public Service and the Labor Code to prevent Labor Harassment (Asamblea Nacional, 2017) and the Ministerial Agreements, such as MDT-2017-0135 Instructions for compliance with the obligations of public and private employers (Ministerio de Trabajo act., 2021). Article 10 establishes the responsibility of identify and evaluate occupational risks, as well as the obligation to carry out training and training programs in occupational risk prevention, including psychosocial violence; and Ministerial Agreement MDT-2020 - 244, on the other hand, establishes the protocol for the prevention and care of cases of discrimination, workplace

harassment and/or all forms of violence against women at work (Ministerio de Trabajo, 2020a). The inclusion of workplace bullying within the psychosocial risks became necessary due to the lack of regulation of constitutive behaviors and its alarming consequences that have caused inadequate management by organizations, which has led to the numbers increasing. Making it a topic of great interest and, therefore, attention to propose measures that help reduce workers' exposure to this risk factor (De Miguel Barrado & Prieto-Ballester, 2016).

As can be seen in Table 1, there is a similarity between the harmful characteristics of teleworking with those of mobbing. There is an excellent line between one and the other if preventive measures are not taken in the



teleworking modality, which could cause crossover from one to the other. The characteristics of each of the variables and those are common and are considered psychosocial risk are appreciated.

#### Methodology

The research exposed concerns about the type of retrospective study because it was carried out during the year 2020, analyzing the results of the application of said survey in personnel belonging to the public and private sectors, with a total of 508 respondents, 38% of the agricultural Veterinary, textile, food, industry. construction, 34% from the public and private health sector, from the SME industrial sector, 42% work in the administrative area, and 58% in operations. Of which 40% are women and 60% are men. Ecuadorians of mestizo selfidentification, with an average of 30 years of age. In addition, statistical knowledge was used to determine the effect of workplace bullying as part of the psychosocial risks in the field of teleworking for both public and private workers in Ecuador (Ochoa-Sangrador, 2020, p. 15).

To develop the present investigation, the methodology was applied qualitatively, given the need to know the incidences of workplace bullying as a psychosocial risk within the field of teleworking in Ecuador through surveys carried out on a group of workers taken at random. Through a random sample of the study, the convergence was given through the guide for the application of the survey for the evaluation of

Table 2.

Characteristics of psychosocial risks.

psychosocial risk prepared by the Directorate of Safety, Health at work, and integral management of health risks of the Ministerio de Trabajo (2018).

The information supporting this study must be obtained to validate the research process. The statistical data of the registered workers by sectors and economic activity of the Ministerio de Trabajo of Ecuador was used to gather meaningful information on the subject raised. Obtained the integration of these documents, such as statistics of employees, and formal and informal workers, the respective analysis was carried out with the contribution of the SPSS econometric program, and the information that could contribute revealing data to development of this study was selected.

#### Results and Discussion

One of the most common statistical analyses in sociological studies, which is used to compare two independent groups of data concerning a numerical variable, is the non-parametric chisquare test. It is applied to establish the null hypothesis in the following way: there is no relationship between the two types of variables; dimension of evaluation of psychosocial risk and impact on work stress in citizens who, due to the effect of the Covid-19 pandemic, had to carry out teleworking in certain activities of the economy. In other words, the assumption is made that the correlation between these two variables can be considered a comparison, yes or no significant (Ochoa-Sangrador, 2020).

Results by the dimension of psychosocial risk assessment						
<b>Survey Dimensions</b>	Low Risk	<b>Medium Risk</b>	High Risk			
Other Important Points: Discriminatory Workplace Harassment	13-16	8-12	4-7			
Other Important Points: Workplace Bullying	7-8	5-6	2-4			
Other Important Points: Sexual Harassment	7-8	5-6	2-4			

Note: Taken from Ministerio de Trabajo (2018).

The mathematical model is based on a correlation analysis measuring incidence levels through a technical sample of 508 workers to whom a survey was developed with multivariate questions directed at stress levels ranging from low risk to up to high, with dimensionless values

ranging from 2 to 8, as shown in Table 2. Once the incidence of the sample was established, the information on the variables measured in the dimensions of the survey was elaborated, and they are shown in table 3 below.



**Table 3.**Cases of Work Stress by Level of Harassment.

LEVEL OF PSYSCOSOCIAL	WORK STRESS
HARASSMENT	No. of Workers
8	56
6	71
4	76
2	51
2	20
7	15
2	10
8	76
5	28
6	25
4	25
7	20
5	15
2	20
	508

Source: Own elaboration.

Once the regression statistic is established, which describes the strength of the relationship between these two variables on an interval or ratio scale, it is seen that the correlation coefficient is 0.34. It is a proportion or percentage; it can be said that 34% of the variation in the number of workers who have suffered some type of stress in their daily work is explained or accounted for by the levels of workplace harassment to which they have been exposed in teleworking.

The correlation coefficient (R); measures the strength of the linear relationship between two variables, while P is the correlation coefficient that determines the probability of incidence of

correlation between the two variables studied, which are: psychosocial dimension versus the number of workers. When the points on the scatterplot appear close to the line, it is observed that the correlation coefficient is usually high. Therefore, the standard error of estimate and the coefficient of relationship relate to the same information but use a different scale to report the strength of the relationship. The correlation between the levels of harassment and the number of workers with job stress was objective and characteristic (R = 0.34, P < 0.01, n = 114), which shows that areas with significant numbers of workers report being at higher risk levels (see table 4).

**Table 4.**Correlation between the Level of Psychosocial Risk and the Number of Workers with Occupational stress in Teleworking.

Regression Statistics					
Multiple Correlation Coefficient	0,32454188				
Determination Coefficient R^2	0,10532743				
R^2 ajusted	0,03077139				
Typical Error	2,21345824				
Observations	14				
	Degrees of	Sum of	Average of the	F	Critical Value
	Freedom	Squares	Squares	Г	F
Regression	1	6,92151705	6,92151705	1,41272824	0,25759437
Waste	12	58,7927687	4,89939739		
Total	13	65,7142857			
	Coefficients	Typical Error	t-Statistic	p-value	lower 95%
Interception	3,76788305	1,09078504	3,45428561	0,00476714	1,39126662
Variable X1	0,03001897	0,02525611	1,18858245	0,25759437	0,02500937

Source: Own elaboration.





Established the linear correlation analysis between the two variables analyzed and with the help of the Chisquare, Table 5 can be arranged:

**Table 5.**Chi-Square of the Psychosocial Risk Level Cases.

$f_o$	$f_e$	$f_o$ $-f_e$	$(f_o - f_e)^2$
8	7,56	56	56,4
6	9,09	71	67,9
4	9,44	76	70,6
2	6,26	51	46,7
2	2,60	20	19,4
7	2,60	15	19,4
2	1,42	10	10,6
8	9,92	76	74,1
5	3,90	28	29,1
6	3,66	25	27,3
4	3,42	25	25,6
7	3,19	20	23,8
5	2,36	15	17,6
2	2,60	20	19,4
68	68	508	508

Source: Own elaboration.

The calculated  $X^2$  is 28,20 and is in the rejection region beyond the critical value of 27,70. Therefore, the decision is to reject  $H_0$  with a level of 0.05 and accept  $H_1$ . The difference between the observed and expected frequencies is not due to chance. Instead, the differences between Buddha and Faith are large enough to be considered significant. The chance that these differences are due to sampling error is minimal.

The non-parametric chi-square test yielded a value of 28.20, which is distant from the values recorded in the table, which is  $\pm$  27,7, meaning that it is outside the left of the Gauss curve. Therefore it meets the null hypothesis (H<sub>0</sub>), which indicates that, in general terms, there is a direct correlation between the levels of psychosocial risk to which the majority of workers are exposed versus some of the categories that work stress can trigger.

Research hypotheses are presented for future analysis.

H<sub>0</sub>: The presence of exposure to workplace bullying in both public and private companies does NOT directly affect the generation of work stress in the telecommuting personnel.

H<sub>1</sub>: The presence of exposure to the levels of workplace bullying in both public and private companies directly affects the generation of work stress in the personnel who work telecommuting.

After establishing the null and alternative hypotheses, the next step is developing the significance level. The probability of rejecting the null hypothesis when it is true.

The significance level is expressed by the Greek letter alpha  $\alpha$  and is sometimes also known as the risk level. This is perhaps a more appropriate term because it is the risk of rejecting the null hypothesis when it is true. No single significance level applies to all tests; a decision is made to use the 0.05 level (often expressed as the 5% level), the 0.01 level, the 0.10 level, or any other level between 0 and 1. Typically, the 0.05 group is selected for research projects; the 0.01 level is for significance assurance before formulating a decision rule and collecting sample data.

Degrees of Freedom (gl) = (number of lines - 1) (number of columns - 1)

Lines =	14
Columns =	2
gl =	(14-1)*(2-1)
gl =	13
Significance Level =	0,01
According to table =	27,7

Reject the H<sub>0</sub>: si  $X_0^2 \ge 27.7$  o  $X_0^2 < -27.7$  two tails 28.20 > 27.7



For the elaboration of the statistical analysis, the Ministerio de Trabajo (2020b) data was obtained concerning the data of workers in the public and private sectors, in the sectoral spheres, and of the different activities registered in the classification. International Uniform Industrial Industry, mentioned above, since it is the only state institution that reports the information inherent to the economically active population, both for global employment and adequate employment.

The importance of the implementation of non-parametric techniques (chi-square); for the analysis of the correlation between workplace bullying and the levels of stress in the mass of workers who incurred teleworking in times of pandemic indicated that, indeed, these do generate a sufficient impact on the psychosocial risks to which workers are exposed. Workers, a contribution that, through this study, can be visible to the institutions that generate contributions to the community or to the beneficiary population of teleworking.

#### Conclusions

The results of the information obtained through psychosocial risk surveys should lead to the establishment of corrective measures that allow adequately distributing of the time assigned to work tasks to reduce the psychological demand on the worker. However, said results generally do not generate improvement actions.

As established in the review of the literature and the field mentioned above studies, the line of transition in modalities of teleworking towards mobbing and psychosocial risks is usually excellent, for which it is necessary to clearly define the processes, as well as the forms of monitoring and reporting that do not detract from worker's autonomy. In addition, organizations must permanently monitor the relationships of bosses with their work teams since, as has been stated, it is in this type of relationship that mobbing occurs frequently.

The double presence affects teleworking, so strategies are necessary to organize time and tasks and adequately divide the work of domestic and personal activities; for this, clearly defined schedules must be established without exceeding the communications or requirements outside this time through electronic means.

The presence of mobbing has been manifested mainly by the work environment of long teleworking hours with little rest, missed deadlines, and the need to keep jobs. In addition, the hostile environment that physically and psychologically affects workers adds to complex problems in the family environment.

The correlation analysis applied to measure the levels of incidence of labor stress of teleworking workers resulted in the acceptance of the null hypothesis, demonstrating that the presence of exposure to workplace bullying in companies directly affects the generation of work stress in the personnel that works in telework.

The tripartite elements of this investigation, mobbing, teleworking, are psychosocial risks, have played a determining role for the labor force. However, it is true that more than 70% have returned safely to their workplaces. Face-to-face, however, there are other organizations. This experience has led them to propose the virtual modality as one of the complementary modalities for saving administrative expenses and increasing "production" or instead for the unconditionality of the worker.

#### Bibliographic references

Acevedo, L. B., Restrepo Vélez, M., & Orjuela Muñoz, J. A. (2018). El teletrabajo autónomo en una entidad oficial de Medellín. Un programa femenino percibido como susceptible al acoso laboral. Revista Indisciplinas, 4(7), 183-198. Recuperado el 2 de febrero de 2022, de https://publicaciones.unaula.edu.co/index.php/indisciplinas/article/view/674

Alvarez, R. P., & Harris, P. R. (2020). COVID-19 in Latin America: Challenges and opportunities. Revista Chilena de Pediatria, 91(2), 179-182. doi: http://www.scielo.cl/scielo.php?script=sci\_a rttext&nrm=iso&lng=pt&tlng=pt&pid=S037 0-41062020005000602

Asamblea Nacional. (Ultima modificación: 26sep-2012 de act., 2021). Código de Trabajo. Quito, Quito- Ecuador: Registro Oficial. https://derechoecuador.com/codigo-detrabajo/

Asamblea Nacional. (2017). Ley Orgánica Reformatoria a la Ley Orgánica del Servicio Público y al Código del Trabajo para prevenir el Acoso Laboral. Quito: Registro Oficial. https://acortar.link/KiIvGA

Benavides, F. (2016). Descripción de los factores de riesgo psicosocial en empresas. México: Gaceta Sanitaria.

Bonilla-Prieto, L. A., Plaza-Rocha, D. C., Soacha-De Cerquera, G., &





- Riaño-Casallas, M. I. (2014). Teletrabajo y su relación con la seguridad y salud en el trabajo. Ciencia y trabajo, 16(49), 38-42. doi: http://dx.doi.org/10.4067/S0718-24492014000100007
- Carvajal-Orozco, J. G., & Dávila-Londoño, C. A. (2013). Mobbing o acoso laboral. Cuadernos de Administración, 29(49), 95-106.
- De Miguel Barrado, V., & Prieto-Ballester, J. M. (2016). El acoso laboral como factor determinante en la productividad empresarial: el caso español. Perspectiva, (38), 25-44.
- European Agency for Safety and Health at Work. (2000). Research on work-related stress. Luxembourg: Office for Official Publications of the European Communities. https://osha.europa.eu/en/publications/report-research-work-related-stress
- Görgülü, N., Beydağ, K. D., Şensoy, F., & Kıyak, M. (2014). The effects of mobbing (bullying) on health employes. Procedia-Social and Behavioral Sciences, 152, 503-509.
- Instituto Nacional de Seguridad e Higiene en el Trabajo. (2009). Acoso psicológico en el trabajo: definición. Nota técnica de previsión 854. Recuperado el 7 de febrero de 2022, de Instituto Nacional de Seguridad e Higiene en el Trabajo-España: https://acortar.link/d9J4Kb
- Iñaki, P., & Zabala, A. G. (2015). La evaluación del Mobbing. Cómo peritar el acoso en el ámbito forense. Buenos Aires: Sb Editorial.
- Lanata-Fuenzalida, R. G. (2018). El acoso laboral y la obligación de seguridad en el trabajo. Revista de Derecho (Valdivia), 31(1), 105-126. doi: http://dx.doi.org/10.4067/S0718-09502018000100105
- Lulli, L. G., Giorgi, G., Pandolfi, C., Foti, G., Finstad, G. L., Arcangeli, G., & Mucci, N. (2021). Identifying Psychosocial Risks and Protective Measures for Workers' Mental Wellbeing at the Time of COVID-19: A Narrative Review. Sustainability, 1-26. doi: https://doi.org/10.3390/su132413869
- Mejía, C.R., Chacón, J.I., Enamorado-Leiva, O.M., Garnica, L.R., Chacón-Pedraza, S. A., & García-Espinosa, Y. A. (2020). Factores asociados al estrés laboral en trabajadores de seis países de Latinoamérica. Revista de la Asociación Española de Especialistas en Medicina del Trabajo, 28(3), 204-211. Recuperado el 17 de enero de 2022, de http://scielo.isciii.es/scielo.php?script=sci\_ar ttext&pid=S1132-62552019000300004&lng=es&tlng=pt

- Ministerio de Protección Social de Colombia. (2015). Código Sustantivo del Trabajo. Bogotá: Diario Oficial de Colombia.
- Ministerio de Trabajo. (2018). Guía para la aplicación del cuestionario de evaluación de riesgo psicosocial. Obtenido de Dirección de Seguridad, Salud en el Trabajo y Gestión Integral de Riesgos: https://acortar.link/089Etk
- Ministerio de Trabajo. (2020a). Acuerdo No. MDT-2020-244 Protocolo de prevención y atención en caso de discriminación, acoso labora y/o toda forma de violencia contra la mujer en espacios de trabajo. Quito: Registro Oficial.
  - https://www.fao.org/faolex/results/details/es/c/LEX-FAOC201569/
- Ministerio de Trabajo. (2020b). Boletín Estadístico Anual: El mercado laboral del Ecuador. Obtenido de Ministerio del Trabajo: https://www.trabajo.gob.ec/wpcontent/uploads/2021/04/BoletinAnual\_V7.p
- Ministerio de Trabajo. (act. 2021). Acuerdo No. MDT-2017-0135 Instructivo para el cumplimiento de las obligaciones de los empleadores públicos y privados. Quito: Registro Oficial. https://www.gob.ec/regulaciones/acuerdoministerial-no-mdt-2017-0135-instructivo-cumplimiento-obligaciones-empleadores
- Moore, P. V. (2018). The threat of physical and psychosocial violence and harassment in digitalized work. Geneva: International Labour Organization.
- Naranjo-Zambrano, M., Morales-Naranjo, I., & Ron-Amores, E. (2020). Efectos de la pandemia en la familia y en la sociedad ecuatoriana. RES NON VERBA, 10(2), 115-135. doi: https://doi.org/10.21855/resnonverba.v10i2.
- Ochoa-Sangrador, C. (2020). Diseño y análisis en investigación. Madrid: International Marketing & Comunication S.A. https://www.aeped.es/comite-pediatria-basada-en-evidencia/documentos/diseno-y-analisis-en-investigacion
- Organización Internacional del Trabajo. (2020). Frente a la Pandemia: Garantizar la Seguridad y Salud en el Trabajo. Ginebra: Organización Internacional del Trabajo.
- Osio-Havriluk, L. (2010). El teletrabajo: una opción en la era digital. Observatorio Laboral Revista Venezolana, 3(5), 93-109.
- Oviedo-Vega, A., & Vásquez-Flores, N. (2016). Mobbing y teletrabajo: el acoso laboral en la modalidad de trabajo flexible mediado por tecnologías. Bogotá, Colombia: Corporación



- Colombia Digital. https://www.yumpu.com/es/document/read/5 6180050/mobbing-y-teletrabajo
- Peiró, J. M. (2001). El estrés laboral: Una perspectiva individual y colectiva. Investigación Administrativa, 30(88), 31-40.
- Pilinger, J. (2017). Violence and harassment against women and men in the world of work. International Labor Organization. Ginebra: ILO publication.
- Popovych, I., Chervinskyi, A., Kazibekova, V., Chervinska, I., & Machynska, N. (2021a). Empirical research of the typology of social expectations of the personality. Amazonia Investiga, 10(43), 112-122. https://doi.org/10.34069/AI/2021.43.07.11
- Robles-Acosta, C., Alviter-Rojas, L. E., & Martínez-Rodríguez, E. (2020). Burnout, cargas de trabajo y clima organizacional en trabajadores mexicanos en el contexto del

- Covid 19. Revista Venezolana de Gerencia (RVG), 25(4), 115-130.
- Saldaña-Orozco, C., Delfín-Ruiz, C., Cano-Guzmán, R., & Peña-Valencia, E. J. (2022). Estrés, factores psicosociales y su impacto en la mujer trabajadora. Revista Venezolana de Gerencia (RG), 27(99), 1115-1125. doi: https://doi.org/10.52080/rvgluz.27.99.16
- Tavares. (2017). Telework and health effects. International Journal of Healthcare, 3(2), 30-36.
- Zachmann, K. (2014). Risk in Historical Perspective: Concepts, Contexts, and Conjunctions. Risk A Multidisciplinary Introduction. Switzerland: Springer International. doi: https://doi.org/10.1007/978-3-319-04486-6 1



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# Internet journalism in modern society: an overview of mechanisms for resisting media manipulation

## Periodismo en Internet en la sociedad moderna: una visión general de los mecanismos de resistencia a la manipulación mediática

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Written by:

Tatyana Plekhanova<sup>43</sup>

https://orcid.org/0000-0003-2639-0396

Volodymyr Tarasiuk44

https://orcid.org/0000-0003-3216-0415

Gaiana Iuksel45

https://orcid.org/0000-0002-0894-7544

Web of Science Researcher ID: AAB-2490-2021

Scopus Author ID: 57216205308

Iryna Putsiata46

https://orcid.org/0000-0001-9047-6245

Olena Kulykova<sup>47</sup>

https://orcid.org/0000-0002-0461-3803

#### **Abstract**

At the current stage of the development of the information society, the influence of Internet journalism on the formation of public opinion (in particular, if we are talking about outright manipulation) is extremely noticeable. The purpose of the article is to analyze these influences in modern society in terms of the presence and use of media manipulation mechanisms and ways to counter them. The main research methods were general scientific (analysis, synthesis) and special scientific (abstraction and concretization). Manifestations of the manipulative influence of Internet journalism on human consciousness are traced in the results. The main attention is paid to the analysis of the mechanisms of resistance to manipulation in the media. In particular, an analysis of fact-checking, legal methods of combating fakes was carried out, the peculiarities of protection against manipulation based on the

#### Resumen

En la fase actual de desarrollo de la sociedad de la información, la influencia del periodismo en Internet en la formación de la opinión pública (en particular, si hablamos de manipulación descarada) es extremadamente notable. El propósito del artículo es analizar estas influencias en la sociedad moderna en términos de presencia y uso de mecanismos de manipulación mediática y formas de contrarrestarlos. Los principales métodos de científicos investigación fueron generales síntesis) y (análisis, científicos especiales (abstracción y concreción). En los resultados se rastrean las manifestaciones de la influencia manipuladora del periodismo en Internet sobre la conciencia humana. Se presta especial atención al análisis de los mecanismos de resistencia a la manipulación en los medios de comunicación. En particular, se realiza un análisis de la comprobación de hechos, los métodos legales de lucha contra las falsificaciones, se investigan las

<sup>&</sup>lt;sup>47</sup> Candidate of Science in Social Communication, Senior Lecturer Department of Journalism, Faculty Culturology, Kharkiv State Academy of Culture, Kharkiv, Ukraine.



<sup>&</sup>lt;sup>43</sup> Candidate of Philology, Associate professor head of the Department of Publishing and Editing, Faculty of Journalism, Zaporizhzhya National University, Zaporizhzhia, Ukraine.

<sup>&</sup>lt;sup>44</sup> Ph.D. of philological sciences, associate professor of the Department of Journalism, Faculty of Philology, Uzhhorod National University, Ukraine.

<sup>&</sup>lt;sup>45</sup> PhD in Philology, Associate Professor, Doctoral Candidate of the Institute of Journalism Taras Shevchenko National University of Kyiv, Ukraine. Associate Professor Department of Slavic Philology and Journalism, Educational & Scientific Institute of Philology and Journalism of the V.I. Vernadsky Taurida National University, Kyiv, Ukraine.

<sup>&</sup>lt;sup>46</sup> Senior Lecturer Department of Journalismand Mass Communication Psychology and Innovative Education, Institute of Jurisprudence, Lviv Polytechnic National University, Lviv, Ukraine.

verification of photo and video materials were investigated. The results also highlight the video verification algorithm. The conclusions summarize that critical thinking and acquisition of media competence and media literacy skills are a relevant way to resist manipulative influences on the Internet. Despite this, fact-checking and verification of photos and video materials that are distributed on the Internet are effective mechanisms for resisting manipulation.

**Keywords:** media resources, Internet journalism, manipulation, propaganda.

#### Introduction

The leading role in the formation and dissemination of public opinion is played by the media, it is interpreted as a set of modern channels of communication (press, television, radio, Internet), through which information is distributed. However, the mechanisms used in the media often have a manipulative and controlling potential, influencing the perception of reality, social attitudes, and behavior patterns of individuals. At the same time, under the conditions of information society globalization, Internet journalism occupies a notable function; it is a tool through which direct influence on human consciousness is exercised.

Manipulative mechanisms used in the media can noticeably influence public opinion, so an important task of modern journalism is to identify the key characteristics of manipulative messages and to study the main mechanisms of counteracting manipulation.

Note that the authors of the article interpret the term "manipulation" as a special type of mental influence exercised through the press (newspapers, magazines), the Internet, television, audio, video recordings, advertising, social networks, etc., which leads to awakening in the object of influence intentions that transform its moods, thoughts, values, attitudes, views, etc.

The purpose of the article is to analyze the influence of Internet journalism in modern society on the presence and use of media manipulation mechanisms and to determine the main effective ways of countering them. For this, the research first describes the possibilities of the manipulative influence of Internet media on people's consciousness, highlights the key

peculiaridades de la protección contra la manipulación basada en la verificación de materiales fotográficos y de vídeo. Los resultados también ponen de relieve el algoritmo de verificación de vídeo. Las conclusiones resumen que el pensamiento crítico y la adquisición de competencias mediáticas y de alfabetización mediática son una forma pertinente de resistir a las influencias manipuladoras en Internet. A pesar de ello, la comprobación de los hechos y la verificación de las fotos y los vídeos que se distribuyen por Internet son mecanismos eficaces para resistir a la manipulación.

**Palabras clave:** medios de comunicación, periodismo en Internet, manipulación, propaganda.

mechanisms of countering manipulation. The following sections examine the practical use of anti-manipulation mechanisms through the prism of fact-checking, checking photo and video content.

#### Theoretical Framework or Literature Review

The methodological basis of the article is the work of European, American, and Asian scientists. In particular, Abbas Naqvi et al., (2020) characterized the influence of social networks on the development of public institutions and businesses. The authors focused on the manipulative potential of advertising. Brooks & Porter (2020) developed a model of media influence on political ideology in the context of globalization and information transformation. Karlsen & Aalberg (2021) conducted an experiment designed to determine the impact of news distribution on social media (Facebook) on the emergence of news credibility. The results of their study demonstrated that spreading news through Facebook affects trust. The researchers note that the effect is strong, while politicians are mediating senders. At the same time, Kaur & Verma (2018) characterized the manipulative influence of social media. Rogers & Niederer (2021) also identified the manipulative significance of social media and characterized its role in influencing human consciousness, making all kinds of decisions, including political decisions. Tuters (2020) investigated the problem of the spread of fake news to the Dutch political debate space on YouTube.

At the same time, Vysotska & Vysotska (2020) characterized some mechanisms to counter fake news manipulation. In particular, the authors



note the importance of teaching students to show bias and manipulation based on events in Ukraine. Mykolaienko (2019) investigated the problem of manipulativeness and false news in the Ukrainian media space.

As can be seen from the analysis of the literature, modern researchers have paid much attention to the analysis of the manipulative influence of social media resources, while other Internet resources (including official news sites) were not subject to detailed research. At the same time, the review of mechanisms of resistance to manipulation remains a topical problem for research.

#### Methodology

The realization of the research goal involved the use of general scientific research methods. In particular, based on the analysis, the research subject (mechanisms of resistance manipulative influence) is divided into smaller parts: the study of the main manipulations used in Internet journalism, the characteristics of resistance to manipulations through the prism of fact-checking analysis, the analysis of resistance to manipulations using the analysis of photo and video materials. With the help of synthesis, the specified elements were synthesized and own conclusions and recommendations were formed.

The study was implemented in several stages. The first stage involved a theoretical review of the main features of manipulative messages used in the media. In the second stage, the main mechanisms for countering manipulation (fact-checking, legal verification methods, etc.) were reviewed. In the third stage, a thorough analysis of countering manipulation through photo and video content verification was conducted. On the basis of modeling, a model of photo and video content verification was developed through the prism of the use of modern online resources. At the last stage the results were summarized, and own judgments and conclusions were formed.

The results of the study are based on an analysis of news sites such as BBC News, "Metro" the factcheck media "Slovo i Dilo", etc. The study was prepared based on the analysis of such sites as Pipl. Com, deepWeb, Yomapic, JPEGSnoop, Findexif, Jeffreys Exif Viewer, etc. In addition, particular attention is paid to the analysis of Google's fact-checking sites: Google Imagine, Google Earth.

#### **Results and Discussion**

### Protection from manipulation: signs of a manipulative Internet message

Various characteristics of manipulation have been described in the scientific literature, among them two leading characteristics: asymmetric and (Brooks & Porter. 2020). informational action of the source manipulation is targeted at the mass psyche of society. Most technologies of manipulative influence are based on the creation of artificial reality, the implementation of an external stimulus that focuses the attention of the object and is meaningful to him (Karlsen & Aalberg, Consequently, modern researchers distinguish several levels of the manipulation process (see Figure 1).

In general, the information provided to us by the media passes through the censorship of the psyche (Kaur & Verma, 2018). The latter stands in the way of the message that appears in the center of human perception of it (through representational and signaling systems). The human consciousness is capable of redistributing information and perceiving it in its own way. One part of the information message, as a result of mental censorship, reaches consciousness, while others (much larger in volume) go to subconsciousness. At the same time, the received information message in the begins the subconscious to influence consciousness after a certain period of time (Shafi & Vultee, 2018).

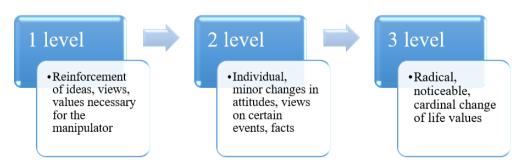
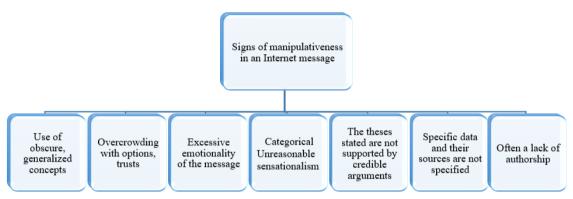


Figure 1. The main levels of manipulation used in Internet media Authors' development



A sign of manipulation is the language that politicians, presenters, and article writers use. If they use obscure or generalized concepts, it is more likely that they are trying to hide something (Cheung et al., 2020). If the material is addressed to a general audience but is oversaturated with opt-outs, trusts, etc. - the audience is being manipulated. On the other hand, another criterion is excessive emotion. When the author of an Internet message in a text is very emotional, one should look for a catch. In the material, emotion is used to form a specific, necessary condition in the reader of the manipulator. The use of emotionally colored words: outrageous, unacceptable. perfectly indicative manipulation, because the goal is to create a impression. Another sign sensationalism – when authors try to emphasize the information's weightiness and importance and induce a corresponding state in readers (Abbas Naqvi et al., 2020).

In many cases where categoricalness appears, there are signs of manipulativeness. For example: "Every one of us is president," "I will hear everyone." One should also be wary of the mode of grouping. When the source of information begins to emphasize that we belong to one group, and they do not understand them - to another. At the same time, in a manipulative Internet message, the opinions stated are unsubstantiated credible arguments, there is no specific data and no references to Internet sources (if there are any, they are difficult to verify). A separate tendency of manipulative messages often spread in various Telegram channels, is the lack of authorship. (See Figure 2).



*Figure 2.* Signs of manipulativeness in an Internet message Authors' development

Taking into account the indicated signs, it is possible to distinguish a manipulative message from a true one. At the same time, it should be taken into account that a manipulative message gives away its header. A headline like: «Sensation...». «You won't believe ... ». «Shocking truth» is manipulative. In the name of this type, excessively emotional vocabulary is mostly used. The main goal of such Internet headlines is for the reader to click on them and open the message. At the same time, there will often be no sensationalism in the text. There is another purpose for using such headers. Due to the fact that there is a lot of news on social networks, people do not open all of them, but only skim the titles. In such a situation, the manipulation will be aimed at the reader forming the desired opinion of the manipulator based only on the title.

### Basic mechanisms for resisting manipulation on the Internet

A powerful defense against manipulative influence is the acquisition of media literacy and media competence skills. These skills are especially important in view of the Russia-Ukraine war and Russia's use of various means of propaganda. For this reason, one must learn to analyze information, find contradictions in it, and interpret it. Since the manipulator always affects the emotional state, you should try to blunt your emotions. First of all, you should perceive the author's words rationally and impartially. If the message contains signs sensationalism and categorical, you should check the information with other sources. In particular, if the message is categorical, one should immediately think "What will happen if he hears everyone?" Internal conversations arguments should be had. As soon as an alternative opinion emerges that differs from the



considerations of the manipulator, its zombifying effect is suspended.

At the same time, it is important to remember that no source of information in a confrontational environment provides a realistic assessment of the state of affairs. Internet manipulation loosens up users on a kind of emotional swing of "victories" and "failures," which leads to gradual internal exhaustion. For this reason, anxiety or aggressiveness must have a kind of application. Physical activity (physical work) allows one to take away aggression and fears, to soberly assess the news, and to exert manipulative influence in the future.

A separate method for countering the spread of manipulation by journalists in the digital environment is fact-checking, i.e. a detailed verification of the information received. including an analysis of the completeness, authenticity and manipulative content. Factchecking can be considered an extension of media competence, with the difference that it can be performed not only by individuals, but also by groups of Internet users united for the purpose of countering the spread of lies (Hirst, 2018). In the context of political destabilization and open armed aggression, the existence of enthusiastic groups and the efforts of individual users who create relevant pages where they oppose the disinformation, false spread of political discussions, etc.

Factchecker implements verification of information only in open official sources. A key difference between factchecker and media investigation is the absolute rejection of insider information and unofficial information.

Factchecker uses only official sources of information, both Ukrainian and foreign answers to inquiries to governmental bodies and foreign institutions to create research (See Figure 3).

So, as shown in Figure 3, the fact checker first selects material and identifies the main points to be verified. The next step is to search official sources to verify the information. This will help determine whether the Internet message is true, false or contains misleading statements. After that, the analyzed message is accompanied by comments that justify the result, then another expert verifies the comment. If the comment passes the check, a final check for internal logic is implemented. Then there is a publication of the verified data, which contains links to the sources of verification.

At the same time, the possibilities of legal opposition to manipulation are discussed. In particular, researchers identify several major manifestations of manipulation on the Internet (Spencer, 2019). First, manipulation is not conducive to an individual's autonomous existence, as it causes tangible harm to the freedom to make personal decisions. Second, manipulation entails ineffective outcomes or negative consequences because it forces individuals to take actions and make choices that may be harmful and not in line with their actual preferences (Warwick et al., 2021). In the political arena, manipulative behavior leads to decreased trust in democratic institutions. Also, the use of manipulation harms the concept of human dignity because people become certain subjects of externally imposed experiments, they are only used to achieve a certain goal.



Figure 3. Basic check algorithm for fact-checkers

The use of manipulation in online journalism, through opinionmakers, can deal all of the above "blows" simultaneously, but have a certain particularly harmful direction. For this reason, there is a legal problem between defining the boundaries of free speech, the right to err (because some manipulative information is distributed erroneously), and conscious propaganda. One compromise solution is to block platforms that deliberately spread misinformation. It is not the personal opinion of the author that is taken into account, but the methods of spreading disinformation - that is, first and foremost, the platform that provided the opportunities for broadcasting materials with manipulative content is sanctioned. possibilities of direct legal regulation regarding the threats of online manipulation are also discussed - the use and addition of certain data protection legislation clauses on the exercise of misconduct with appropriate administrative or criminal penalties (Spencer, 2019). This tool is particularly valid for Influencers, disseminate manipulation and propaganda materials, but cover themselves with the interest of the audience, in particular, anyone who is not interested in their opinions can leave the digital channel of its retransmission. Perhaps in the deliberate dissemination future the manipulative information will have problems with the law.

### Avoiding manipulation through photo verification

The active development of Internet journalism has influenced the fact that the copyright of photos is not always used. At the same time, the use of photos in social networks without a signature and the right to use them has become common practice. This is also noticeable in Ukrainian media, using other people's professional photos to better showcase content. For some editors, other people's photos are the basis for social media promotion (Singh, 2021). This is what manipulative media resources take advantage of, using photos from search engines for manipulative purposes. BBC News editor T. Barot talks about the mechanism of image verification (Dorosh, 2014). First, the author of the photo must be identified. The most common and effective way is to contact those who sent the photo to the editor (or uploaded it), and ask this person herself took the photo. A separate effective method is to search for the photo through reverse image surfing. Often the Google network will show such images, which helps to see if the photo has been edited. The researcher

notes that the link to the photo in the best extension is the original source (Dorosh, 2014).

Separately, one should check the person who is distributing the informational message in order to gather more information about them there are a number of different platforms, but predominantly they are created for U.S. residents (Hirst, 2018). However, there are some that will be useful for Ukrainians as well. In particular, the platform Pipl. com - is designed to find a user of the Internet, by entering the name and surname of the author of the content you can identify him, find the main of his photos. This program implements a search on all known social networks, its peculiarity is that it searches on the basis of deepWeb, which is ignored by simple search engines.

In a photo verification system, it is important to identify small details and discrepancies. To do this, there are special tools for checking photos. The easiest tool is the Google Image reverse search. By uploading the photo to the system Google finds similar pictures. In the case where the system finds hundreds of steps of photos, you should enter keywords. A reverse photo search is implemented by the Tineye service, which filters out similar images by time. There is a program Google Earth (Dorosh, 2014) to check the photo from the scene. For example, the message indicates that the streets of Kharkov are depicted. In order to check this, you can use the specified program, which shows the panorama of any streets. Service Yomapic finds with the help of social networks to find photos taken in a certain place. Ukrainian journalists use this resource to find out if people live in the occupied territories (Dorosh, 2014). JPEGSnoop is a resource that allows you to view photo metadata, it detects if an image has been edited and highlights errors in corrupted files. At the same time, the Findexif platform identifies EXIF data (i.e., basic information about how, where and when the photo was taken, what device, indicates the main characteristics of the image. Another online resource that reveals the purpose of the data is Jeffreys Exif Viewer. Another way to check the photo is to determine what the weather conditions were in the analyzed place on a particular day.

### Protection against manipulation: checking video products

Another mechanism for countering manipulation is video product verification. The authors propose a basic algorithm for video verification,



taking into account such criteria as origin, location, and source.

The first important step is to identify the genesis of the video. Predominantly the video is accompanied by tags, its descriptions, and comments that affect its identification (Tuters, 2020). In order to start verification, keywords from this information should be identified and searched. Separately, a search for early videos matching the keywords should be implemented: this will allow the results to be viewed and compared. The next step involves checking online visitor profiles. Many modern resources allow you to contact those who have distributed or downloaded content. Analyzing these people will allow you to analyze exactly who was interested in the video message. When researching a video owner's account, the following information should be considered: where the account is registered, where the account is located, or the dated video content they are distributing, the quality of the content distributed. If the videos have the extension AVI or .MP4, it indicates that they are downloaded directly from the device. In case the video description contains the phrase "Uploaded via YouTube Capture" it indicates that the video was taken with a smartphone. A separate step is to check the personal information of the person who uploaded the video. First, you should determine if there are related acanths online and find out if they are active now. After that, find out if the account in question is connected to social networks and if there is information about the person in directories such as LinkedIn and Spokeo. Separate to this system is the location of the video. This procedure begins establishing the location covered in the video. Resources such as Wikimapia or Google Earth can be used for this (Dorosh, 2014).

An analysis of this data will determine if the video messages uploaded from the profile being analyzed should be trusted.

## The practice of creating organizations resisting media manipulation

In European countries there is a whole network of special organizations engaged in the formation of media literacy among the entire population. A typical way for a fact-checking organization to emerge is through the formation of fact-checking organizations in media editorial offices. In particular, in 2014 the newspaper "Metro" project called a fact-checking "Viralgranskaren". "PolitiFact" is one of the best-known fact-checking American

organizations, with 15 regional chapters. This organization is owned by the "Tampa Bay Times newspaper". There are also factcheck media resources in Ukraine: "the Stop Fake" project, the analytical resource "Vox Check" and the factcheck media "Slovo i Dilo". The project "No Lies" was the first to show fact-checking in a television format, founded a number of correctional projects, and created the first methodical manual on fact-checking in Ukraine. On the other hand, the Academy of the Ukrainian Press is also engaged in the implementation of various projects on media education of all categories of citizens.

There are also special organizations, which are not subordinate to the media. In particular, in Great Britain there are two projects "Newswise" and "News Literacy Network", which organize various events that contribute to the support of media competencies. As part of these projects, numerous trainings are held to promote critical thinking and an analytical view of the media. Participants in such events learn to emphasize the source of information, whether it is trustworthy or spreads rumors, it is balanced. Note that in the UK there are many officially supported media literacy initiatives that are implemented by both the media and the educational community. In Germany, the media regulator's "Zeebra" project is popular. It is a special line of help and questions about everyday digital life. This resource answers personal and anonymous calls. Within the established network there is close cooperation with various public institutions and organizations. If citizens often have similar questions, the "Zeebra" team forms special explanatory materials on its pages. Between the topics with which citizens address, the most popular whether certain information is true, what is misinformation. At the same time people often do not share different problems - hoaxes, fakes, propaganda, so the outlined network offers a broad analysis of these phenomena, helping the population to understand the manipulative mechanisms.

Factchecking organizations are also being created at universities. In particular, in 2012, at the initiative of Czech students at T. G. Masaryk University, a project called "Demagog.cz" appeared, the purpose of which is to check factual statements and determine their credibility.

The process of manipulating public opinion is especially active during elections (Shafi & Vultee, 2018). However, the electoral legislation of Ukraine, unfortunately, does not regulate the

rules of election campaigning on the Internet and social networks, which is used by influential politicians. In 2016, on the eve of the presidential election, the University of Wisconsin-Madison created "The Fact Checks", the content of which consists of students and professors checking local politicians. Students from the University of Cologne founded the "Faktenzoom Project", which aims to analyze statements made by politicians on the eve of an election. At the same time, some leading European states prohibit paid campaigning on certain Internet resources and television. We are talking about such states as France, Denmark, Belgium, Britain, Germany, Sweden, Switzerland, etc. This is due to make the electoral process as transparent and fair as possible. Such a ban was caused by considerations about the violation of the principle of equality of candidates: the rich have much more opportunities and resources to distribute advertising, and the election campaign is transformed into a "confrontation of financial weapons". In addition, in most European states, television channels must serve an equal amount of free airtime to each candidate. At the same time, in France, 6 months before the election, any paid advertising in any type of media is banned (Hirst, 2018). For this reason, to counteract manipulation, public policy must first rely on journalism and media literacy, where the former acts as an activity to gather and release information in such a way as to organize the news chain.

#### Conclusions

Therefore, Internet journalists have opportunities to manipulate public consciousness, but also to resist such influences. An important means of resisting manipulative influence is to resort to internal critical thinking and to acquire media literacy and media competence skills. This will allow us to analyze information, find contradictions in it, and interpret it. An important internal way to fight against manipulation is a balanced emotional state because articles on the Internet and comments on them can irritate, sow discouragement and neglect, and perceiving materials rationally and impartially will help to combat the distortion of information.

Modern mechanisms for countering manipulation in journalism also include fact-checking, which describes not only individual users, but also special groups of persons who leave themselves for the purpose of countering manipulation in the information space. Separate mechanisms of resistance to manipulations in the Internet media are verification of photo and video

content, as shown in the study, it can be carried out on many free online resources. Note the prospects of a legal response to manipulative actions, which, however, require further consideration through the discussions of scientists regarding deliberate manipulation and freedom of speech.

The experience of European countries in creating fact-checking organizations is important for Ukraine: they are created not only at the level of public media structures, but also on the basis of universities, involving active young people in this activity.

#### Bibliographic references

- Abbas Naqvi, M. H., Jiang, Y., Miao, M., Naqvi, M. H., & Wu, Y.-C. J. (2020). The effect of social influence, trust, and entertainment value on social media use: Evidence from Pakistan. Cogent Business & Management, 7(1), 1723825. doi: https://doi.org/10.1080/23311975.2020.1723825
- Brooks, H. Z., & Porter, M. A. (2020). A model for the influence of media on the ideology of content in online social networks. Physical Review Research, 2(2). doi: https://doi.org/10.1103/physrevresearch.2.02 3041
- Cheung, M. L., Pires, G., & Rosenberger, P. J. (2020). The influence of perceived social media marketing elements on consumer—brand engagement and brand knowledge. Asia Pacific Journal of Marketing and Logistics, 32(3), 695–720. doi: https://doi.org/10.1108/apjml-04-2019-0262
- Dorosh, M. (2014, February 5). 13 Online Content Verification Tools. Media Sapiens. Retrieved from https://ms.detector.media/howto/post/1707/2014-02-05-13-onlayninstrumentiv-dlya-perevirky-kontentu/
- Hirst, M. (2018). Research and Verification. In Navigating Social Journalism, p. 199–228. New York: Routledge, 2019.: Routledge. doi: https://doi.org/10.4324/9781315401263-10
- Karlsen, R., & Aalberg, T. (2021). Social media and trust in news: An experimental study of the effect of facebook on news story credibility. Digital Journalism, 1–17. doi: https://doi.org/10.1080/21670811.2021.1945 938
- Kaur, M., & Verma, R. (2018). Social media. In Media influence (p. 1–8). IGI Global. doi: https://doi.org/10.4018/978-1-5225-3929-2.ch001





- Mykolaienko, A. (2019). Fake news in the ukrainian media space: Technologies of experimental projects. Scientific Notes of the Institute of Journalism, 1(74), 29–37. doi: https://doi.org/10.17721/2522-1272.2019.74.3
- Rogers, R., & Niederer, S. (2021). Politics of social media manipulation. Amsterdam University Press.
- Shafi, A., & Vultee, F. (2018). One of many tools to win the election. In Media influence (p. 24–42). IGI Global. doi: https://doi.org/10.4018/978-1-5225-3929-2.ch003
- Singh, D. (2021). Media manipulation. SSRN Electronic Journal, 1–10. doi: https://doi.org/10.2139/ssrn.3793082
- Spencer, S. B. (2019). The Problem of Online Manipulation. SSRN Electronic Journal, 959–1006.

- https://doi.org/10.2139/ssrn.3341653
- Tuters, M. (2020). Fake news and the Dutch YouTube political debate space. In The Politics of Social Media Manipulation (p. 217–238). New Prinsengrachtt, 89, 1018. VR Amsterdam Nederland: Amsterdam University Press. doi: 10.5117/9789463724838 ch07
- Vysotska, O., & Vysotska, S. (2020). Information evaluation: Teaching students to detect bias, fake, and manipulation ukrainian perspective. Science and Education a New Dimension, VIII(94), 81–86. doi: https://doi.org/10.31174/send-pp2020-236viii94-18
- Warwick, C. R., Baker, L. M., Fernandez, J. C., & Rumble, J. (2021). Getting the most out of social media: What is social media? Edis, 2021(4). doi: https://doi.org/10.32473/edis-wc220-2021

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# Professional training of future psychologists in the information space in higher education institutions<sup>48</sup>

## Професійна підготовка майбутніх психологів в інформаційному просторі закладів вищої освіти

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Written by:
Alexander Mytnyk³9
https://orcid.org/0000-0002-2916-7344
Ernest Ivashkevych⁵0
https://orcid.org/0000-0001-7219-1086
Illia Chanchykov⁵1
https://orcid.org/0000-0003-4023-8622
Viktoria Predko⁵2
https://orcid.org/0000-0001-5160-7636
Olha Stakhova⁵3
https://orcid.org/0000-0002-6884-6032

#### **Abstract**

The article lights up the professional training of future psychologists in higher education institutions of Ukraine and considers the specifics of the professional training of future psychologists. Future specialists professional training in psychology is considered one of the key problems of the theory, science and practice of psychology. The article reviews the main areas of work of a psychologist in the education system. We noted various criteria for personal self-realization of future psychologists. The article shows the theoretical foundations of the structure of the psychologist's professional personality for work with adolescent children. The use of modern pedagogical technologies during the professional training of future psychologists is currently expedient in the informational educational space. The article shows that the desire to quickly win the status of to achieve independence, is characteristic of adolescence, and

#### Анотація

У статті висвітлено професійну підготовку майбутніх психологів у закладах вищої освіти України та розглянуто особливості професійної підготовки майбутніх психологів. Професійна підготовка майбутніх фахівців з псизології вважається однією з ключових проблем теорії, науки і практики психології. Стаття оглядає основні напрями роботи психолога в системі освіти. Ми зауважили різні критерії особистісної самореалізації майбутніх психологів. У статті показано теоретичні засади структури професійної особистості психолога для роботи з дітьми підліткового віку. Використання сучасних педагогічних технологій під час професійної підготовки майбутніх психологів є нині доцільним в інформаційному освітньому просторі. У статті показано, що своєрідним для підліткового віку прагнення швидше вибороти дорослого, досягти самостійності, а також розглянуто особливості психолого-

<sup>&</sup>lt;sup>52</sup> Ph. D., Senior Research Fellow Ukrainian Scientific and Methodical Center of Practical Psychology and Social Work Kyiv, Ukraine.
<sup>53</sup> Ph. D. in Psychology, Associate Professor at the Department of Psychology, Speech Therapy and Inclusive Education, Zhytomyr Ivan Franko State University, Ukraine.



<sup>&</sup>lt;sup>49</sup> Doctor of Pedagogical Sciences, Professor, Head of the Department of Practical Psychology, Faculty of Pedagogy, National Pedagogical Dragomanov University, Ukraine.

<sup>&</sup>lt;sup>50</sup> Ph. D in Psychology, Professor's Assistant of the Department of English Language Practice and Teaching Methodology, Rivne State University of the Humanities, Ukraine.

<sup>&</sup>lt;sup>51</sup> Ph.D in Psychology, Teacher of the Department of Practical Psychology, Faculty of Pedagogy, National Pedagogical Dragomanov University, Ukraine.



peculiarities of psychological and pedagogical conditions and the organization of the educational process of training practical psychologists in the information space are also considered. During the analysis of scientific works and consideration of trends in the development of education, the article revealed contradictions characteristic of the system of higher psychological education.

Keywords: psychologist, information space, teenagers, education, professional training.

#### Introduction

The latest period of the development of Ukrainian society can be considered a crisis: military actions, political and social instability all this provokes the development of insecurity in one's future, a decrease in self-confidence, endurance and vitality of the individual. There is an urgent problem among young people who are just entering active public life and acquiring the profession of a psychologist (Shevchenko, 2018). Psychological science is reaching new frontiers and fulfills an increasing role in solving urgent problems of education, production, and the sphere of human communication. The strategy for the development of the psychological service of the education system of Ukraine, approved by the Ministry of Education and Science of Ukraine, emphasizes the need for professional assistance in the self-development of an individual, the protection of the mental health of all participants in the educational process.

The success of these assignments depends on the degree of professional skill of psychologists and the formation of their readiness for practical activities. Readiness for work is a complex personal creation that involves a number of components that collectively allow a certain person to successfully implement a specific job.

The practice of training psychologists shows that the existing traditional education system does not fully ensure the formation of a future specialist who can fulfill his professional duties and fulfill professional functions at a high level. Not every specialist who has a professional education is able to perform the functions of a psychologist, and even more so to provide psychological assistance to clients.

педагогічних умов та організації освітнього процесу підготовки практичних психологів в інформаційному просторі. Практика підготовки психологів показує, наразі звична система навчання не повною мірою забезпечує формування майбутнього фахівця, спроможний належним чином здійснювати свої професійні обов'язки та виконувати професійні функції. Під час аналізу наукових праць та розгляду тенденцій розвитку освіти, у статті виявлено протирічча, характерні системі вишої психологічної освіти.

Ключові слова: психолог, інформаційний професійна простір. підлітки. освіта. підготовка.

The analysis of trends in the development of higher education, scientific works and modern practice of psychological activity revealed a number of contradictions inherent in the system of higher psychological education: between the objective and socially determined need of society psychologists capable of preventive, psychodiagnostic and psychocorrective work with clients and their lack of orientation towards this professional training in the conditions of the institution; between the level of preparation of students and the ability to apply their knowledge, abilities and skills in practice (Bochelyuk, 2014).

The need for the domestic system of higher education to enter the world educational space, the importance of raising the competitiveness of graduates of higher education institutions on the labor market poses the task of an unbiased assessment of the current situation, primarily from the standpoint of the existing world. Improving the procedure for training specialists also outlines the identification of the causes of existing contradictions and the search for opportunities to overcome them. These circumstances determine the relevance of this study (Vintyuk, 2016).

**The purpose.** The purpose of this paper is to determine the specifics of professional training of future psychologists in the information space of higher educational institutions and emphasize importance and necessity psychological readiness of doctors for work, who, according to the requirements of their profession, must highly qualified be psychologists for quality patient care.

#### Literature Review

- O. Kokun (2012) considers the main psychological problems of professional development of a modern psychologist. He paid special attention to the psychological features of the professional development of specialists in professions of the "person-person" type. The author describes that «...results of empirical research aimed at identifying the peculiarities of the development of professional orientation and competence of specialists at different stages of professional development».
- O. Vasylieva (2021) considered that «...the importance of innovative pedagogical technologies in the system of professional training of future psychologists in higher education, as well as their role as a means of optimizing professional psychological education». She analyzed the basic concepts of the terminological apparatus of pedagogical modernization. The author emphasized that «...the study offers a list of innovative educational technologies that should be used in the system of professional training of psychologists to increase the level of effectiveness of their professional education: personality-oriented, developmental, research, modular development, distance, project, group, differentiated training». In the article attention is focused on the fact that the implementation of innovative procedures at all levels of professional training of students of higher educational institutions should be regular and be built taking into account the realities of the changing world and the requirements of the labor sphere.
- T. Kravchenko et al., (2022) underlines that «...the innovation of computer technologies, especially multimedia ones, is a necessary condition for the functioning of specialists in modern society, since specialists are at the center of the educational process, during the improvement of professional competence».
- O. Plakhotnik et al., (2022) illustrate the position of multimedia teaching tools which are hopeful and very effective tools that let the educator not only to present an array of information in a larger volume than traditional sources of information, but also to include text, graphs, diagrams, sound, animation, video, etc. in a visually integrated form.
- O. Shchyrbul et al., (2022) explane the essence of the concept of multimedia. In the situation of media education, multimedia lists a number of

- functions: informational, interpretive, cultural, entertainment, and educational. The necessity to see the requests charted in the article in the circumstances of informatization of the educational process involves the educator to have knowledge and skills in the field of multimedia pedagogical technologies, knowledge of advanced methods and means of modern science.
- S. Shevchenko (2018) considered the problem of the relationship between self-confidence and resilience in the background of professional future psychologists training. The author emphasizes that «...based on the theoretical analysis of scientific research, it defines the content of the concepts of "viability" and "resilience", it is argued that self-confidence acts as a certain hypothetical construct that allows a person to choose a certain value position in relation to himself, to the world and, based on this position, build his own strategy of life».
- V. Bochelyuk (2014) proved that «...the experience of training psychologists shows that the existing traditional training system does not fully ensure the formation of a future professional who is able to perform his professional duties and realize professional functions at a high level».
- Yu. Vintyuk (2016) notes that «...the improvement of the system of training psychologists and provides for identifying the causes of existing inconsistencies of specialists and finding opportunities to overcome them».

## Methodology

To achieve our objective, we used a set of research methods that complement and test each other, which include: theoretical methods: studying the works of teachers, psychologists, methodologists, philosophers, psychological specialists, as well as government documents on research, the use of modern teaching methods and technologies; studying and analyzing methodological manuals and recommendations; empirical methods: psychological and pedagogical observation.

#### Theoretical methods.

According to V. Noskov (1999), the training of modern psychologists is impossible «...without changing the content of the educational process, the educational values of which should be: humanistic principles, scientifically based psychological and pedagogical teaching methods, the certainty of psychologists-teachers



regarding the understanding of the mechanisms of psychophysical mental movement, spiritual properties of the individual».

The problem of using innovative technologies and methods in the system of professional training of future specialists and doctors is relevant in modern higher education. The orientation of the modern education system is reflected in the new system of requirements for the content of educational programs, methods of their implementation, and learning outcomes.

New approaches to professional training of future psychologists and doctors require teachers of higher educational institutions to master and implement innovative teaching methods, use innovative learning technologies information space.

Modern training of specialists has a technocratic orientation, which is expressed in the information and subject content of training and in didactic and algorithmic methods that correspond to the traditional attitude in psychology to teaching methods of assimilation and understanding of knowledge. When training future specialists, the emphasis should be placed on the acceptance of knowledge, on the transformation of message values into the recipient's own values, since only the values accepted by the person form the basis of his activity and regulate individual behavior. At the same time, external orientations can be included in their own value system if: this does not cause moral and orientation dissonance, internal discomfort; external values do not contradict the values already existing in the personal structure: a new orientation that has arisen as a result of accepting values allows the individual to satisfy any of their needs (Yaraya, 2011; Radchuk, Adamska, & Oliinyk, 2019; Sapargaliyeva et al., 2023).

#### **Empirical methods**

Generalization of the main theoretical aspects of pedagogical innovation in the psychological and pedagogical literature allows us to reveal innovative pedagogical technologies, the use of which in the process of professional training of future psychologists and doctors is appropriate and rational at the present stage in the information space (the research was based on O. Vasylieva (2021):

personality-oriented training aimed at ensuring independent thinking, making your own choice in the learning process;

- developmental training aimed at developing of new design technologies, methods of developing and finding optimal solutions to problem situations is implemented by immersing students in the developing environment, giving them freedom to put forward hypotheses with their subsequent justification and independent choice of ways to solve problems;
- research activities aimed at developing future specialists' research skills, educating an active creative person:
- modular and educational training aimed at of the formation self-educational competence among future specialists, which is possible thanks to innovative software and methodological support, in particular: electronic textbooks, graph schemes of academic disciplines, research projects, selfrealization programs, etc.;
- distance learning aimed at interaction of teachers and students in the process of mastering knowledge, skills, abilities and methods of cognitive activity in the educational environment of information and communication technologies;
- project-based training aimed at stimulating students' interest in new knowledge, developing their own personality by solving personal problems and using this knowledge in practical activities;
- group training on the use of interactive methods of personal and educational influence, aimed at the formation of internal motivation for active assimilation of knowledge, communicative qualities of future specialists, activation of mental activity in particular (group, frontal; collective, cooperative; situational modeling; discussions);
- differentiated training aimed at developing the ability to learn, the need to find alternative solutions to typical and nonstandard situations, the ability to generate new original ideas.

The analysis of innovative pedagogical technologies gives grounds for highlighting the features of this approach, in particular:

- creation of an educational environment in information space, in which interpersonal and intergroup mechanisms of successful development and selfdevelopment of the individual and group, cognitive activity, cooperation and creativity are updated;
- interaction and mutual integration of the vocational training system with practice,



which implies compliance of the goals, objectives, content of vocational education with the real needs of practice, prospects for its development, and at the same time modern scientific achievements.

Fundamental concepts and original technologies are the theoretical and methodological basis for the development of subject-oriented professional training of psychologists at the current stage.

The methodology for selecting the content of the professional training of future psychologists should be aimed at solving both tactical and strategic tasks and be based on a set of both general didactic principles and provisions specifically aimed at ensuring the effectiveness of such training.

The modern methodology of professional training of future practical psychologists assumes personal centering.

For the most part, educational and methodological provision of professional training of practical psychologists is not addressed to the personality of the future professional, which does not provide for the actualization of its potential and does not create a "zone of its promising development"

The issue of modernization of higher education, improvement of the traditional system of professional and methodical training of future psychologists is acute. Emphasis is placed on increasing the level of their professionalism, competence, and intellectual culture. All these questions are considered by us in the article.

## **Results and Discussion**

The experience of training psychologists shows that the existing traditional training system does not fully ensure the formation of a professional psychologist who is able to perform various duties at a high level that he faces in practice.

In the professional activity of a psychologist and doctor, there are several main areas of work, such as psychodiagnostics, correction, counseling, prognostics, rehabilitation, therapy, and prevention. Among them, psychodiagnostic and correctional work is of key, initial importance, and serves as the basis for all other activities of a practical psychologist and doctor. The role of these activities increases when working with adolescents whose mental development is accompanied by certain difficulties and problems that require timely identification and correction.

Therefore, it is especially important to study the development of personal readiness of psychologists, first, for diagnostic and correctional work with schoolchildren. The initial link of the system of training practical psychologists should be special professional training in this direction, integrating all other elements of this system (Vyshnovskyi, 2007).

One of the most important problems of our time is the problem of pedagogically expedient and non-confrontational adaptation of a young person's personality to social changes, his preparation for independent life in society. This requires the help of psychologists who carry out career guidance, diagnostic, correctional and developmental, rehabilitation and educational work with all participants in the educational process: students of general education schools and vocational educational institutions, students, teachers, parents. Such activities have a positive impact on the development and formation of the personality of young citizens of Ukraine. The creation of optimal psychological pedagogical conditions for the formation of future specialists, increasing the level of their professional training, socialization adaptation to activities in the labor collective require appropriate psychological support. In addition, the development of psychological support for the purpose of constructive social implementation of practical psychological assistance in the educational process, in a person's life, the use of modern psychological approaches by teachers and doctors, the development of psychological recommendations regarding the style of pedagogical influence, etc.

Employees of the psychological service of educational institutions should assist future specialists in choosing a specific field of professional activity and recommendations for a successful choice of profession. Because of psychological consultation, it is planned to identify physiological, psychophysiological capabilities and features of the human body, formulate conclusions about the presence or absence of medical contraindications to work in the chosen specialty, and so on. This makes it possible to draw a scientifically based conclusion about the professional suitability of an individual for a particular profession (Rudenko et al., 2012; Andrushchenko et al., 2022).

The following criteria for personal selfrealization of future psychologists and doctors are highlighted:



- low level of personal anxiety;
- low level of aggressiveness; b)
- the expressed strength of the «I»; c)
- flexibility of views; d)
- developed empathy; e)
- f) high level of creativity;
- g) self-confidence;
- h) emotional stability;
- independence (independence of judgments).

Speech is one of the main tools of a psychologist's and doctor activity and a form of representation of his professional consciousness, and speech competence is a professionally important quality for a psychologist. As a component of professional competence, a complex of knowledge, skills, characterizes it and abilities that provide the ability to perceive. understand and create texts that contain information expressed by specific means of language concerning the object of his profession, as well as store such information in memory and process it in the course of mental operations. Speech proficiency, as the most active means of psychological influence, is an important mechanism regulatory for professional interaction between a psychologist and doctor with a client. The psychologist's speech influence on the client is determined by the level of development of the linguistic structure of utterances, their psychological saturation and verbal creativity of the psychologist and doctor (Antonova, 2007).

As shown by N. Antonova (2007), at different stages of professionalization, the professional «Iconcept» of psychologists and doctors undergoes significant changes: ideas about the ideal psychologist, about real well representatives of this profession and about themselves as a professional change:

- The stage of choosing a profession (starting professional training). First-year students are characterized by greater anxiety. They are not very sure that the psychologist has the qualities attributed to him, and doubt that they have them in themselves. At this stage, the professional «I-concept» is blurred and contradictory. This is also confirmed by the fact that first-year students attribute opposite qualities to the professional psychologist and themselves, such as the desire for affiliation and self-affirmation, trust and skepticism.
- The stage of the beginning of professional development (completion of training). For fifth-year students, a greater «saturation» of the image of a psychologist with

professionally important qualities characteristic, which add up to a complete picture. When describing one's real «I», certain contradictions continue to persist, but the description of the «I-ideal» practically coincides with the image of a real psychologist and is characterized by the absence of intrapersonal contradictions. Therefore, we can say that the desire to join the professional community is characterized by the desire to adapt to objective requirements, without violating the integral, harmonious, internally coordinated personality, which should become a professional psychologist. By the fifth year, the desire for greater sobriety in grades (yourself, people, and profession) also increases.

Stage of professional adaptation. Young professionals (with up to three years of experience) attribute quite high indicators to their own real image, which may indicate recognition and perception of the versatility of their own personality. There is also a desire to focus on cooperation, instead of a willingness to help and sympathize with others. Contact with the real work of a psychologist leads to a departure from the desire to help «each and every one», the content of targeted assistance that is necessary for a particular person in this situation is realized, that is, there is a decrease in the romanticization of the chosen specialty.

The stage of forming an individual activity style. Specialists with more than three years of experience note in their real image of the «I» the predominance of an optimistic and active mood, focused on their own picture of the world, with a tendency to authenticity and optimism. The selfimage is almost formed (Andrushchenko et al., 2022).

- A. Matvienko and A. Zatvorniuk (2014) «...the peculiarities highlighted that psychological and pedagogical conditions and organization of the educational process of training practical psychologists information space»:
- designing the content of psychological disciplines with a focus on the formation of a culture of thinking of future psychologists and constructive solution of professional problems;
- application in the educational process of fundamental, conceptual psychotechnical knowledge of psychology,

- as well as game and creative methods that activate the personal potential of future practical psychologists, guide and improve the process of professional training;
- taking into account the level of reflectivity, formation of self-management skills and creative thinking of students in the framework of training for the purpose of self-development and self-improvement of future specialists in the field of psychology;
- the use of psychological means of activating students' professional training in the forms of purposeful application of professionally important qualities;
- application of the main forms of psychological support for future psychologists in extracurricular activities (psychological counseling centers, psychological clubs);
- the use of socio-psychological trainings of professional and personal growth aimed at activating the relevant structures in the personality of the future specialist;
- participation in training groups to master a set of relevant psychological knowledge for self-knowledge and the ability to have a positive self-attitude to yourself and life;
- 8) the use of various training activities aimed at solving the problems of professional training of future psychologists.

Let us highlight the features of professional training of future psychologists:

- not everyone can work as a psychologist, so the training process should include the formation of professionally important personality traits of a specialist (psychological worldview, personality self-regulation orientation, skills, development of professional intuition, specific self-concept, altruistic attitudes, etc.);
- forms and methods of professional training in the field of psychology should be commensurate with the content of this training, so in the course of training they should evolve from academic lectures, at the stage of theoretical assimilation of knowledge, to practical, more active ones seminars, trainings, workshops and others;
- practicing psychologists should specialize in a specific type of practical psychology, in the process of professional training, the selection and deepening of professional orientation of future specialists should be carried out, a certain specialization in a specific type (technique) of work (child psychotherapy, marital counseling,

- individual psychocorrection of deviant behavior);
- the central method of organizing and presenting educational material should be a random (situational) approach;
- professional training of a psychologist is impossible without theoretical and practical assimilation of ethical norms (psychological deontology) (Matvienko & Zatvornyuk, 2014). This position is important for doctors, who, according to the requirements of their profession, must be highly qualified psychologists for quality patient care.

The features of the professional position of a psychologist of an educational institution include:

- double subordination: according to the professional line, it reports to the head of the relevant department in the educational management bodies, according to the administrative line to the director of the educational institution, which often creates unfavorable conditions of activity. As a result of contradictory tasks set by the administration that do not agree with the professional principles of the psychologist;
- takes a «position next to» in relation to the child, unlike the teacher with a position «opposite» to the child. The psychologist of an educational institution does not have the right to refuse to work with a child who needs it; on the contrary, he is obliged to take all measures to make this work possible;
- since most of the child's psychological problems are secondary, arising from a wide range of social, economic, and pedagogical problems, their solution requires the psychologist of the educational institution to be an intermediary in coordinating the efforts of all parties, sometimes not interested in joint activities. Unlike a teacher who independently solves educational tasks, the activity of a psychologist and its effectiveness depend on the degree of acceptance of its tasks by other participants in the pedagogical process;
- in comparison with a consulting psychologist, he faces a much larger range of tasks, so he does not have enough knowledge and skills of one or two types of activities;
- the content of the activity requires possession of not only special psychological knowledge, but also knowledge of modern pedagogical technologies used in education;
- in the course of the psychologist's activity, his functional status is updated, depending



on the professional situation, with whom (adults or children, with sick or healthy people, etc.) and with what type of problems (professional, personal, family, etc.) he works. Studying the features of the educational space and the above-mentioned features of the activity of an educational psychologist, we can assume a less pronounced nature of updating professionally differentiated properties; rather, on the contrary, the formation of professionalism of educational an psychologist is associated with universalization of his knowledge and experience (Kobylyanska, 2019).

The features of the result of the activity of a psychologist of an educational institution include:

- the result of the activity of a psychologist of an educational institution is not obvious and achieved, in contrast to the result of the teacher's activity measured by students' knowledge;
- in comparison with the immediate result of the practical psychologist's activity in the form of positive reflection of the client with the effect of assistance, participation and hope for improvement. The immediate result of the educational psychologist's activity may be a reflection of a different nature, caused by the concern «what is wrong with me (my child, my activity) that attracted the attention of the psychologist of the educational institution»;
- the delayed result of the psychologist-client interaction is usually known only to the client himself, while the delayed result of the educational psychologist's activity is expected, it can be observed and evaluated by all participants in the pedagogical process;
- responsibility for the course and result of the activities of the practical psychologist and the client, as a rule, is assigned to the client himself, responsibility for the course and result of pedagogical activities depends not only on the specific teacher. Also on his colleagues, the student himself and on his family, while responsibility for the course and result of the activities of the educational psychologist is individual, that is, entirely lies with this specialist (Kobylyanska, 2019).

Professional training of future psychological personnel is one of the key problems in the theory, science and practice of psychology. Researchers and practitioners who assess the education system draw conclusions about the crisis state of training psychologists. The crisis is manifested in the fact that the level of readiness of graduates of higher educational institutions in our country does not meet the requirements of society and international standards. Modern professional training is not focused on quality indicators, new principles and technologies of training. There is a gap between the general cultural and professional components in training, which does not ensure the formation of a professional culture of a psychologist, his readiness for professional activity.

As the experience of highly developed countries shows, the tasks of training future specialists of the education system are most effectively solved the ways of its professionalization, humanitarization, and creativity. The key problems are the humanitarization of education, because it sets the strategy for creating a holistic education system. Therefore, a new approach to the very understanding of specialist training in line with general humanistic trends in society is important.

The main areas of work of a psychologist in the education system are defined psychocorrection. psychodiagnostics, psychoprophylaxis, rehabilitation, psychological forecasting, and psychological expertise.

In the process of professional development of future psychologists-practitioners and doctors, it is important to diagnose their readiness for professional activity: not only theoretical training is important, but also age, psychological characteristics of the future specialist, existing experience in communicating with children, formed value orientations. Having an initial level of Teacher Education, future psychologists and practitioners get the opportunity to implement in practice the theoretical knowledge gained during their studies.

Professional training of practical psychologists consists of three conditional blocks: theoretical and experimental training – the study of classical psychological disciplines, carried out by traditional methods (general psychology, history of psychology, personality psychology, age psychology, experimental psychology, etc.). Mastering the theoretical foundations of practical psychology, which is carried out through the participation of students in active (interactive) forms of educational activities: seminars, master classes, trainings, discussions (psychological counseling, the basics of psychotherapy and

psychocorrection, psychological service in the education system, etc.). Mastering practical psychological technologies, techniques and methods of forming skills in working with people (groups), which is carried out in the process of practical work and during participation in workshops. Such three-level training of future practical psychologists will allow: to carry out professional selection in the course of training and deepen the professional orientation of students; systematically teach the basics of scientific and practical psychology; to form professionally significant personality traits and skills of practical work of a specialist (Shavrovska & Smalius, 2011).

#### **Conclusions**

Therefore, the professional training of future psychologists in higher education institutions of Ukraine is highlighted. The article considers the features of professional training of future psychologists, the main directions of work of a psychologist and doctors in the education system. Criteria for personal self-realization of future psychologists are highlighted. The theoretical foundations of the formation of a professional psychologist to work with adolescent children are considered. Generalization of the main theoretical aspects of pedagogical innovation in the psychological and pedagogical literature allowed us to reveal innovative pedagogical technologies, the use of which in the process of professional training of future psychologists is appropriate and rational at the present stage in the information space. In the professional activity of a psychologist, several main areas of work, which is an important aspect for doctors, who, according to the requirements of their profession, must be highly qualified psychologists for quality patient care.

We see prospects for further research in finding out the main areas of work of a psychologist in the education system.

#### **Bibliographic references**

- Andrushchenko, V., Yershova-Babenko, I., Kozobrodova, D., Seliverstova, A., & Lysakova, I. (2022). Digitalization of society: implications and perspectives in the context of the psycho-dimensionality of social reality/psychosynertics. Amazonia Investiga, 11(56), 183-195. https://doi.org/10.34069/AI/2022.56.08.19
- Antonova, N.O. (2007). Crisis phenomena in the professional formation of student psychologists and practicing psychologists.

- Actual problems of psychology. Psychology of work. Experimental psychology, 6, 3-9. (In Ukranian)
- Bochelyuk, V.V. (2014). Structure of professional training of future psychologists to work with victimized adolescent girls. Bulletin of ONU named after I. I. Mechnikova. Psychology, 1(31), 43-51. (In Ukranian)
- Kobylyanska, T. V. (2019). Formation of readiness of future psychologists to work with families of teenagers in the process of professional training. (Dissertation of the Candidate of Pedagogical Sciences) Uman State Pedagogical University named after Pavlo Tychyna, Ukraine.
- Kokun, O. M. (2012). Psychophysiology of a person in the modern dimension. Psychology and personality, 1, 201-203. (In Ukranian)
- Kravchenko, T., Varga, L., Lypchanko-Kovachyk, O., Chinchoy, A., Yevtushenko, N., Syladii, I., & Kuchai, O. (2022). Improving the Professional Competence of a Specialist in Poland by Implementing Multimedia Technologies. International Journal of Computer Science and Network Security, 22(9), 51-58.
- Matvienko, O., & Zatvornyuk, O. (2014). Professional training of future psychologists as a psychological and pedagogical problem. Scientific Bulletin of Kherson State University. Series Psychological Sciences, 1(1), 215–220.
- Noskov, V.I. (1999). Problems of training psychologists in the system of higher education. Coll. of science Ave. «Psychology», 4(7), 210-219. (In Ukranian)
- Plakhotnik, O., Strazhnikova, I., Yehorova, I., Semchuk, S., Tymchenko, A., Logvinova, Ya., & Kuchai, O. (2022). The Importance of Multimedia for Professional Training of Future Specialists. International Journal of Computer Science and Network Security, 22(9), 43-50.
- Popovych, I., Chervinskyi, A., Kazibekova, V., Chervinska, I. y Machynska, N. (2021). Estudio empírico de la tipología de expectativas sociales del individuo. Amazonía Investiga , 10(43), 112-122. https://doi.org/10.34069/AI/2021.43.07.11
- Radchuk, H., Adamska, Z., & Oliinyk, M. (2019). Features of Authenticity Development in Future Psychologists. Romanian Magazine for Multidimensional Education, 11(3), 213-223. https://doi.org/10.18662/rrem/146
- Rudenko, L. A., Degtyareva, G. S., Matiykiv, I. M., Shidelko, A. V., & Kozyar, M. M. (2012). Psychological aspects of professional



- training of competitive specialists: monograph. Kyiv: Lviv Scientific and Practical Center of Vocational and Technical Education of the National Academy of Sciences of Ukraine. (In Ukranian)
- Sapargaliyeva, A.Z., Zhumagali, K., Ualyieva, S.A., Tastemirova, A.Y., & Yessimbekova, A.O. (2023). Training of a Future Teacher-Psychologist in Multilingual Education Conditions. Journal of Psycholinguist Research. DOI: https://doi.org/10.1007/s10936-022-09931-2
- Shavrovska N., & Smalius L. (2011). Training of practical psychologists for educational institutions. Native school, 10, 59-63. https://acortar.link/J0JIC5
- Shchyrbul, O., Babalich, V., Mishyn, S.,
  Novikova, V., Zinchenko, L.,
  Haidamashko, I., & Kuchai, O. (2022).
  Conceptual Approaches to Training
  Specialists Using Multimedia Technologies.
  International Journal of Computer Science
  and Network Security, 22(9), 123-130.
- Shevchenko S. (2018). Psychological features of the development of self-confidence in future psychologists. (Abstract of candidate of psychological sciences. Pedagogical and age psychology). Kostyuk Institute of

- Psychology. Kyiv. 24. http://psychology-naes-ua.institute/files/pdf/shevchenko 3333 1536
- ua.institute/files/pdf/shevchenko\_3333\_1536 666471.pdf
- Vasylieva, O. (2021). Implementation of innovative technologies in the system of professional training of future psychologists. Scientific Bulletin of the Izmail State Humanitarian University, 56, 62-72. (In Ukranian)
- Vintyuk, Yu.V. (2016). The state of training of future psychologists in universities of Ukraine from the standpoint of modern requirements. Young Scientist, 12.1(40), 395-399. (In Ukranian)
- Vyshnovskyi, V.V. (2007). Formation of personal readiness of future psychologists for diagnostic and correctional work with adolescents (Thesis of the candidate of pedagogical sciences) Yan-t. asked. of education and adult education of the Ukrainian Academy of Sciences, Ukraine.
- Yaraya, T. A. (2011). Professional training of future practical psychologists to work with students with disabilities as a subject of psychological analysis. [File PDF] URL: http://scienceandeducation.pdpu.edu.ua/doc/2011/3\_2011/29.pdf

DOI: https://doi.org/10.34069/AI/2023.61.01.13

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## The role of information technologies in education<sup>54</sup>

## Роль інформаційних технологій в освіті

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https://orcid.org/0000-0002-2850-1224

Antonina Kushnir<sup>58</sup>

 $\begin{array}{c} \text{https://orcid.org/0000-0001-9041-7691} \\ \textbf{Dmytro Yaroshuk}^{\mathfrak{s9}} \end{array}$ 

https://orcid.org/0009-0000-1632-725X

#### **Abstract**

In the article we find out the possibilities of using information technologies to modernize the educational process in higher education institutions. The article reveals the content of information technologies, describes possibilities of their application, and shows their role in higher education institutions for the modernization of education. It is noted the functions inherent in the system of information provision of monitoring and quality control of education. The article distinguished the components of information technologies (hardware and software; applied information; the end user of information and the components of the national information system (modern telecommunications infrastructure; distributed computer network; system of national information resources); system-methodological. Information technologies are classified according to several features: the method of process in the information system; the step of treatment of organization tasks; the classes of hitech actions carried out; the kind of user interface). Priority directions in the field of informatization of education (introduction of

#### Анотація

статті розкрито зміст інформаційних технологій. виписано можливості застосування та показано їх роль у закладах вищої освіти для здійснення модернізації освіти. Розрлянуто функції, які притаманні системі інформаційного забезпечення моніторингу й управління якістю освіти. Виокремлено компоненти інформаційних технологій (апаратні й програмні засоби; прикладна інформація; кінцевий користувачспоживач інформації та компоненти загальнонаціональної інформаційної системи (сучасна телекомунікаційна інфраструктура; розподілена комп'ютерна мережа; система національних інформаційних ресурсів). Якість досліджено освіти трьох зрізах: y концептуальному; теоретичному; системнометодологічному. Інформаційні технології прокласифіковано за рядом ознак: способом реалізації в інформаційній системі; ступенем охоплення завдань управління; класами здійснюваних технологічних операцій; типом призначеного для користувача інтерфейсу). Виділено пріоритетні напрями у сфері інформатизації освіти (упровадження

<sup>&</sup>lt;sup>59</sup> MD, PhD, Associate Professor of Surgery Department of Dentistry Faculty, National Medical University named after O.O. Bogomolets, Ukraine.



<sup>&</sup>lt;sup>55</sup> PhD, Candidate of Pedagogical Science, Head of State Education Establishment Khmelnytskyi Vocational Training Centre Services

<sup>&</sup>lt;sup>56</sup> Master of the Faculty of Information Technology, Khmelnytskyi National University, Ukraine.

<sup>&</sup>lt;sup>57</sup> Candidate of Pedagogical Science, Senior Lecturer of the Department of Foreign Languages, Vinnytsia National Technical University, Ukraine.

<sup>&</sup>lt;sup>58</sup> Candidate of Pedagogical Sciences, Senior Lecturer of the Department of Pedagogy, Professional Education and Management of Educational Institutions, Vinnytsia State Pedagogical University named after Mykhailo Kotsyubinsky, Ukraine.



multimedia technology, use of multimedia products in higher education institutions) have been identified. Aspects of information inequality are described (physical access, financial access, cognitive access, access to significant information, and political access). The significance of distance education for today is shown, and its principles are considered.

**Keywords:** information technologies, innovation the educational process, of institutions of higher education, distance education, multimedia.

#### Introduction

Today, through the development of the society we understand deep economic and social transformations, and the use of novelties of scientific and technological progress in all spheres of human activity. The use of information technologies is an central issue in the realization of scientific and technical progress: it is the automation of production and its intensification, it is the introduction of highly effective technologies and the improvement of planning and management of all industries (Kuchai, 2014).

Computerization of the educational process in the era of the 21st century in higher education institutions is considered as a global, promising direction for its renewal and improvement. Priority attention is paid to this issue in all countries of the world at the level of higher education institutions themselves, as well as at the state level. The difficulty lies in the fact that this problem (full-scale computerization of the educational process) requires long-term purposeful work and constant attention specifically in institutions of higher education (Zhabolenko & Zhdanova, 2007).

The practice of educational activities of future specialists showed the advantages of information technologies in the change of professional skills and rational possible of the individual. These benefits deserve to be used as much as possible (Klepko, 1998).

Human activity is based on information provision (scientific information, in particular pedagogical, etc.). Many scientists have researched and are researching the advantages of information support, highlighting the means of operation, procedural and operational, and informational and resource components. Progressive information technologies include in their content methods that make it possible to мультимедійної техніки. застосування мультимедійних продуктів у закладах вищої освіти). Розписано аспекти інформаційної нерівності (фізичний доступ, фінансовий доступ, доступ до доступ, когнітивний значимої інформації, політичний доступ). Показано значущість для сьогодні дистанційної освіти, розглянуто її принципи.

Ключові слова: інформаційні технології, модернізація освітнього процесу, заклади вищої освіти, дистанційна освіта, мультимедіа.

increase the level of informatization in higher education. and improve the information environment and information technology (Petrychenko, 2014).

In the article, we set out to investigate the following tasks:

- 1. Establish the functions of the information system for monitoring and managing the quality of education in a higher educational institution;
- Determine main components the information technologies;
- requirements Highlight the for implementing a flexible system of training specialists taking into account quality requirements;
- Show the classification of information technologies according to various characteristics;
- Describe the advantages of information technologies;
- Determine the possibilities of information computer technologies;
- To show the main directions of using computer information technologies in the educational process, taking into account their methodological expediency possibilities.
- 8. The advantages of distance learning are
- Consider the possibilities of effectiveness of pedagogical support of monitoring activities

The purpose of the article: is to find out the opportunities of using information technologies to modernize the educational development in higher education institutions.

#### Literature Review

- V. Shtanko & T. Bordyugova (2012) single out aspects of information inequality: «physical access, financial access, cognitive access, access to significant information, political access».
- O. Kuchai (2014) highlighted the problems of training (theoretical training and methodical training) of specialists in higher education institutions in Poland using multimedia technologies. The basics of training future specialists using multimedia technologies are conceptually substantiated. Features of the use of multimedia technologies are shown at the professional training of specialists in the field of pedagogy. Progressive ideas of using the Polish experience of teacher training for the possibility of their implementation in the education of other countries are singled out.
- L. Petrychenko (2014) named the most important components of information technology and revealed their importance for education: hardware, software tools; applicable information; end user of information.
- V. Varenko (2014) analyzed the main components of the national information system (modern telecommunications infrastructure; distributed computer network; system of national information resources).
- L. Savchenko (2014) substantiates the concept of multimedia and emphasizes the importance of the latest computer technologies and methods for education, proves the importance of information technologies in education, emphasizes the power and versatility of the means of obtaining, processing, and transmitting information, which is important for monitoring the educational activities of future specialists.
- A. Kuzminskyi et. al., (2018) in the conditions of informatization of society and mass global communication single out and substantiate the general goal of high-quality continuous training of a specialist for professional activity who can use all the latest means of information technologies, which will contribute to the implementation of all areas of informatization of education.
- O. Semenikhina et al., (2020) proved the importance of the role of courses on open resources during the COVID-19 pandemic, identified and described a large number of innovative educational courses on foreign open resources and not enough in Ukraine. The

beginning of Ukraine's work in the development of such courses and open educational resources is shown, albeit slowly.

O. Oseredchuk et al., (2022) proved the necessity by information technologies in monitoring the quality of higher education and showed their advantages.

## Methodology

To achieve the set goal, the following research methods were used: theoretical (analysis of philosophical, pedagogical, and psychological literature), which makes it possible to justify the initial positions of the research; interpretative and analytical methods, based on which sources are studied using synthesis, analysis, systematization and generalization.

Remote education dictates its specifics in the organization of educational activities, forms, methods and content of education, selection of teaching aids, including part of information.

The methodology of information technologies involves active use by users telecommunication networks of different levels (local and global). They are the main systemforming sub-sign and are considered in three directions: a) as a resource of teaching any subject area; b) as a component of the traditional training system; c) as a incomes of interdisciplinary integrated approach to learning. The use of information technologies and telecommunication networks in education allows you to solve the problems of training, development and education of future specialists at the level of modern social and economic requirements.

The use of computer-based learning methodology is focused primarily on the integration of all types of educational activities and the preparation of subjects of the educational process for life in the conditions of the information society.

The dynamics of the development of the information society showed that traditional methods and means of education are not enough to improve the quality of specialist training. This fact indicates the need to implement innovative approaches to learning in the field of higher professional education, including the implementation of innovative educational programs, which include the transition of the educational process to new modern electronic, computer, web-oriented technologies, online



learning systems, that is, the transition to education using the latest information technologies. All these problems are considered by us in the article.

#### Results and Discussion

Today offers a diverse range of information technologies in education, but let's single out a universal general procedure of information and systematic activity, which Yu. Surmin & Tulenkov (2004) justifies under the name: "universal technology of analytical activity".

Information technology - the procedural use of a set of collection methods and their means; collection, transfer of data and their processing (primary information) to update data on the state of the object, on the process of updating the phenomenon (information product) (Androschuk & Kondratenko, 2014).

Information technology is an organized system proposed to explain the tasks of monitoring and organization of a higher education institution, which is characterized by a set of methods and means of implementing operations of collection, registration, transmission, accumulation, search, processing and protection of information based on constantly updated software, the use of innovative and constantly updated means of computing and communication, as well as the latest ways in which information is transmitted to those who are waiting for it (Varenko, 2014).

The functions of the information system for monitoring and managing the quality of education in a higher educational institution.

We will set the functions offered by the information system for monitoring and managing the quality of education in a higher education institution:

- the satisfaction of the needs of education seekers, teachers, heads of higher education institutions or structural subdivisions included in this structural subdivision, in the institutions, which are mandatory in the activities of education seekers and are important for the relationship;
- inform about the features, changes in the educational program, the current state of the institution of higher education. availability and adequacy of educational facilities, the results of the student's learning, the international position of the study of experience, the professional activity and qualifications of teachers;

- deliver documents to students, teachers, and heads of higher education institutions, which will be addressed;
- identify defects in intellectual development, control the health check of education seekers and professors and teaching staff (physical health, emotional and mental health);
- distinguish the obvious needs of students: inform teaching staff: involve stakeholders in the educational process (Kuchai et al., 2022).
- The main components of information technologies.

We note the main components of information technology: hardware and software; applicable end user of information information: (Petrychenko, 2014). At the same time, the national information system offers the following components:

- modern telecommunications infrastructure, which includes cable, satellite and other statement channels;
- the spread computer system, which is in the Internet information space, is provided by the information systems of educational institutions:
- the scheme of national information properties, which works similarly to Intranet technology and includes a comprehensive system of information security.

The teaching staff at the institution of higher education uses computer technology in their professional activities and teaches students to apply information technologies in their future professional activities because thanks to global computerization, automated workplaces and local computer networks are created, this allows more efficiency, taking into account operational efficiency, reliability, completeness of the information within the limits of the decisions made, to monitor the quality of higher education, to improve the management functions of the head of the institution.

Reorganized expertise is expected at the comprehensive use of personal computers at the workplace of staffs of higher education institutions. With this approach, the future specialist must be able to enter information into an automated system and, using computer technology, solve the tasks set before him, which will lead to a positive result (Varenko, 2014).

**3.** The requirements for implementing a flexible system of training specialists taking into account quality requirements.

Implementation of a flexible system of training specialists taking into account qualitative requirements is an important task of educational policy, in particular:

- to the quality of assessment of the level of training of education seekers of various profiles;
- to obtain a qualitative assessment of the result of the professional activity of the future specialist;
- to the qualitative design of not only pedagogical technologies but also information technologies and the determination of their reliability;
- to the qualitative evaluation of the effectiveness of the educational process.
- **4.** The classification of information technologies according to various characteristics;

Today's educational policy requires the obligation to single out such a trend as the "movement for a new quality of education", which is associated with the provision of a new quality of life, embodying such concepts as "human dignity" and "humanity". Approaching from the standpoint of a socio-pedagogical phenomenon, we will conduct the most productive study of the quality of education in three sections (classification), namely:

- conceptual (the implementation of the primary understanding of the quality of education as an object of research is observed. At the same time, the space of ideas is actualized, which has the ability to reveal its systemic and interdisciplinary nature, determination, and lead to the formation of its scientific foundations):
- theoretical (considered as a "collapsed" display of the object, parameters of the quality of education and essential characteristics, genesis, structure, classification of species, types, etc.);
- system-methodological (is applied to educational practice thanks to the implementation of the translation of conceptual and theoretical knowledge into normative, practically oriented, applied knowledge (Kapustin, et. al., 2013).

Today we observe the application of information technology in many educational structures,

educational management bodies, and organizations.

The Internet, which is informative and global, plays a big role in education. In particular, it is:

- information superhighway, global information source;
- a global means of communication that is operational;
- base for the development of future, advanced technologies;
- win-win for international organizations, governments, and private companies as an object of investment worldwide;
- development of corporate information systems based on Internet technologies. The information used in the global information system is located on millions of physically spread computer systems with software Web server support, which is subordinate to the global Internet network, that is, its telecommunications means (Luo, 2022). Using Web-browsers saving programs, users, have access to the Internet, use monitoring information (Varenko, 2014; Shunkov et al., 2022).
- **5.** The advantages of information technologies.

Information technologies have advantages:

- respond qualitatively to the improvement of education:
- contribute to the monitoring of the quality of education.

Using information technology to monitor the quality of higher education, we are observing the improvement of the application of methods, tools, processing, storage, data transmission and, as a result, finding high-quality information on the state of training of experts to further improve the level of their training, for the formation of significant new qualities for a competitive society. So, the problem of training a high-quality and professionally trained specialist is possible with a computerized learning process, constant monitoring of the quality of higher education with the help of computer technologies, because it is information computer technologies that provide openings:

- to improve the professional skills of future specialists;
- increasing the rational possible of future specialists. Therefore, it is time to use the rewards of information technologies (Oseredchuk et al., 2022).





Let's consider another priority direction in the ground of informatization of education - the development and implementation of multimedia products, multimedia technology in the educational process. This priority direction has a powerful educational potential for improvement and optimization of the educational process. In institutions of higher education, with the help of modern multimedia technologies, approaches to education are introduced, it becomes possible to improve communicative, creative and professional knowledge, and to optimize the development of self-education. Therefore, the introduction of information technologies into education provides opportunity to move to a new educational stage introduction of modern multimedia educational materials.

Starting with the 28th session of the UNESCO General Conference, which took place within the framework of the "Education" program, the research project "Multimedia technologies and personality development" was launched, where the international community properly assessed the role of new information technologies in education and determined promising ways for education using these technologies.

Today, great importance in education is given to the possibility of using multimedia technologies in institutions of higher education where a competitive specialist is being trained. During such innovative training, students acquire the ability not only to notice information from the screen but also learn to recode a visual image into a verbal system, have the opportunity to apply selectivity in information consumption and evaluate quality.

The emergence of the Internet provided an opportunity for the change of a new type of multimedia tools focused on web technologies. You can refer to them both during classroom work and in the process of independent work of future specialists. The main task of higher education institutions is to make the student of education a versatile, creative personality, a future specialist with flexible thinking, who will be able to successfully perform professional tasks on a competitive basis and will be ready to independently acquire new knowledge throughout his life. multimedia tools focused on web technologies.

Multimedia tools focused on web technologies have changed the classroom method used in educational institutions for periods, and now the method and content of student learning are

changing under the influence of multimedia technologies on the educational process.

So, having proved the importance of multimedia technologies, we will define them as powerful tools necessary for the scientific and educational community. The invaluable advantages of using multimedia technologies in the educational process are in the training of specialists, as they not only provide greater opportunities for the educational process but also increase the interest of education seekers in learning, and ensure the activity of future specialists during the presentation of the material. At the same time, a necessary condition is the teacher's mastery of multimedia technologies.

Let's single out multimedia presentations as the most effective form of educational material that can be created using Microsoft PowerPoint. Multimedia presentations support to present the material as a system of supporting images, bright and filled with perfect information, structured in an algorithmic order. This approach to the use of educational information is aimed at forming a system of clear visual thinking in students.

**6.** Determine the possibilities of information computer technologies;

When using multimedia technologies education. individual approach is an implemented, which gives the student or teacher the possibilities to:

- work in a mode and measure accessible to everyone;
- apply the value of rise of the educational process,
- to mechanize the development of certain practical skills,
- repeatedly repeat operations until complete automation (Kuchai, 2014).

Educational multimedia tools are considered universal because their application is too wide:

- used at different stages of the lesson (motivation, formulation of the problem, explanation of the material, association and overview of knowledge; as illustrations),
- to monitor the quality of education,
- to evaluate educational achievements,
- to receive, transmit, store, process, and present various information,
- for operations related to the study of control and evaluation processes (Savchenko, 2014).



With the use of information and computer technologies in the educational process, students have more opportunities and encouragement to use not only the worldwide network but also to engage in self-education, develop intellectual potential, cultural and social level, improve knowledge of foreign languages (Shtanko & Bordyugova, 2012).

7. The main directions of using computer information technologies in the educational process, taking into account their methodological expediency and possibilities.

Let's dwell on the main directions of using information computer technologies in the educational process, taking into account their methodological expediency and possibilities. These are:

- search for information in the local network and the global network;
- transmission, storage, and processing of information;
- use of modern interactive didactic and methodical materials;
- automation of education control;
- development of software tools for educational space of various purposes;
- use of educational websites in the educational space;
- computer experiments with virtual models;
- organization and processing of experiment results;
- distance learning in educational activities;
- an organization for students of intellectual leisure education (Nosenko, 2011).

In 2020, the COVID-19 pandemic in the field of education has led to significant changes across the planet. During the quarantine, distance learning was introduced as much as possible in all educational institutions (Kuzminskyi et al., 2018).

As noted by A. Kuzminskyi et al., (2021), during the COVID-19 pandemic, distance learning, based on information-educational technologies. Distance learning is effective both for learning in institutions of higher education and for monitoring.

## 8. The advantages of distance learning

Supreme contribution of students in monitoring their knowledge, active learning, and improving them as individuals is required by the methodical basis of distance learning, both for the educational process in general and for remote monitoring of achievements during the pandemic (Omonayajo et al., 2022). Let's note the advantages of working in the distance form of education:

- motivates students to bring out competitive professional training using distance education;
- the speed of communication between students and the teacher;
- constant attention of the teacher:
- increasing the number of consultations at a convenient time for those seeking education;
- the creation of opportunities for communication between the teacher and students of education in the form of a forum;
- interpersonal contact among students and the teacher, which provides an opportunity to ensure quality education - in general, and during monitoring activities - in particular.

Consider the possibilities of effectiveness of pedagogical support of monitoring activities

In the process of distance learning, we will consider the possibilities of the effectiveness of pedagogical care of monitoring activities, which is achieved under the following conditions:

- constant improvement of students' computer literacy;
- the possibility of accounting for the psychological features of perception, attention, memory, age-related capabilities of education seekers, their individual and personal regularities;
- implementation of psychological comfort;
- the ability of an individual to engage in dialogue using information technologies;
- the possibility of applying an individual approach to education seekers;
- organization of self-control of education seekers;
- systematic monitoring of the educational process;
- improvement of self-employment skills among students of education;
- effective interaction of distance education components.

We see the necessity of today in the development of the potential of each country. The primary task is to ensure blended learning. From experience, we see that educational institutions should be better prepared for the use of distance education, which will provide an opportunity for more individualized approaches to the educational





space and monitoring of educational activities. More attention must be focused on developing flexible face-to-face or online teaching curricula.

An important condition is that all teachers have a good command of IT devices and direct their efforts to reform education guided by the standards of the European Educational Space. Teachers should perform the following functions:

- coordination of the educational process,
- filling the course that is taught,
- conducting consultations with education seekers during the development of an individual study plan and during the educational process,
- management of student educational projects,
- assessment of educational achievements of education seekers and monitoring.

During the COVID-19 pandemic, courses on foreign open resources, which exist and need to be developed, became appropriate, because there are not enough of them. This is confirmed by the Prometheus and VUM platforms in Ukraine, which contain an insufficient number of courses (Semenikhina et al., 2020). Consider the principles of distance education as a system. The principles are different from classical education, they ensure the interconnection of the main aspects of distance education - organizational, technological, value, and pedagogical:

- the principle of openness everyone has the right to receive an education without any exams and testing; enrollment in a higher education institution is carried out during the year; the student chooses the place of study himself (study takes place outside the classrooms);
- flexibility the learner chooses the educational blocks himself, sets himself a goal; freely chooses the term of study;
- intensification of educational activities of education seekers - education seekers themselves use their practical experience, already acquired knowledge to master new ones; active forms are widely present during training;
- the adequacy of learning technologies of the distance education model - is based on the principle of pedagogical expediency: the use of new information technologies;
- learning mobility depends and relies on information networks; knowledge bases and banks with the help of which students of education independently adjust their

- educational program by their needs and level of development;
- individualization of training the individual characteristics of the students of education are taken into account and the choice of training terms and training blocks depends on this moment; the possibility of studying outside the study group is allowed, but at the same time there is control of the distance education institution;
- humanism the educational process is aimed directly at the person, all conditions are created for students to acquire a high level of knowledge;
- alternativeness non-antagonism of distance education conditions the successful functioning of all the above-mentioned principles (Strelnikov & Britchenko, 2013).

#### **Conclusions**

The significance education of the possibilities of information technologies for improvement of the educational process in higher education institutions is substantiated. We will highlight and describe the main functions inherent in the information provision system of monitoring and organization of the quality of education in a higher education organization and the key mechanisms of information technologies. The quality of education was investigated in three directions: conceptual, theoretical, and system-methodological. The classification of information technologies is shown, which can be founded on several structures: the technique of operation in the information system; grade of coverage of management tasks; technological operations carried out by classes; type of user interface, etc. The importance of multimedia equipment and multimedia products education is emphasized. The relevance and necessity of distance education are shown and its principles are considered.

## **Bibliographic references**

Androschuk, O.V., & Kondratenko, Yu.V. (2014). Information technologies and their impact on the development of society. Center for military and strategic research of the Ivan Chernyakhovsky National Defense University of Ukraine, 1(50), 42-47. (In Ukranian)

Kapustin, I.V., Holtiai, T.M., Ievtushenko, S.S., & Klimova, S.V. (2013). Monitoring research technology (From work experience). Kharkiv: Kharkiv Academy of Continuing Education, 85 p.

Klepko, S. (1998). Integrative Potential of Informatics and Computer Science in the

- Educational Process. Pedagogy and psychology of professional education, 2, 35-43.
- Kuchai, O.V. (2014). Theoretical and methodical principles of training future primary school teachers by means of multimedia technologies in higher educational institutions of Poland. Cherkasy: publisher Yu. A. Chabanenko. (In Ukranian)
- Kuchai, O., Skyba, K., Demchenko, A., Savchenko, N, Necheporuk, Y., & Rezvan, O. (2022). The Importance of Multimedia Education in the Informatization of Society. International Journal of Computer Science and Network Security, 22(4), 797-803. https://doi.org/10.22937/IJCSNS.2022.22.4.95
- Kuzminsky, A. I., Kuchai, O.V., & Bida, O.A (2018). Using the Polish experience of training IT specialists in the pedagogical education system. Information Technologies and Learning Tools, 68(6). 206–217. https://journal.iitta.gov.ua/index.php/itlt/article/yiew/2636
- Kuzminskyi, A., Kuchai, O., Bida, O., Chychuk, A., Sihetii, I., & Kuchai, T. (2021). Distance learning in the training of specialists in institutions of higher education. Modern information technologies and innovative teaching methods in training specialists: methodology, theory, experience, problems: collection of scientific works, 60, 50-58.
- Luo, Y.T. (2022). Construction of Smart Higher Education Teaching Resources Using Data Analysis Technology in Unbalanced Data Environment. Journal of environmental and public health, 2022, 2130623. DOI: 10.1155/2022/2130623
- Nosenko, T.I. (2011). Information technologies for education: a beginner's guide. K.: Kyiv. University named after Boris Grinchenko. (In Ukranian)
- Omonayajo, B., Al-Turjman, F., & Cavus, N. (2022). Interactive and Innovative Technologies for Smart Education. Computer science and information systems, 19(3), 1549-1564. DOI: DOI: 10.2298/CSIS210817027O
- Oseredchuk, O., Drachuk, O., Demchenko, O., Voitsekhivska, N., Sabadosh, Yu., & Sorochan, M. (2022). Application of Information Technologies is a Necessary Condition for Qualitative Monitoring of Higher Education and Modernization of Educational Process. IJCSNS International Journal of Computer Science and Network Security, 22(3), 501-510. DOI: https://doi.org/10.22937/IJCSNS.2022.22.3.64

- Petrychenko, L. O. (2014). Theoretical and methodological tasks of quality control of education in a higher pedagogical educational institution (thesis. ... doctor of pedagogy Sciences) Taras Shevchenko Luhansk National University, Luhansk, 599.
- Popovych, I., Chervinskyi, A., Kazibekova, V., Chervinska, I., & Machynska, N. (2021). Estudio empírico de la tipología de expectativas sociales del individuo. Amazonía Investiga, 10(43), 112-122. https://doi.org/10.34069/AI/2021.43.07.11
- Savchenko, L. (2014). Theoretical and methodological principles of training future teachers for pedagogical diagnosis of the quality of education. (Dissertation for the Doctor of Pedagogical Sciences degree. Specialty). Kryvyi Rih Pedagogical Institute Kryvyi Rih, 590.
- Semenikhina, O.V., Yurchenko, A., Sbruieva, A., Kuzminskyi, A., Kuchai, O., & Bida, O. (2020). Open Digital Educational Resources in IT: A Quantitative Analysis. Information technologies and learning tools, 75(1), 331–348. (In Ukranian)
- Shtanko, V.I., & Bordyugova, T.G. (2012). Information society: socio-philosophical problems of formation: education. manual. Kharkiv: Khnure. (In Ukranian)
- Shunkov, V., Shevtsova, O., Koval, V., Grygorenko, T., Yefymenko, L., Smolianko, Y., & Kuchai, O. (2022). Prospective Directions of Using Multimedia Technologies in the Training of Future Specialists. International Journal of Computer Science and Network Security, 22(6), 739-746. https://doi.org/10.22937/IJCSNS.2022.22.6.93
- Strelnikov, V. Yu., & Britchenko, I. G. (2013). Modern learning technologies in higher education: a modular guide for students of the author's courses of professional development of teachers. Poltava: PUET. (In Ukranian)
- Surmin, Y.P., & Tulenkov, N.V. (2004). Theory of social technologies: textbook. allowance K.: MAUP. https://subject.com.ua/pdf/319.pdf
- Varenko, V.M. (2014). Information and analytical activity: training. manual K.: "Ukraine" University. (In Ukranian)
- Zhabolenko, M., & Zhdanova, N. (2007). Innovations in the field of using information and communication technologies in the educational process. The Strategy of Innovative Development of the Higher Education System in Ukraine: Materials International science-practice conf. Donetsk: Publishing House "Kalmius", 157-161.



DOI: https://doi.org/10.34069/AI/2023.61.01.14

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## Verification of communicative types in the judicial public space of media discourse in the USA, Kazakhstan and Russia as a psycholinguistic marker of fact-checking

Верификация коммуникативных типажей в судебном публичном пространстве медиадискурсов США, Казахстана и России как психолингвистический маркер фактчекинга

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> > Written by: Gulzat T. Kussepova<sup>60</sup> https://orcid.org/0000-0001-9556-8763 Irina S. Karabulatova<sup>61</sup> https://orcid.org/0000-0002-4228-3235 Karlygash S. Kenzhigozhina<sup>62</sup> https://orcid.org/0000-0003-3574-0941 Aleksey O. Bakhus<sup>63</sup> https://orcid.org/0000-0001-9738-4896 Konstantin V. Vorontsov<sup>64</sup> https://orcid.org/0000-0002-4244-4270

#### Abstract

Modern psycholinguistic research and factchecking actively explore the space of media discourse. However, the representation of the judicial space in the mass media has not been sufficiently studied due to the peculiarities of communicative behavior in the judicial and legal space of the ethno-socius and the attitude to the judiciary. The authors hypothesize that the differences in public behavior in court and the coverage of the work of courts in the American, Kazakh and Russian media are due to the sociocultural features of the phenomena of judicial and legal communication in public space under the influence of established traditions in such coordinate systems as "person - judicial system", "openness - closeness of society", "unity society", disunity of "accessibility stigmatization", "court journalistic

## Абстракт

Современные психолингвистические исследования и проверка фактов активно исследуют пространство медийного дискурса. Однако репрезентация судебного пространства средствах массовой информации недостаточно изучена из-за особенностей судебнокоммуникативного поведения В правовом пространстве этносоциума отношения к судебной власти. Авторы выдвигают гипотезу о том, что различия в публичном поведении в суде и освещении работы судов в американских, казахстанских и российских СМИ обусловлены социокультурными особенностями феноменов судебно-правовой коммуникации в публичном пространстве под влиянием устоявшихся традиций в таких системах координат, как "человек - судебная система", "открытость -

Doctor of Mathematics, Professor RAS, Head of Department of Mathematical Methods of Forecasting of Faculty of Computational Mathematics and Cybernetics of Lomonosov Moscow State University (Moscow, Russia), Head of the Laboratory of IAI of Lomonosov Moscow State University (Moscow, Russia), Head of Department of Mashing Learning and Digital Humanities of MIPT (Dolgoprudny, Russia)



<sup>&</sup>lt;sup>60</sup> PhD student of L.N. Gumilyov Eurasian National University. (Astana, Kazakhstan)

<sup>61</sup> Doctor of Philology, Professor, Research-Professor of the Department of Foreign Languages, Faculty of Philology, RUDNuniversity (Moscow, Russia), Deputy Head of the Laboratory of IAI of Lomonosov Moscow State University (Moscow, Russia), expert of Department of Mashing Learning and Digital Humanities of MIPT (Dolgoprudny, Russia)

<sup>&</sup>lt;sup>62</sup> PhD of Philology, Associate Professor L.N. Gumilyov Eurasian National University. (Astana, Kazakhstan)

<sup>63</sup> PhD of Philology, Senior Lecturer of the course "Modern technologies of mass media and MC", Faculty of Philology, RUDNuniversity (Moscow, Russia)

investigation", etc. The results confirm the hypothesis of the authors' team, revealing the difference in the perception of the judicial system in the USA, Kazakhstan and Russia, illustrating the "rejection" of the Soviet and post-Soviet stigmatization of the judicial and legal space by the Kazakh society towards democratic norms. The prospects of the study are related to the subsequent development of an automatic system for evaluating speech behavior strategies in court and their coverage in the media as a category of fact-checking.

**Keywords:** discourselogy, communicative behavior, judicial and legal system, NLP, comparative studies, confidence marker.

#### Introduction

Communicative types in the judicial space of media discourse are implemented within a certain coordinate system, weakening /strengthening the perception of the reliability of events covered in the media.

Modern linguistics considers the phenomenon of *homo est iudicialis* as a multi-tiered, systematic education. On the one hand, the linguistic personality acts as a concentration of discursive practices of society, representing a set of certain social and professional roles within which we carry out interpersonal communicative interaction. On the other hand, the personality of the communicant has a certain structure, which is proved by numerous studies of psychologists (as it was proved in the works of Stratton, 2017, Costello, 2010, etc.).

The research methodology is synergetic in nature: a) a general hypothetical-deductive method; b) purely linguistic methods of interpreting media discourses in order to comprehend the essence of the phenomenon under study and discursive analysis; c) NLP methods aimed at formalizing linguistic analysis, comparing and classifying known and new linguistic facts in public judicial discourse, conceptual modeling and definitional interpretation of the communicative type in the public judicial space of media discourse. The scientific novelty lies in the choice of the object of research and the definition of the communicative type in the judicial space of media discourse as a verifying marker of

общества". "единство закрытость разобщенность общества", "доступность стигматизация", "суд журналистское расследование" И т.д. Результаты подтверждают гипотезу авторского коллектива, выявляя разницу в восприятии судебной системы в США, Казахстане и России, иллюстрируя "неприятие" советской и постсоветской стигматизации судебноправового пространства казахстанским обществом в сторону демократических норм. Перспективы исследования связаны последующей разработкой автоматической системы оценки стратегий речевого поведения в суде и их освещением в СМИ как категории проверки фактов.

**Ключевые слова:** дискурсология, коммуникативное поведение, судебноправовая система, NLP, компаративистика, маркер достоверности.

reliability/unreliability of a communicative event. The empirical material consisted of articles on the coverage of socially significant court sessions in the USA, Kazakhstan and Russia, articles on the judicial system in these countries.

The modern post-Soviet space is characterized by heterogeneity of preferred discursive strategies in society, demonstrating consequences of choosing different bifurcation points for their countries, which either adhere to different coordinate systems, balancing between East and West (Barabash et al., 2019). In this regard, of particular interest is the transformation of attitudes to the coverage of high-profile court cases in the mass media space of Kazakhstan, Russia and the United States with the presentation of communicative types of judicial and legal media discourse. The choice of countries is determined by historical and geopolitical ties. Thus, the American linguistic culture demonstrates a steady interest in court proceedings, public hearings (Summers, 999; Gormley, 1961; Gutterman, 2022). The communicative type is understood linguosemiotic and linguocultural phenomenon realized by one or another linguistic personality (Chekulai et al., 2021).

#### Literature review

Linguocultural types and communicative types in the Kazakh linguoculture reveal a lacuna. The description of etiquette and norms of





communication are related to general ethnopsycholinguistic norms in Kazakh culture (Kobzhasarova, 2012). At the same time, we must admit that to describe such linguistic and cultural communicative types as bai, biy, akyns, zhyrshy, in their evolution, separate dissertation research is required, which cannot be covered by this article. Modern communicative types in Kazakh culture reflect global trends while preserving ethnic and socio-cultural specifics.

In this connection, the authors consider the general distribution of complexity across all terms in the language, which is especially important for the development of our topic (Eremeev & Vorontsov, 2019).

discursology distinguishes Russian communicative linguistic and cultural types as "Russian intellectual", "slob", "fan" (Karasik, 2016; 2005), "Russian entrepreneur" (Ivanova, 2010, 4-31), "Russian warrior", "soldier", "general", "Cossack" (Yelina, 2005), "The Russian nobleman" (Kvartovkina, 2005), "English businessman" (Mikhailova, 2005), "American cowboy" (Mishchenko, "manager" (Klimenko, 2014), "boss" (Dubinina, 2005), "politician" (Zheltukhina, 2010), "lamer", "hacker" (Lutovinova, 2008), "evil mother-inlaw" (Volkova, 2010). These types reflect the speech established stereotypes communicative behavior of the Russianand English-speaking speaking linguistic personality.

The researchers emphasize that the perception of the government itself and society as a whole within the framework of the civilizational model of the world depends on how the communicative types symbolizing the judiciary, the defendant, the prosecutor, the witness, the victim, the arbitrator/independent judge are positioned in the media (Dubrovskaya, 2016; Stepanyuk et al., 2022; Senyk et al., 2022; Akkurt et al., 2021). At the same time, the mass media are trying to create narratives of court proceedings in the role position of the communicative type "arbitrator", forming both the image of the judiciary, the state, and the defendant, prosecutor, lawyer, witness, independent experts, providing the target audience with versatile information about the explicit and hidden illegal activities that led to this trial.

Consequently, the representation of the judicial and legal narrative in the media discourse in such genre groups as: 1) genres of representation of facts; 2) evaluation genres; 3) artistic genres (Dankova, 2017). These genres also include mockumentary, whose role is being reinforced in modern cognitive information wars of a hybrid type (Mishurova, 2022; Sander, 2022; Sinitsyn et al., 2022). The ideological modality of the coverage of trials in the mass media gives any information an ideological coloring that is consistent with the value system of society.

The need for cooperation between the judicial and legal system and the media is regulated in the Concept of Information Policy of the judicial system (Order No. 194, 2012; Decree No. 60, 2001).

The US judicial System (State Unified Court System) widely uses the concept of "e-court", which allows the user to get direct information to court sessions via Internet access from almost anywhere to obtain materials about any court case or other related information. E-court is implemented through the systems Management or Electronic Archive of Cases" (Case Management/Electronic Case (CM/ECF)) and "Open Access to court Electronic Records" (Public Access to Court Electronic Records), which include the following functions:

- 1) court case management (tracking the process, responses, deadlines and hearings);
- introduction of additional information, documents and changes to cases:
- search for documents; 3)
- management, storage, backup copies and archiving of electronic documents;
- sending documents from the court, to the court or directly within it;
- providing information about other parties in the case, about the date of filing and storage of the document.

The authority of the court as the most important component of the rule of law should be strengthened and supported in every possible way (Blake, 2014). Without the interaction of the judiciary with the media, the goal can hardly be achieved.

As a rule, messages on "high-profile" cases in the media discourse appeal to background knowledge and value constants in society, which allows not only to establish rapport with the expectations of the target audience (Coibion, Gorodnichenko, & Kamdar, 2018), but also to form an evaluative perception of events and their participants among recipients (Bolotnov, 2015). In this regard, researchers distinguish among the journalistic community such communicative types as a writer, blogger, witness (user)

(Bolotnov, 2015; Lipchanskaya & Privalov, 2021). At the same time, the communicative types found in the judicial and legal media discourse rarely become the object of close attention in linguistics. At the same time, journalistic investigations, as well as news from the courtroom, as well as various reality shows of the judicial plan directly indicate the demand for such discourses in modern society.

When mass media create narratives of a judicial and legal orientation, they pursue the following tasks: 1) providing the target audience with complete information about the illegal actions of officials, politicians, media personalities, individual antisocial citizens; 2) providing information about the mechanisms of a particular iudicial and legal media discourse: 3) strengthening value orientations in society with the help of mass media through an appeal to background knowledge; 4) creating social attitudes; 5) forming and transformation of the image of the defendants in a particular case. Kazakhstan and Russia are characterized by such headings in the media as "From the courtroom", TV simulations of the court session, radio, TV shows such as "Your Lawyer"/ "Your Lawyer", as well as relevant new legal media that form public opinion about the law and legality, judicial procedures and the main actors- participants in the trials. At the same time, TV simulations of court sessions are close to mockumentary (Gutterman, 2022).

#### Materials and methods

The stated problem predetermined the task of determining the cognitive-pragmatic specifics of the judicial media discourse using genre analysis and comparative analysis to determine communication strategies and tactics in the formation of communicative types.

In this connection, the examples of judicial media discourse were compared with the data of informants' surveys in Kazakhstan, which made it possible to clarify the differential signs of various communicative types in judicial media discourse, to analyze associative links with the lexical analysis of and phraseological objectification of legal concepts in judicial media discourse based on the analysis of the corpus of contexts, in which there is a modeling of the permanent characteristics of the communicative behavior of the main communicative types

within the framework of the discourse under consideration, taking into account the analysis of discursive features, i.e., consideration of the parameter of speech activity (goal, strategy, method of implementing speech actions, features of communicative behavior) and questioning.

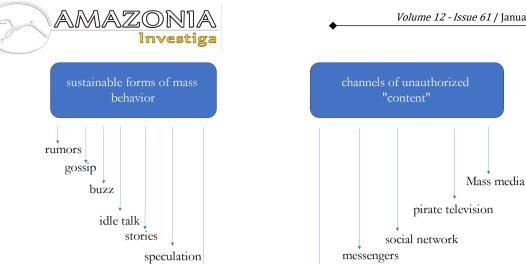
The study is based on the data of news materials, where the progress of the consideration of cases or the decision of a judge in the Republic of Kazakhstan, the USA and Russia was announced. The comparative analysis is conditioned by the historical context of the common past (Kazakhstan and Russia) and the democratic goal-setting of modern development (Kazakhstan and the USA). At the same time, the prognostication of Kazakhstan's judicial media discourse in comparison with Russia and the United States is a priority.

100 people from among Kazakhstani students took part in the survey. Such a comparison of the data of desk and field research is aimed at using the "ideality" of communication (Apel, 1998), the "ideality" of the speaker (Chomsky, 1995; McGilvray, 1979), the "ideality" of speech communication (Habermas et al., 1974; Lincoln, 2020) as prototypes and is focused on understanding the "limitless" communication as such.

## Results

However, the expansion of the sphere of intercultural communication, the digitalization of social and managerial life and globalization contribute to the unification of behavioral norms with the loss of specific ethno-psycholinguistic norms of one people. The positioning of news within the judicial media discourse shows that these norms affect the submission of such information guides, and representatives of the media sphere are not always able to interpret it correctly and react accordingly.

This, in turn, leads to communication failures in such a conflict-prone area as judicial media discourse. Knowledge of behavioral features, including the features of spatial behavior, in situations of judicial communication is necessary for a proper understanding of the intentions of all participants in the communicative process to achieve the goal of judicial media discourse and, as a result, to establish harmonious social communication



tales

Fig. 1. Gradation of rumors as sources of conflictogenicity in the public consciousness (Developed by us based on the analysis of materials: Olshansky D.V. Psychology of the masses. St. Petersburg: Peter, 2001).

Internet pages and channels

We believe that the public legal media discourse is closely related to the phenomenon of rumors, since it either prevents their development or stimulates them. It is known that rumors are a phenomenon of interpersonal exchange of distorted, emotionally colored information. Legal cases are accompanied by incomplete openness, which contributes to the emergence and spread of rumors. At the same time, rumors act as a specific type of interpersonal communication, during which the plot, to a certain extent reflecting some real or fictional events, becomes the property of a vast diffuse audience (fig.1). All this together actualizes the manifestation of one or another communicative type that contributes to the dissemination of false information, or its deliberate distortion. D. V. Olshansky (2001) believes that rumors always carry false information (Olshansky, 2001). The work with rumors itself is correlated with the technology of fact-checking, since it uses classifications according to the degree of reliability / unreliability of information.

However, since Kazakhstan has widely used oral transmission of knowledge, therefore, scrupulous adherence to details and observance of the truth of the presentation is a distinctive feature of the Kazakh mentality in contrast to the Russian and Western European. In Kazakh culture, the spoken word still has full weight, thanks to which the reliability of information, its identity to the original, is preserved. Due to the specifics of the Kazakh mentality, Kazakh lawyers are actively arguing in professional social networks about the need for emotivity in court (Whether emotions are needed in court. Kazakhstan Legal Forum, (n/d)). The classification of rumors under consideration demonstrates how what is said between people goes into the public sphere, decision-making. influencing Russian

researchers believe that written information is invariably transformed into hearing when retelling (Olshansky, 2001).

This method of working with public consciousness was widely used and is used during the wars, which is clearly seen in the material of the Siberian press during the First World War and the Civil War, the White Cossack uprisings. At this time, the mass media became the conductors of rumors, stirring up the public consciousness.

Accordingly, each type of public communication corresponds to a certain communicative type. Thus, the communicative type "slander" will differ from the communicative type "gossip", despite some similarity of communicative manifestations. The communicative type of "ham" in some features will be similar to the communicative type of "truth-teller".

Such communicative types are often used to create a stir and raise the degree of public sentiment. At the same time, the so-called communicative type of the "leader of public opinion" can be correlated with communicative type of the "expert", however, the leader of public opinion may not always correspond to the competence of the expert, but is an expression of public opinion.

The new fact-checking procedure emerged as an unbiased analysis of the reliability of the facts and events presented in the media discourse (Lelo, 2022; Dubrovskaya, 2017) using artificial intelligence methods and subject assessment. As a rule, the role position of a judge is focused on emotional coldness, therefore, in American linguoculture, attributing emotional traits to a judge is considered a gross insult

(Maroney, 2017). Kazakh and Russian courts may call on the defendant, the prosecutor, the victim, the lawyer, and witnesses to restrain their emotions more harshly than it can be in an American court.

At the same time, calls have been heard more and more recently to consider the role position of a judge as a person involved in judicial discourse with all its inherent human qualities and experiences, recognizing that the absence of emotions also carries a destructive component in the personality structure. Thus, Russian judges directly say that "professional deformation occurs without emotions" (Zhuravleva & Kurskaya Pravda, 2022).

Kazakh lawyers discuss the possibilities of expressing emotions during trials on their forum, noting that in the Russian media space, conflict-causing labels are widespread, unlike in the Kazakh media (Do emotions need to be at trial? Kazakhstan Legal Forum, (n/d)).

The emergence of access to the data arrays of the judicial media discourse, on the one hand, facilitates the work of experts and the interested community, and on the other hand, complicates the work of analysts due to the abundance of disparate data. If we take for example the Kazakh and Russian judicial media courses, then in most cases it is simply impossible to get access to a large number of documents.

The speech and behavioral profile of communicative types in judicial discourse is regulated by judicial ethics, which is consistent with ethno-psycholinguistic norms in the country, they are determined by the degree of stability of traditions in a particular society. In this regard, Kazakhstan demonstrates a course of soft assimilation of national traditions with democratic innovations, illustrating its commitment to the Eurasian path.

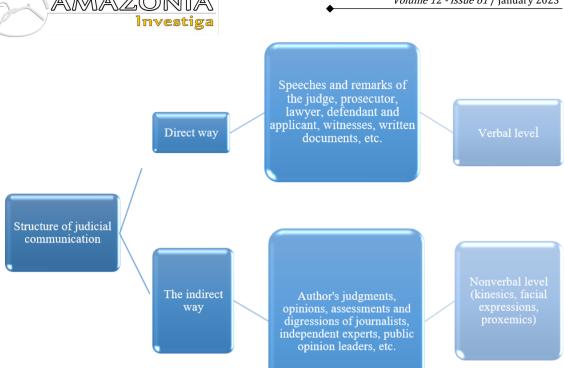
The complexity of the analysis of the judicial media discourse is that, as a rule, the main information targets are thematic fields with a destructive emoticeme of stigmatization. For example: "corruption", "orphanhood", "widowhood", "illness", "murder", "mutilation", "resettlement", "eviction", "special settlement", "deportation", "prisoner", "poverty", "poverty", racial and ethnic labels, etc.

Interpretation of the materials of the judicial media discourse is saturated with contradictory subjective assessments, in connection with which the provision of objectification of data on a particular trial serves as fact-checking (Schuldt, 2021). The appeal to this problem is caused by numerous distortions in socio-political and other discourses that contribute to the promotion of destructive moods in society.

American, Kazakh and Russian ethno-linguistic culture acts as a unique national-cultural community, which is characterized by a certain well-established behavior, manifested, in particular, during communication between its representatives.

From the point of view of structural formality, we can point to the presence of two levels in judicial media communication – direct and indirect (Fig.2).

Proxemics is the science of the communicative space, the human perception of the communicative space and its use to achieve the goal. Certain spatial behavior is used in various types of discourse, but in judicial media communication it has its own specifics, taking into account the protocol-ritual nature of the relationship between the participants of this specific communication, the stages of judicial media communication, speech-behavioral profiles and intentions of communicants.



*Fig.* 2. The internal structure of the judicial media communication (compiled by the author's team. Kussepova et al.).

The lack of access to judicial and procedural information in Russian and Kazakh societies is a legacy of a common historical past. However, the widespread use of digital tools makes it possible to quickly bring information from the courts to target audiences, which contributes to both the information society and its polarization. Court reporters and columnists in Russian and Kazakh societies face a number of problems related to access to judicial information: mainly it is the negative attitude of judges to the presence of journalists at court sessions, the reluctance of judges to provide copies of decisions and sentences for publication. In turn, such behavior of representatives of the judicial and legal system actualizes the features of aggressiveness, harsh

A court report lasts no more than 1-2 minutes, so each word serves as the center of the associative field, appealing to the verbal memory and background knowledge accepted in a particular ethno-socio-culture. The very concept of a journalist is clearly connected with the role positions that representatives of this profession occupy in Russian and Kazakh societies. In total, about 100 associations related to this word were recorded: author, blog, notebook, letters, paper, news, video, questions, lies, gross lies, fantasies, newspaper, gloss, girl, money, dialogue, announcer, Dictaphone, microphone, woman, magazine, journalism, female journalist, angry

and boorish journalist, headline, note, record, salary, stars, celebrity, scandal, publication, publisher, interview, internet, information, camera, channel, kiosk, book, column, computer, correspondent, sheet, gossip, people, material, fashion, man, news, communication, operator, survey, essay, points, paparazzi, transfer, pen, print, print, scribbler, writer, write, letter, politics, truth, press, program, falsification of facts, propaganda, profession, publication, work, radio, blogger, conversation, story, editor, editorial, reportage, investigation, reporter, pen, sensation, word, mass media, mass communication, event, informational occasion, sport, article, court, shooting, text, television, TV, debauchery, TV channel, murder, duck, photo, camera, photographer, photograph, person, read, watch, broadcast.

The communicative type "journalist" is characterized in such frequency phrases as: hot spot, newspaper journalist, investigative journalism, coffee table, outrageous journalist, yellow press, bad journalist, live broadcast, newspaper article, smart journalist, journalism faculty, good journalist, competent journalist. The public's belief in the power of the "fourth power" is reflected in fiction: "The belief or hope that a well-known journalist will be able to stir up public opinion, attract the attention of interested persons, up to the top leadership of the

country, to such a... er... global problem" (Shakhov, 2012). Communicative "stroking" provides adjustment to the internal picture of the recipients' world, subconsciously adjusting to the cognitive-behavioral paradigm of the addressee of mass media discourse. As a rule, the subject of consciousness of the conflictogenic story itself, beginning with the words "In this city/ district/ country/ village/ family / collective...", is a correspondent / eyewitness / blogger who describes the place and time of the outbreak of the conflict as a kind of plot, concretizing or creating the appearance of concretization of the described conflictogenic source of the message as the forerunner of a specific judicial situation. For example: "A resident of Valuyki told the details of the shelling. A local resident told how it was" (Bel.ru, 09/16/2022): "The settlers recalled how frightened hares sat on the islands formed in the middle of the water, and people. with the compassion of Grandfather Mazai, made rafts for them and felled trees, building bridges so that the animals could move "to the mainland"" (Ohotnick, 13.12.2013).

In contrast to journalists, representatives of the judicial system are distinguished by their closeness. As a rule, judges do not contact journalists, refuse to comment on their decisions, do not take the initiative to provide the media with information about how they protect the rights of citizens — information that most contributes to the formation of a positive image of the courts.

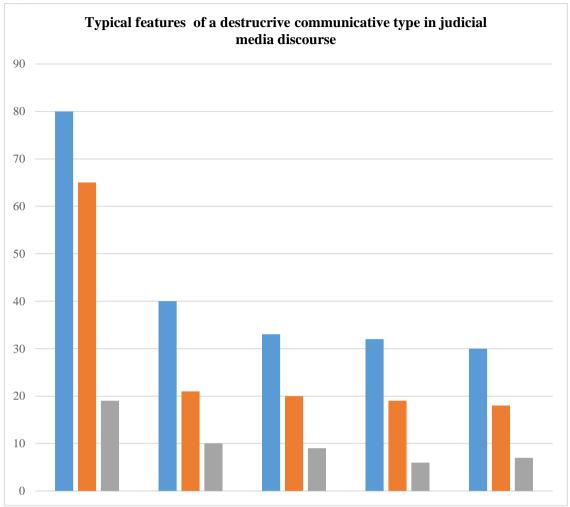
This behavior of judges is due to a high degree of destructiveness, which permeates the entire conceptual space of the judicial and legal media discourse, which has a well-organized field structure. The nuclear concepts of the conceptual space of the judicial media discourse include the emotive concepts "anger", "rage", "hatred", "contempt", "fear", "aggression". This also includes the emotional and behavioral concepts

of "revenge", "jealousy", "black envy", "struggle", "persecution". The near periphery of this space is formed from such emotive concepts as "irritation", "dislike", "resentment", "fear", "domination", i.e. those that are causally related to emotive stimuli of pronounced destructive-criminal behavior. Then there are a couple of prototypical scenarios for the development of "aggressive" emotions. The far periphery is formed from concepts, the content of which is indirectly related to the phenomenon of criminal antisocial behavior with a vivid manifestation of destructiveness.

The communicative types of the criminal are closely related to destructive emotions. These motifs are characterized by plasticity, which allows them to be subjected to a formalized analysis. Conceptualization itself materializes a person's ideas about the criminogenic nature of aggression as a kind of spontaneous force that is difficult to consciously control on the part of a person, and therefore needs social regulation. Verbal conceptualization of destructive criminogenic behavior is conditioned by the iconic somatic fixation of emotions.

The manifestation of the communicative type in situations of judicial and legal media discourse it is connected with the role position of the actor, expressed by the basic goal setting, strategies and speech-behavioral tactics. At the same time, the communicative type of one or another factor in the judicial media discourse is controlled by the dominant emotions of the injured applicant and the accused defendant. The very communicative behavior of the criminal type can be focused on open conflict and destruction (communicative "bully". "boor"). Hidden types criminal communicative behavior uses indirect. prolonged destructive influence of the defendant on the victim (communicative types "domestic tyrant", "jealous", "bribe taker", "envious", "confidence fraudster", etc.).





Greed Fraud Emotional Coldness Obsceneness Sexual promiscuity blue color - Russian language; orange color - English language; gray color - Kazakh language *Fig. 3.* Typical features of a destructive communicative type in judicial media discourse.

Fig. 3 shows typical actions of the criminal communicative type in the representation of native speakers of Russian, English and Kazakh languages in the judicial media discourse. Thus, the ideas of the criminal communicative type in the judicial media discourse of the USA, Kazakhstan and Russia are quite stereotypical. The judicial media discourse reflects the everyday use of words and native speakers' ideas about the criminal communicative type.

## Discussion

We start from the interpretation of judicial discourse proposed by Kuban scientists E. N. Luchinskaya and I. B. Sizonenko, who rightly consider judicial discourse as a kind of legal discourse (Luchinskaya & Sizonenko, 2013). At the same time, the formalization of legal discourse in Russia, the so-called LegalTech, ignores this subtype of legal

discourse, believing that judicial discourse is exclusively a field of legal documents (Tiutiunnik, 2018; Bibas, 2001). It is obvious that judicial discourse and judicial media discourse are not identical, since judicial discourse is understood as an activity taking place in a courtroom.

In this regard, it is impossible to put an equal sign between judicial discourse and judicial media discourse, despite the apparent similarity between these close, but not identical subtypes. It is not by chance that researchers focus their attention on speech strategies and language means of expressing the conflictogenicity of judicial discourse in the courtroom (Zaytseva, 2016). In our opinion, conflictogems as a designation of a conflictogenic provocative meaning in a lexeme deserve separate consideration and standardization for subsequent formalization.

We believe that conflict situations of judicial discourse actualize the corresponding communicative types with vivid demonstrative behavior in order to attract the attention of the target audience and model certain public attitudes (Eliot, 2020). In this connection, we observe a strict selection of language tools when describing situations related to media personalities, opinion leaders, politicians, and government representatives (Okolyshev et al., 2022).

Some Russian scientists believe that a lawyer uses attack strategies at a court hearing (Zaytseva, 2016), which we cannot agree with, since aggressive speech strategies (attacks and accusations) are characteristic of both a lawyer and a prosecutor with maximum polarization. This situation allowed Western scientists to define judicial discourse as a multimodal and complexly organized construct, which also has a number of limitations (Dipika & Kimberly, 2020).

At the same time, despite the implementation of the detailing of speech strategies and tactics in the American judicial discourse (Pelepeychenko, Zatsnyi, & Zaitseva, 2021), we see a lag in the modeling of communicative types in the judicial media discourse. This situation is due, in our opinion, to the fact that the pragmatics of the analysis of the judicial media discourse is focused on linguistic means of manipulating public sentiment, ignoring the very figures of the actors of the judicial media discourse, who are the maximum expression of their role roles.

This issue seems to us far from idle, but especially relevant in the era of digital information warfare, when all recipients of digital content can become jurors (Qin et al., 2022) and the Internet space becomes a judicial platform. Ignoring the role positions set by the court procedure itself and the established ethnopsycholinguistic norms of communication can play a negative role in assessing reliability.

We proceed from psychological theories, thanks to which it is possible to determine the psycholinguistic parameters of the communicative type of a deceiver, provocateur, gossip, liar as a source of false information, in contrast to the style of truth. Based on this, the analysis of the speech behavior of public opinion leaders in the judicial media discourse should be aimed at identifying manipulations and fake news by detecting the linguistic style of news articles in the judicial media discourse (Vorontsov & Potapenko, 2014). This includes

the author's use of words with the establishment of new associative connections between words with the subsequent transformation of lexical meaning (at the lexico-semantic level), the construction of phrases and sentences (at the syntactic level) and extralinguistic connections (at the discursive level) (Karabulatova, 2020). Within the framework of machine learning, such studies analyze the linguistic style of news by calculating the frequencies of each word at the lexicographic level, at the grammar level, the frequency of occurrence of parts of speech is calculated, at the level of syntax and discourse, rhetorical and pragmatic relations.

#### Conclusion

The analysis of the conducted studies of linguistic and cultural communicative types associated with the criminogenic sphere and judicial media discourse allows us to conclude that today the term "communicative type of judicial media discourse" unites numerous types that can be distributed into various groups, which are based on: 1) socio-cultural characteristics and dependence on lifestyle; 2) psychological dominants of character; 3) ethno-nationalcultural and regional specifics; 4) professional characteristics; 5) historical, cultural confessional context, etc. However, a special place is occupied by criminogenic types, which are based on the features of the antisocial communicative behavior of the individual (for example, "boor", "domestic tyrant", "gossip", "bribe taker", "corrupt", "killer", etc.), which makes it possible to distinguish them in a separate group.

The spectrum of nuclear connotations used in the texts of the judicial and legal media discourse covers semantic groups that are heterogeneous in their genesis, whose significance nevertheless has the character of a universal for most ethnic groups. Such concepts with pronounced emotivity include the basic components of the conceptual field "age" (for example, in the dyad "old people and children"), "gender" (for example, emphasis: pregnant women and widows), "health" (for example: "healthy wounded, crippled, disabled"), "social status" "orphan", "widow", (namely: "refugee", "evictee", "migrant", "deserter", "prisoner of war", etc.). The emphasis on certain aspects is immediately set in the very title of the document.

At the macro level, we can trace the external conditions and the results of socio-historical actions of a criminal, illegal nature, when people's behavior depends on ethno-sociocultural



processes, crises of institutions and power structures. Microanalysis allows us to identify the mechanism of interpersonal interaction, the reasons that determine illegal human behavior (motives, motives, values).

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#### Bibliographic references

- Akkurt, V., Korolova, T., & Popova, O. (2021). Persuasion prosody in prosecutor's speech: Ukrainian and English. Amazonia Investiga, 47(47), 125-141. https://doi.org/10.34069/AI/2021.47.11.13
- Apel, K.O. (1998). Towards a Transformation of Philosophy. Marquette Studies in Philosophy. Vol. No 20. Translated by Adey, Glyn; Fisby, David. Milwaukee: Marquette University Press. ISBN 0-87462-619-6
- Barabash, V., Kotelenets, E., Karabulatova, I., Lavrentyeva, M., & Mitina, Y. (2019). The confrontation between the Eastern and Western worldviews in the conceptual space of the information war against Russia: the genesis and evolution of the terminological apparatus. Amazonia Investiga, 8(19), 246-254. Retrieved from https://amazoniainvestiga.info/index.php/amazonia/article/view/226
- Bel.ru (2022). A resident of Valuyki told the details of the shelling., 16 September 2022. https://bel.ru/news/2022-09-16/zhitelnitsa-valuek-rasskazala-podrobnosti-obstrela-1482767 [In Russian]
- Bibas, S. (2001). Judicial Fact-Finding and Sentence Enhancements in a World of Guilty Pleas. The Yale Law Journal, 110(7), 1097–1185. https://doi.org/10.2307/797526
- Blake, A. (2014). Ranking the media from liberal to conservative, based on their audiences. The Washington Post. Oct. 21, URL: https://www.washingtonpost.com/news/the-fix/wp/2014/10/21/lets-rank-the-media-from-liberal-to-conservative-based-on-their-audiences/?noredirect=on&utm\_term=.7fa28 f255834
- Bolotnov, A. V. (2015). Informational field of media language personality and its idiostyle. Media Linguistics, 4(10), 51–59. Available at: https://medialing.ru/informacionnoe-pole-

- medijnoj-yazykovoj-lichnosti-i-ee-idiostil/ (accessed: 07.02.2023). (In Russian)
- Coibion, O., Gorodnichenko, Y., & Kamdar, R. (2018). The Formation of Expectations, Inflation, and the Phillips Curve. Journal of Economic Literature, 56(4), 1447–1491. https://www.jstor.org/stable/26570578
- Chekulai, I., Prokhorova, O., Zhukova, E., Kuchmistyy, V., & Shustov, D. (2021). Characteristics of Linguocultural Type in The English-Language Political Discourse, Man, Society, Communication, 108. European Proceedings of Social and Behavioural Sciences, pp. 85-92. European Publisher. https://doi.org/10.15405/epsbs.2021.05.02.1
- Chomsky, N. (1995). Language and Nature. Mind, 104(413), 1–61. http://www.jstor.org/stable/2254605
- Costello, S. (2010). Hermeneutics and the psychoanalysis of religion. Bern: Peter Lang. pp. 72–77. ISBN 978-3-0343-0124-4.
- Dankova, N. S. (2017). Representation of Judicial Power in the Genres of Russian Print Media. Speech Genres, 1(15), 86–91. DOI: https://doi.org/10.18500/2311-0740-2017-1-15-86-91 (in Russian)
- Decree No. 60. The concept of information policy of the judicial system (Adopted by Resolution of the Council of Judges of the Russian Federation of November 16, 2001) https://base.garant.ru/12124885/
- Dipika, J., & Kimberly, M. (2020) Rhoten Epistemic Injustice and Judicial Discourse on Transgender Rights in India: Uncovering Temporal Pluralism. Journal of Human Values, 26(1), 30-49.
- Dubinina, I. I. (2005). The communicative type of the boss. Axiological linguistics: linguistic and cultural types: collection of scientific works. Volgograd Paradigm, 298-309. https://perviydoc.ru/v33350/аксиологическ ая\_лингвистика\_лингвокультурные\_типа жи [In Russian]
- Dubrovskaya, E.M. (2016). Typology of linguistic and cultural types: the experience of systematization // The World of Science, Culture and Education, No. 2(57). URL: https://cyberleninka.ru/article/n/tipologiyalingvokulturnyh-tipazhey-opyt-sistematizatsii (accessed: 07.02.2023). [In Russian]
- Dubrovskaya, T.V. (2017). Metapragmatics of the administration of justice in the discourse of Russian and English judges. Bulletin of the Peoples' Friendship University of Russia. Series: Linguistics, 21(1), 73-90. DOI: 10.22363/2312-9182-2017-21-1-73-90



- Eliot, L. B. (2020). Legal Sentiment Analysis and Opinion Mining (ALSO): Assimilation Advances in autonomous AI Legal Reasoning. arXiv preprint arXiv:2010.02726. https://arxiv.org/pdf/2010.02726
- Eremeev, M., & Vorontsov, K. (2019). Lexical Quantile-Based Text Complexity Measure. International Conference "Recent Advances in Natural Language Processing", RANLP. DOI: 10.26615/978-954-452-056-4\_031, ID: 2-s 2.0-85076458275, Part of ISBN: 13138502
- Gormley, W. P. (1961). Lawyers Must Be Effective Communicators. American Bar Association Journal, 47(6), 572–575. http://www.jstor.org/stable/25721614
- Gutterman, R.S. (2022). Liable, Naaaht: The Mockumentary: Litigation, Liability and the First Amendment in the works of Sacha Baron Cohen. Harvard Journal of Sports & Entertainment Law, 13, 142 179.
- Habermas, J., Lennox, S., & Lennox, F. (1974). The Public Sphere: An Encyclopedia Article (1964). New German Critique, 3, 49–55. https://doi.org/10.2307/487737
- Ivanova, M.M. (2010). Linguistic and cultural type "Russian entrepreneur". Linguocultural types: signs, characteristics, values: collective monogr. / edited by O.A. Dmitrieva. Volgograd: Paradigm, 4-31. https://uchebilka.ru/kultura/7607/index.html [In Russian]
- Karabulatova, I. (2020). Possibilities of artificial intelligence in assessing the impact of potentially dangerous texts in modern news discourse: problem of statement. International Scientific Forum "Issues of Modern Linguistics and the Study of Foreign Languages in the Era of Artificial Intelligence (dedicated to World Science Day for Peace and Development)" (LLT Forum 2020), 88. DOI
  - https://doi.org/10.1051/shsconf/2020880100
- Karasik, V. I. (2016). Discursology as a direction of communicative linguistics. Actual problems of philology and pedagogical linguistics, 1(21). URL:
  - https://cyberleninka.ru/article/n/diskursologiya-kak-napravlenie-kommunikativnoy-lingvistiki (accessed: 08.02.2023). [In Russian]
- Karasik, V.I. (2005). The linguistic and cultural type of "Russian intellectual". Axiological linguistics: problems of communicative behavior: collection of scientific works. Volgograd, 25-61. https://perviydoc.ru/v33350/аксиологическ ая\_лингвистика\_лингвокультурные\_типа жи [In Russian]

- Kazakhstan Legal Forum (n/d). Whether emotions are needed at the trial., electronic resource:
  - https://forum.zakon.kz/topic/126292нужны-ли-эмоции-на-судебном-процессе/ [In Russian]
- Kvartovkina, Yu.O. (2005). The linguistic and cultural type of "Russian nobleman". Axiological linguistics: linguocultural types: collection of scientific tr. Volgograd: Paradigm, 128-135.
  - https://perviydoc.ru/v33350/аксиологическ ая\_лингвистика\_лингвокультурные\_типа жи [In Russian]
- Klimenko, E.O. (2014). Image and communicative culture of the manager. Language and culture (Novosibirsk), 14. URL: https://cyberleninka.ru/article/n/imidzh-i-kommunikativnaya-kultura-menedzhera [In Russian]
- Kobzhasarova, J. K. (2012). Culture of communication of the Kazakh people. Modern Higher School: innovative aspect, 4. URL: https://cyberleninka.ru/article/n/kultura-obscheniya-kazahskogo-naroda [In Russian]
- Lelo, T. (2022) When a Journalistic Truth-Seeking Tradition Thrives: Examining the Rise of the Brazilian Fact-Checking Movement. Journalism Practice. DOI: https://doi.org/10.1080/17512 786.2022.2088603
- Lincoln, D. (2020). "Facebook's Response to Its Democratic Discontents: Quality Initiatives, Ideology and Education's Role." The Digital Age and Its Discontents: Critical Reflections in Education, edited by Matteo Stocchetti, 69–94. Helsinki University Press, https://doi.org/10.2307/j.ctv16c9hdw.8.
- Lipchanskaya, M. A., & Privalov, S. A. (2021). Social media in the context of Russian and German Constitutional Law. Izv. Saratov Univ., Economics. Management. Law, 21(1), 73-82. DOI: https://doi.org/10.18500/1994-2540-2021-21-1-73-82 [In Russian]
- Luchinskaya, E.N., & Sizonenko, I.B. (2013). Performativity of judicial discourse. Bulletin of the Adygea State University. Series 2. Philology and Art History, 1 (114), 142-146. http://vestnik.adygnet.ru/files/2013.2/2526/luchinskaya2013\_2.pdf [In Russian]
- Lutovinova, O.V. (2008). About linguistic and cultural types of virtual discourse. Bulletin of Chelyabinsk State University, 37, 58-63. https://cyberleninka.ru/article/n/o-lingvokulturnyh-tipazhah-virtualnogo-diskursa [In Russian]
- McGilvray, J. A. (1979). [Review of Reflections on Language, by N. Chomsky]. Canadian Journal





- of Philosophy, 9(3), 519–544. http://www.jstor.org/stable/40231112
- Maroney, T. A. (2017). Emotion and the Discourse of Judging. Law Explorer, 12. https://lawexplores.com/emotion-and-the-discourse-of-judging/
- Mikhailova, A.G. (2005). Linguocultural type "English businessman". Axiological linguistics: communicative types. Volgograd: Paradigm, 136-155. https://perviydoc.ru/v33350/аксиологическ ая\_лингвистика\_лингвокультурные\_типа жи [In Russian]
- Mishurova, Ya. A. (2022). Mockumentary: features, role and significance of genre in cinema and modern media. A young scientist, 33 (428), 151-153. URL: https://moluch.ru/archive/428/94481/
- Mishchenko, M.V. (2005). Linguocultural type "American cowboy". Axiological linguistics: linguocultural types: collection of scientific tr. / edited by V.I. Karasik. Volgograd: Paradigm, 166-173.https://perviydoc.ru/v33350/аксиологич еская\_лингвистика\_лингвокультурные\_ти пажи [In Russian]
- Ohotnick, F. (13.12.2013). Russian Tragedy: Mologa, LJ. Fedorohotnick. https://fedorohotnick.livejournal.com/10874 8.html [In Russian]
- Okolyshev, D. A., Karabulatova, I. S., Lagutkina, M. D., Zavarzina, G. A., & Savchuk, I. P. (2022). Linguistic patterns in the lexical-semantic subsystem of new public administration: typology and features. Amazonia Investiga, 11(57), 133-144. https://doi.org/10.34069/AI/2022.57.09.14
- Olshansky, D. V. (2001). Psychology of the Masses. St. Petersburg: Peter. https://bookap.info/sociopsy/olshanskiy\_psi hologiya\_mass/gl139.shtm [In Russian]
- Order No. 194. The concept of further informatization of the judicial system of the Republic of Kazakhstan (Chairman of the Supreme Court of the Republic of Kazakhstan dated June 4, 2012). https://sud.kz/rus/content/koncepciya
- Pelepeychenko, L., Zatsnyi, Y., & Zaitseva, M. (2021). Cognitive dissonance as factor of influence in American courtroom discourse. Linguistics and Culture Review, 5(S3), 173-186.
  - https://doi.org/10.21744/lingcure.v5nS3.149
- Qin, M., Xiao, D., Yuan, L., & Karabulatova, I. (2022). Emotive Tonality of the "Youth–Old Age" Dichotomy in Russian and Chinese Media Discourses: The Stage of Psychosemantic Expertise. Journal of

- Psycholinguistic Research, 2022, https://doi.org/10.1007/s10936-022-09899-z
- Sander, B. (2022). International law in the age of digital media: Reflections on history, the neoliberal communication sphere, and race, London Review of International Law, 10(2), 295–305. https://doi.org/10.1093/lril/lrac009
- Senyk, S., Churpita, H., Borovska, I., Kucher, T., & Petrovskyi, A. (2022). The problems of defining the legal nature of the court judgement. Amazonia Investiga, 11(56), 48-
- 55. https://doi.org/10.34069/AI/2022.56.08.5 Shakhov, M.A. (2012). General Death. Moscow: Labirint, https://www.labirint.ru/books/368217/?p=20 74&pin=1491883172827466987
- Schuldt, L. (2021). Official Truths in a War on Fake News: Governmental Fact-Checking in Malaysia, Singapore, and Thailand. Journal of Current Southeast Asian Affairs, 40(2), 340–
  - 371. https://doi.org/10.1177/1868103421100 8908
- Sinitsyn, M. V., Karabulatova, I. S., Kattsina, T. A., Sautieva, F. B., & Karimova, K. K. (2022). Conflictogenicity of the topic of Armenian and Greek refugees in the media discourse of the World War I period at the pre-revolutionary stage. Questions of History, 10(2), pp. 88-99 [In Russian]
- Stepanyuk, R., Shcherbakovskyi, M., Kikinchuk, V., Petrova, I., & Babakin, V. (2022). Problems of investigation of medical crimes in Ukraine. Amazonia Investiga, 11(57), 39-47. https://doi.org/10.34069/AI/2022.57.09.4
- Stratton, K. B. (2017). Copp, Paul; Wedemeyer, Christian K. (eds.). "Narrating Violence, Narrating Self: Exodus and Collective Identity in Early Rabbinic Literature". History of Religions. University of Chicago Press for the University of Chicago Divinity School, 57(1), 68–92. doi:10.1086/692318
- Summers, R. S. (1999). Formal Legal Truth and Substantive Truth in Judicial Fact-Finding: Their Justified Divergence in Some Particular Cases. Law and Philosophy, 18(5), 497–511. http://www.jstor.org/stable/3505142
- Tiutiunnik, R. (2018). LegalTech: Is there any threat to compliance? We speak Legal English, German, French, Spanish.... Students' Annual Conference. Moscow: RUDN-university, 185-186. https://elibrary.ru/item.asp?id=36911720



- Volkova, Ya.A. (2010). The linguistic and cultural type of "evil mother-in-law". Linguocultural types: signs, characteristics, values: a collective monograph, edited by O.A. Dmitrieva. Volgograd: Paradigm, 177-183.
- https://uchebilka.ru/kultura/7607/index.html
  Vorontsov, K.V., Potapenko, A.A. (2014).
  Tutorial on Probabilistic Topic Modeling:
  Additive Regularization for Stochastic
  Matrix Factorization. AIST'2014, Analysis of
  Images, Social networks and Texts. Springer
  International Publishing Switzerland, 2014.
  Communications in Computer and
  Information Science (CCIS), 43, 29–46.
  http://www.machinelearning.ru/wiki/images/
  1/1f/voron14aist.pdf
- Yelina, E.A. (2005). The old Russian army and its types. Axiological linguistics: linguistic and cultural types. Volgograd, 106-128. https://perviydoc.ru/v33350/аксиологическ

- ая\_лингвистика\_лингвокультурные\_типа жи [In Russian]
- Zaytseva, M. O. (2016). Judicial discourse: speech strategies and tactics, linguistic means of expressing conflict. The First Independent Scientific Bulletin, 6, 74-78 https://dspace.nlu.edu.ua/handle/123456789/13098?mode=full [In Russian]
- Zheltukhina, M.R. (2010). The linguistic and cultural type of "politician". Linguocultural types: signs, characteristics, values: a collective monograph, edited by O.A. Dmitrieva. Volgograd: Paradigm, 143-155.
  - https://uchebilka.ru/kultura/7607/index.html [In Russian]
- Zhuravleva, A. (2022). Without emotions, professional deformation occurs. Kurskaya Pravda. https://kpravda.ru/2022/12/01/bezemoczij-nastupaet-professionalnaya-deformacziya/ [In Russian]



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## Initiatives and the process of the development of regional students' cross-cultural communication skills

#### Инициативы и процесс развития навыков межкультурного общения у региональных студентов

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Written by:

Zhukova Tatyana Anatolyevna<sup>65</sup>
https://orcid.org/0000-0002-2184-4814
Bogoslovsky Vladimir Ivanovich<sup>66</sup>
https://orcid.org/0000-0001-7071-244X
Ivashkina Olesya Anatolyevna<sup>67</sup>
https://orcid.org/0000-0002-0229-444X
Kozlovtseva Nina Aleksandrovna<sup>68</sup>
https://orcid.org/0000-0002-2323-0752
Khalevina Svetlana Nikolayevna<sup>69</sup>
https://orcid.org/0000-0002-7458-0015

#### **Abstract**

The article states the problem of preparing students for cross-cultural communication by some means of initiatives. The authors provide a detailed series of definitions and determine the necessity to consider regional specificities during development of initiatives aimed at the students' cross-cultural communication skills. Thus the following main prospects outline the design of the initiatives: the examination of the quantitative and qualitative analysis, which will enable to identify the students' preparedness for the project; the review of research works and analytical data reflecting the role and importance of initiatives; the analysis of the mechanisms for initiatives' implementation, one of which is a professional task. The main results are the determination of the value foundations of the mechanisms for preparation, justification for the selection of the region taken for comparison and analysis, the experience of which is adapted to the conditions of the local region, consolidation

#### Аннотация

В статье обозначена проблема подготовки межкультурному студентов общению К посредством методов инициатив. Авторами представлено описание основных дефиниций данного исследования, определена учета необходимость региональных особенностей при разработке инициатив, направленных на развитие навыков межкультурного общения студентов. Для реализации метода инициатив необходимо: проведение количественного и качественного анализа, который позволит определить студентов проектной готовность К деятельности; обзор исследовательских работ и аналитических данных, отражающих роль и важность реализации метода инициатив; анализ процесса реализации метода инициатив - одна из форм реализации метода инициатив профессиональная задача. Цель исследования разработка и в будущем реализация метода развитие направленного инициатив, на межкультурной коммуникации. Основные

<sup>&</sup>lt;sup>69</sup> PhD in Philology, Associate Professor Department of Foreign Languages and intercultural communication, Financial University under the Government of the Russian Federation Moscow, Russia.



<sup>&</sup>lt;sup>65</sup> PhD in Education, Associate Professor, Department of Foreign Languages and intercultural communication, Financial University under the Government of the Russian Federation Moscow, Russia.

<sup>66</sup> Dr. of Pedagogy, Professor, Department of digital education, Herzen State Pedagogical University, St. Petersburg, Russia.

<sup>&</sup>lt;sup>67</sup> Senior English language teacher Department of Foreign Languages and intercultural communication, Financial University under the Government of the Russian Federation Moscow, Russia.

<sup>&</sup>lt;sup>68</sup> PhD in Culturology, Senior English language teacher, Department of Foreign Languages and intercultural communication, Financial University under the Government of the Russian Federation Moscow, Russia.

of the main areas of students' cross-cultural training implemented within the project framework, and the design of a predictive model of the initiative. Systematic and structural-functional approaches are used to fulfill the goal set (to expand the right understanding of the prospects for the design of initiatives during the development of cross-cultural communication).

**Keywords.** initiatives in education, improvement initiatives, educational projects, cross-cultural communication, regionalization, comparative analysis.

#### Introduction

We view it essential within this research to highlight the regional nature of process organization. This is determined primarily by the existing in Russia principle of decentralization in management, which gives each region the freedom and openness to its own innovations, findings, and various initiatives. However, common problems on all of the lands of the country create the need for convergence of regional educational institutions. At the same time, the concern is relevant due to various ethnocultural processes occurring in regions. It is crucial to consider those processes and apply different forms of organizing education to develop and further improve cross-cultural communication.

Theoretical analysis revealed the following areas of the subject matter under research. *The first* area is the study of cross-cultural communication and the specifics of its implementation at the regional level (Aniskin et al., 2011).

The second area is the investigations devoted to the peculiarities of application of initiatives with the purpose of developing cross-cultural communication considering regional specifics (Kozareva, Radionova, and others 2004).

The third area is the works on comparative study and their role in developing initiatives to improve cross-cultural communication (Kamenskaya et al., 2019).

результаты настоящего исследования определение ценностных основ механизмов подготовки студентов, важность обоснования выбора региона, взятого для сравнения и анализа, опыт которого адаптирован к условиям рассматриваемого региона, интеграция основных направлений межкультурного обучения студентов, реализуемых в рамках рамки проекта и разработка прогностической модели инициативы. Системный структурно-И функциональный подходы используются для достижения поставленной цели (расширить понимание перспектив проектирования инициатив в ходе развития межкультурной коммуникации).

**Ключевые слова:** инициативы в области образования, инициативы по улучшению, образовательные проекты, межкультурная коммуникация, регионализация, сравнительный анализ.

#### **Literature Review**

Whenever we speak about cultural interaction, we mean contacts between large groups of people (Smirnov, 2002). In present conditions, the development of cultural links occurs in such fields of human activity as tourism, sports, personal contacts, and many other. Besides, the social, political, and economic changes that have taken place in the world in recent years have resulted in large-scale migration of people, their resettlement, blending, but also conflicts. As a result of these processes, more and more people have to overcome cultural barriers which previously separated them. They not only interact with other cultures but have to integrate into them. Thus, in reality, the interaction of cultures occurs precisely through contacts between individuals. These contacts represent the process of cross-cultural communication.

It is a well-known fact that cross-cultural communication occurs if the sender and the receiver of a message belong to different cultures if the communication participants realize each other cultural differences (Novikova, 2007). In fact, cross-cultural communication always means interpersonal communication in a specific context when a cultural difference is detected between the participants. It may cause many problems due to differences in expectations, prejudice and stereotypes that are natural for each person and are obviously different in different cultures. Cross-cultural features can be viewed as differences in verbal and non-verbal codes in a specific communication context. Moreover, each



member of cross-cultural communication possesses the system of rules enabling to code and decode the incoming and outgoing messages.

It is evident that cross-cultural communication can be established on both macro and micro levels (Kurylo, 2019). The regional level and the process of preparing students for cross-cultural communication with regional specificity are of particular interest within this study. Recent frequent use of such phrases as «regions», «regional problems», «regional policy», and many others give the impression that regional issues are of high priority in both real life and the public opinion of the Russians. This process has an equitable basis. Regionalization as one of the strategic directions of modern politics is largely determined by the federal structure of the Russian State.

Hyperunification and overstandartization were being implemented for decades in the former USSR and education in regions ceased to be the sphere of independent creativity for both administrative and teaching personnel. The intensification of the regional issue with selfidentity nowadays is a natural response to these processes.

Regionalization of education is one of the principles of global education determined by modern trends in the socio-cultural development of a society, the recognition of the uniqueness of national and regional variants of cultures, their unity, and integrity. However, several obstacles and difficulties arise in the development process of the regionalization of education. They are low levels of regional awareness of education necessity among the population; preparedness and ability of the region to act as education stakeholder; development of a philosophical, methodological, and methodical foundation for integration and differentiation between federal and regional education components.

The current regional policy in the field of higher pedagogical education is designed in such a way as to, firstly, conform to the global trends of globalization and ensure the adjustment of the existing ones and the identification of innovative cultural aims and tasks of education in order to preserve the national culture and sustain the cultures of integrated people, taking into account the ethnocultural peculiarities of the regions.

Secondly, to ensure the preservation of a unified all-nation educational environment, to expand integrational ties between various educational regional institutions in order to intensify the

teachers' work and find new approaches to changing the teachers' training. In other words, to increase the efficiency of regional educational systems and maintain the quality of education.

As researchers note, the necessity to manage regionalization objectively follows from the social nature of people's lives. In current conditions, the problem of management improvement becomes of particular relevance. It is associated with a change in relations within society both vertically and horizontally. In that connection, the category "management" itself defines new ways of interaction between representatives of different regions, establishing subject-subject relations.

One possible form of organizing regionalization is the initiative. We will concentrate on the analysis of initiatives. An initiative is a form of a research project. It includes research and developments to solve urgent theoretical and practical problems of social and cultural Research projects importance. present scientifically based solutions to problems of the particular region under study. Initiatives are projects provided by an educational institution or land. They contribute to the increase of openness and interaction. Their implementation provides free access to comprehensible information about the education institution activity, encourages involvement into work reference groups, public organizations, and unions (Dyuzhakova, 2022).

Some researchers consider initiatives as follows: a global, regional problem to be solved by the project; a particular task within the problem to be solved by the project; methods and approaches. as well as a general scenario proposed for the entire period of work; expected scientific results (a detailed description with an estimate of the degree of originality); the current state of research in the area and comparison of the forecast results on the national and federal levels; existing groundwork concerning the project offered; the results obtained earlier (with an assessment of the degree of originality); methods developed (with an estimation of the degree of novelty); a list of relevant publications which most relate to the project offered; an inventory and characteristics of the project support available (Nieto et al., 2008).

The authors of the current paper will agree with those researchers who point out that an «initiative is the achievement of a specific new goal within a time frame and with the use of limited resources. This goal demands approaches regarding its achievement and certain steps to be followed. The steps include a project team, management (how to ensure the implementation of the project considering quality requirements», expenses and deadlines), an estimate of the results obtained. They will undoubtedly make it possible to reassess the content, existing conditions, and methods of cross-cultural communication improvement. Besides, assess the advancement of secondary operations influencing the developing process. Also, analyze crisis phenomena, transformation, and the effectiveness of the experience borrowed and used in educational practice. Moreover, it will allow conditions for adaptation and management of the open, nonlinear selforganizing systems to update these practices.

#### Methods

The purpose of this study is to identify the prospects for the design of initiatives in developing cross-cultural communication.

In this article, we appeal to a system approach, which allows us to first study in detail the existing practices of preparing students for crosscultural communication separately, then to analyze and compare them with each other's, and finally, to combine them into a holistic system. The performed research with the system approach will make it possible to identify the structural elements of the components taken for consideration and determine functional dependencies between these elements. In this regard, structural and functional approaches were used for this study. Since the function is established as a result of the interaction between the regional education system and the higher education system of the Russian Federation and expresses its involvement in the formation and functioning of the system components. It mirrors the value content of these components and, consequently, it reflects the integrity and differences during the process of the problem consideration by researchers from different regions. Thus, the function reflects the regions' choices effect, which reveals the features of the development of cross-cultural communication through initiatives with the account of the regional specifics.

The authors use the review literature and analyze the literature on the problem of the current research. Moreover, they refer to literature regarding the specificities of the initiatives in a real teaching practice. The following review of literature points to some of the main critical aspects of the further prospects of the multicultural initiative's development. This

review has been helpful in structuring the study and may serve as the first step towards the solution of the problem of the paper. The conceptual framework included phases identifies obstacles to the instruction for the development of the initiatives in teaching practice.

#### Results

The areas considered in this study as prospects for the design of initiatives in developing crosscultural communication of regional students seem to bear importance which requires further analysis.

Firstly, it is an examination of quantitative and qualitative analysis, which will enable us to identify the level of students' preparedness for initiatives. These are primarily such methods as interviewing (free interview, semi-standardized and standardized interviews), questionnaires, participant observation, group conversation, focus group, expert assessment). A combination of methods is of equal importance as it provides the possibility for an unpretentious understanding of educational reality.

A principal procedure of collecting information in this regard is working with a focus group, which should be viewed as a research method of (semi-standardized) interviews held in the form of a group discussion and focused on obtaining information from its participants about their attitude to a particular problem and the way they act in a specific situation. Concerning the problem under study, the people participating in the work of a focus group must be homogeneous. As a rule, the focus group is small and consists of not more than six to ten participants. That enables to carry out data collection rather quickly.

The main stages of the preparation include determining the place and time of a focus group, providing necessary technical equipment, choosing criteria for the selection of participants, selecting and inviting the participants, preparing the scenario for the focus groups, selecting and training a moderator, selecting methodological techniques depending on the preplanned level of discussion of the information to be obtained, preparing the material required for the specific techniques, providing recording of the process.

It is important to note that a focus group is not synonymous with group interviewing, during which the researcher also asks the whole group a series of questions, but the participants answer them individually. During group interviews, participants are encouraged to discuss and study



the issue among themselves, while the researcher uses these discussions as information. The effectiveness of the method is largely determined by how much the conditions in the discussions are close to the conditions of everyday communication between people, how appealing these conditions are to the participants, and to what extent they facilitate natural behavior during group discussion.

A distinctive feature of focus groups compared to other survey methods is that their participants can spontaneously express their emotions during the discussion making it livelier and more attractive. Besides, they provide essential additional information. Furthermore, compared to an individual interview, the advantage of a focus group interview lies in the fact that every participant expressing their opinion, judgments, and arguments stimulates the mental activity of the others. That allows having a broader and more thorough consideration of the problem under study.

Focus groups can consist of target group members and other people included by the researchers, as they may possess some essential information. It could be representatives of the professional teaching community such as school principals, members of parents' associations, young teachers, and others. At the same time, experts in assessing professional pedagogical activity can be participants of one of the target groups of the focus group discussion. In this regard, the specifics of using expert assessment should be considered.

Expert assessment is a method of organizing the work with experts and processing experts' opinions. These opinions are usually expressed partly in a quantitative and partly in qualitative form. To reach a decision by means of expert assessment, a working group is created which organizes the experts' work on behalf of the decision-maker. The experts comprise an expert commission making the expertise examination. Expertise examination as a research method is based primarily on the competence and experience of experts. During expertise, several techniques are used. Such techniques as comparisons, ranking, identification of the progress of specific processes help obtain the information necessary for the system analysis.

All the information received from various resources during the expertise examination is generalized and comprehended by the group of experts who also define characteristics and

develop the models. The performed analysis is used to develop the recommendations.

According to the range of experts, the expertise can be:

- a group one (a group of experts). The group assessment is more reliable since it ensures provided credibility maximum competent specialists are selected;
- a collective one. It involves cooperative assessment made by a group of specialists and provides multidimensional thinking and consistent perception of several areas within the framework of the system under consideration. A new, unusual viewpoint on the phenomena under analysis allows the collective expertise to detect concealed processes since certain phenomena appear to be in a wider knowledge field;
- individual one (an expert). examination of a specific area is carried out by an individual specialist in accordance with the existing standards or particularly developed criteria;
- a reflective one (self-examination).

Secondly, this is the study of research sources and original analytical materials, which reflect the role and significance of initiatives:

- documents on the development of higher professional education including higher pedagogical education in Russia and abroad. These consist of programs, projects, and studies of the Council of Europe, «The Bologna Process: European and National Qualifications Frameworks»; «Ouality assurance in education: Glossary», Federal laws in Education;
- regulatory documents concerning various aspects of vocational training at a university: state educational Federal standards including all amendments: educational programs of bachelors;
- materials reflecting the needs and changes of educational practice: experimental work, competitive research made by teachers, research and creative work made by students of pedagogical higher education institutions; the results of sociological research: information and teaching materials programs including educational curricula of regional universities («Guide to the modules at the university», «Comments on academic disciplines at the university»). The sources for that information can be specialized electronic Russian and foreign

databases (publicly available on the Internet), specialized magazines, newspapers, official educational structures, Ministries, information from external consultants, experts, analysts from different countries and regions, and other.

 publications of national and foreign research work devoted to the problems of improving cross-cultural communication of university students: collections of scientific papers, doctoral studies, abstracts of dissertations, teaching materials.

Thirdly, it is an analysis of the mechanisms for the implementation of initiatives, one of which is a professional task. The examples of the most significant professional tasks used as an integral component of initiatives to develop crosscultural communication include:

- seeing oneself in the process of crosscultural communication – to be able to determine the motivation and preparedness to interact with representatives of other cultures and build tolerant relations with them:
- establishing interaction with the other participants of cross-cultural communication;
- designing and implementing self-education, improving own analytical and synthetic skills, which are the basis for the differentiation and integration of the knowledge about the characteristics of other cultures (socio-cultural, professional, and other.)

#### Discussion

Unfortunately, little attention is paid in the regional higher professional education to both the «cross-cultural content» and the regional aspect. Although, the latter is widely recognized. Moreover, we want to highlight that, despite a large number of studies showing the importance of the problem, the recent trend to study the elements of culture based on the results of direct comparison of formal aspects, such as statements or actions, remains and has led to the reinforcement of stereotypes (Zhukova & Shrenk 2016). In this regard, an increasing number of studies carried out by numerous scientists have recently emphasized the necessity to borrow the experience of various regions and countries solving similar issues (Zair-Bek, 2017).

In this matter, we believe that comparative studies and the stages of their organization should play an important role. It is known that comparative studies enable to overcome the traditional methodology contradictions of comparative pedagogy, which are the following:

- on the one hand, the analysis of the educational systems of various countries is made through strict differentiation (separation) of research objects and subjects, resulting in a lack of understanding the necessary correlation between general tendencies of education development and the development of education in individual countries;
- > on the other hand, consideration of the general trends in the development of education in the world does not allow us to fully present the specifics of the current development uniqueness of each national education system.

The general purpose of the comparative analysis of the education systems in different countries is to give an objective assessment of their development, identify the development trends and the best precedents through comparative studies.

Improvement of cross-country analysis enables to evolve and modify national practices of preparing students. Foreign approaches in education, which are based on the principles of openness, non-linearity, and social interaction (Kokarevich, & Sizova, 2015), can be applied. Students should understand the importance of continuous and lifelong learning. These tasks are not possible to achieve only by correcting the existing national practices of students' training. A significant transformation is necessary utilizing international experience).

The analysis of how researchers view the essence of certain phases of the process shows that the organization of comparative pedagogical research is based on an inductive approach, which implies that the inferences conclusions are drawn by going «from specific to general». It is the use of the inductive approach that can serve as the basis for choosing the following phases for the research: the first phase is problem-oriented. «It includes a description and statement of the characteristics of the subject of the research, thereby turning it into an object of a study»; the second phase is critical» (Zhukova, Bogoslovskiy and Klimova 2022). It contains a discussion and criticism of the presented and compared knowledge obtained empirically; the third phase is constructivelyoriented. It is forecasting and designing new



models, approaches, and other, considering the characteristics of the region and the adoption of the principle of regionalization as one of the leading in modern education.

#### Phase 1 - defining the value basics of the mechanisms for preparing students for crosscultural communication.

The implementation of higher education reforms is characterized by global and local changes in education. Among the specific features is fundamental research on the priorities and values of education, manifested in the activation of regional ethnocultural and ethnopolitical movements. They, in return, are stimulated by the processes of globalization and integration (Wu, & Havens, 2005). The close attention to local differences, the importance of the formation of cultural identity, the growing interest in the traditions of ancient times have determined the demand to form a single but diverse regionaloriented network that requires maximum consideration of ethnocultural characteristics in the region. At the same time, it is obvious that «the best practice is not an absolute and final decision, the implementation of which ensures the improvement of the work of a higher education institution; rather, «the best practice» means finding the best approach in a given situation, since institutions or individual organizational programs are very different in their structure and scope» (Nieto et al., 2008). Although modern education is based on the adopted competency-based approach, purpose of which is the focus on the freedom of choice for a student, the openness of education, the new quality of education, in general, and the mechanisms for the development of crosscultural communication, in particular.

#### Phase 2 – justifying the choice of the region selected for comparison and analysis. The experience of the region taken for comparison is adapted to the conditions of the region of application.

For a comparative study, it is also essential to justify the choice of the higher education institution. It is particularly necessary to study those universities that have had many years of positive experience in preparing students for cross-cultural communication, have a similar activity area (training bachelors and masters of education), and have a regional status. Consequently, the partnership between regional educational institutions is vital. The result of such partnership would be natural conditions for studying the cross-cultural communication development mechanisms. Another reason for choosing a specific regional university may be the access to information about how education is developing there (Zhukova et al., 2022). The main task of this stage is the search for the most successful cases.

A precedent is an option of the system being modeled (part of its functionality) due to which an individual can obtain a specific, measurable, and desired result. It corresponds to a particular component of the system, defines one of the use cases, and describes a typical way in which an individual interacts with that system. Use cases are usually employed to specify the external requirements for the system, taking into account the influence of sociocultural factors.

Some foreign researchers consider a precedent (Eng. Case) as a specification of the sequences of actions (variants of sequences and invalid sequences) that a system, subsystem, or class can perform when interacting with external actors. While the precedent describes some integral fragment of the system and the interaction of the system with the actors, the case describes an individual incident. In this process, the main issue is to establish the relationship between these concepts. As it is known, the research strategy of a "case" is defined as an empirical study of an individual incident. A "case" refers to methods of "qualitative research", which means any type of research when obtaining results is not achieved by quantifying and processing data using statistics.

The choice of the research method of precedents (Case-based Reasoning) allows, in understanding, to solve a new, unknown problem by using or adapting the solution of an already known problem. Thus, employing already accumulated experience in solving similar problems. Whereas, the case itself is a description of a specific issue (Ziegele, 2006). The current understanding of the precedent method enables to determine the possibility of using the accumulated experience repeatedly; to reduce the time spent on the search for a solution; to avoid re-obtaining an invalid solution. As negative features that define the boundaries of the precedent, the study indicates the following: it is problematic to determine the criteria for comparison; the method is applicable only in regions where the principle of regularity is employed and the types of problems are repeated; insufficient level of generalization of the precedent under the study.

In further research, a German university will be taken as a precedent.

Firstly, because the current system of university education in Germany has significantly influenced the development of higher education in various countries of the world. For more than two centuries, the Humboldt university model has been a prototype for universities in Europe and the world. The model of an ideal university in Germany, developed by W. Humboldt and later implemented, expanded the concept of the university with the following ideas: universities have become an area for scientific research; systematic lectures were replaced by seminars; serious attention was paid to the study of languages; democratic approach educational scientific and process was developed.

Secondly, it is no less important to consider for comparison the fact that in 1998 "a level structure of instruction was introduced by law in Germany", which provided the introduction of new bachelor's and master's qualifications. As a result, the Russian and German universities have been solving several common tasks related to the integration of the Bologna reforms into the internal university processes.

Phase 3 – summarizing the main programs of cross-cultural communication training of students implemented within the framework of initiatives, carried out from the perspective of general, specific, and private features.

The authors of this study believe that the model used for students' training is of primary importance. The model of adaptive behavior and the model of professional development are of particular attention. The main goal of the adaptive behavior model is to form the skills of a person to fit in the surrounding reality. Whereas the main emphasis in the model of professional development is on shaping the ability to transcend everyday routine; see, realize and evaluate various problems, constructively resolve them following own value system, consider any difficulty as an opportunity for further development. While the adaptive model is focused on the instant response to external changes, the professional development model focuses on the anticipation and consideration of future changes in training.

According to philosophy, any object unites both individual features as of a unique identity and general features as the governing law. The combination of the general and the individual

composes the specific. While the individual is the form of existence of the general in reality, the specific is the general implemented in the individual. These categories form in the process of understanding the world. Each object appears to a person as something individual. In the course of cognitive activity, several objects discover to have recurrent features, which allow them to be combined into «classes», thus determining the features:

- general ones. They reflect national trends in the development of higher education which are influencing the development of cross-cultural communication among students (for example, focus on rapidly changing ethnocultural processes in the regions; implementation of sustainable development in the field of education; ensuring close cooperation with the regions);
- specific ones. They are of regional nature in a particular regional higher education institution under study (ensuring cooperation with various educational and social organizations, identifying development initiatives in terms of ideas for the development of cross-cultural communication);
- individual ones. They reflect individual characteristics of students (designing an "individual educational route" through the choice of educational programs and implementation of humanitarian learning technologies; providing scientific and research, administrative and informative activity in order to develop cross-cultural communication skills).

### Phase 4 – designing a predictive model of the initiative.

It is known, that modeling is one of the most effective system tools of strategic management. In the field of education, this method is aimed at creating the most adequate, detailed vision of the future object, system, or process, from which all other components of the change strategy will be developed. In the study, we talk about the significance of the predicted changes that allow us to forecast the course of possible transformation due to the strengthening of ethnocultural processes in the region and determining specifics education the of development and, accordingly, the teacher training.

Modeling of the results is part of a whole analytical complex that makes it possible not only to carry out a promising examination of





educational outcomes but also to correct the practical process of their obtaining. In doing so it is necessary to focus on innovation and creativity. Continuity of already existing in the national science pedagogical theories, as well as the logic of stage design, should be observed in building a modeling theory.

A predictive model is a forecast model, the study of which allows one to obtain information about possible states of an object in the future and (or) ways to achieve these states. When building and evaluating a predictive model, it is impossible to carry out a direct check of the conformity of the model with the original version since this check must relate to the future states of the object. At the moment, the object itself either does not exist (the projected object), or it exists, but it is not known what changes it may have experienced by a given moment (Vargas, 2000).

Obviously, the predictive model must meet the following requirements: be complete, adaptable, and dynamic, provide the ability to include a sufficiently wide range of amendments, supplements so that a consistent advance to the model is possible; be abstract enough to allow a large number of variables to be used; comply with the conditions limiting the time for problem solving; ensure the receipt of useful information about the object in term of the assigned research task (Yarovoi, 2007).

The priority types of initiatives should include the following:

- «Cooperation» which involves interethnic cooperation within multinational conglomerates (designing initiatives the purpose of which is to find ways of enhancing interaction between regions).
- «Ideas» to increase vibrancy and creativity in various fields of knowledge (initiatives related to the search for ways to develop education in a multicultural society).
- «Personnel» regarding training, mobility and increase in the quantitative potential of researchers (initiatives, the purpose of which is to find ways to improve teachers training).
- «Opportunities» to maintain regional initiatives and integrated knowledge regional research centers, the potential of which is not constrained by limited national frameworks (incentives as anti-crisis technologies for teacher training).

It is obvious that the implementation of these projects is possible within modular education. Modular learning system implies the division of

disciplines into relatively small components called modules. A module contains learning material grouped in accordance with the professional tasks to be solved. Each topic can be studied to a particular extend. For example, by in-depth study of the problem tasks and application of typical methods to arrive at the solution or by special approach to the problemsolving with own choice and justification of actions. That allows students to choose their individual training route and ensures the sustainability of the learning process. In further work the authors of the article plan to develop these initiatives and introduce them into educational practice.

#### Conclusion

Thus, summarizing the above, we may note the following: pursuing the stated goal of this article, the authors have identified several prospects for the design of initiatives in the development of cross-cultural competence of students in the regions. These are the analysis of quantitative and qualitative analytics, which will enable to examine the students' preparedness for the implementation of the initiatives; the study of the research sources and authentic materials, which reflect the role, and significance of initiatives; the analysis of the mechanisms for implementation of initiatives one of which is a professional task. In the future, the authors of this article plan to implement the indicated promising areas.

It is without a doubt that knowledge about ways to improve students' training is very short-term, quickly becoming obsolete, requiring constant flexibility and precise refocusing which demands integration both at the level of states and state regions. This reveals the compensatory nature of teacher training, which implies the removal of institutional and personal barriers that prevent the full and equal participation of all citizens in the life of a society.

This means that special conditions may be required during a transitional period in the process of teacher training, determining further changes. The changes may involve the rejection of linearity, initiation of practice-oriented and individual teacher training routes, reinforcement of sustained learning. They should be reflected in the future in the process of designing and implementing initiatives.

We believe that this study opens up new perspectives for the improvement of mechanisms preparing students for cross-cultural communication and the implementation of



initiatives. In particular, it is beneficial to study such problems as technologies for improving initiatives; technologies for organizing an integrative space in an educational institution in order to improve initiatives; anti-crisis technologies for managing initiatives/

#### Bibliographic references

- Aniskin, V.N., Bogoslovsky, V.I., & Zhukova, T.A. (2011). Socio-cultural competence of a teacher in a higher school: features of development: a study guide for teachers and students of pedagogical universities. St. Petersburg Samara: PGSGA publishing, 1724. (In Russian)
- Dyuzhakova, M.V. (2022) Polycultural education and the migration processes: Monograph. Voronezh: VGPU publishing. 172. (In Russia) https://www.elibrary.ru/item.asp?id=499845 20
- Kozareva, V.A., & Radionova, N.F. (2004) Competence-based approach in teacher training Collective monograph. Saint Petersburg: Herzen State Pedagogical University, 391. (in Russian)
- Kamenskaya, N.V., Chevtayeva, N.G., & Kachanova, Ye.A. (2019). Success factors in the implementation of initiative projects in the activities of state (municipal) institutions of the social sphere. Management issues, № 5(60), pp. 20-29.
- Kokarevich, M.N., & Sizova, N.Z. (2015). Model of tolerance of intercultural communication. Procedia-Social and Behavioral Sciences, 166, 621-625. (In Russian)
- Kurylo, O.V., (2019). The specificities of the multicultural education system. In the guide: Psychology in the system of social training relations. Material of the international Scientific and Practical Conference. 2019. 10-13. (In Russian) https://www.elibrary.ru/item.asp?id=412192
- Nieto, S., Bode, P., Kang, E., & Raible, J. (2008). Identity, Community and Diversity: Retheorising multicultural curriculum for the postmodern era. The Sage handbook of curriculum and instruction, 225.

- Novikova, L.A., (2007). Development of crosscultural competence of students of a pedagogical university based on the use of telecommunication technologies (Author's abstract of a dissertation of a candidate of pedagogical sciences). Omsk State Pedagogical University, Omsk, 226. (In Russian)
- Smirnov, L.V. (2002). Regionalization of education improving the quality of training of specialists. Influence of educational technologies on the development of Russian regions. Vologda: Legia, 141-143. (In Russian)
- Vargas, C.M. (2000). Sustainable development education: Averting or mitigating cultural collision. International Journal of Educational Development, 20(5), 377-396.
- Wu, K., & Havens, W.S. (2005): Modelling an academic curriculum plan as a mixed-initiative constraint satisfaction problem, Heidelberg, 231.
- Yarovoi, G.O. (2007) Regionalism and crossborder cooperation in Europe. Saint Petersburg.: Norma, 280.
- Zair-Bek, Ye. S. (2017).The methodology of project researches and innovation in education. Theoretical foundation for teaching pedagogical design. Saint. Petersburg. Herzen State Pedagogical University, 15-23. (In Russian) https://www.elibrary.ru/item.asp?id=349157 58
- Zhukova, T. A., Bogoslovskiy, V.I., & Klimova, I.I. (2022). Predicting changes in teacher preparation for intercultural interaction in regions. Tomsk. Education and Pedagogy Journal, №2 (4), 78-87
- Zhukova, T.A., & Shrenk, M., (2016). The principle of regionalization in the development of higher education in a multicultural society. In the digest: Actual problems of natural science and mathematical education. Materials of the International Scientific and Practical Conference. 151-159. (In Russian)
- Ziegele, F. (2006). Konzeption eines neuen Modells der staatlichen Mittelvergabe an die Hochschulen in Brandenburg. result report, 51, Guetersloh., 100.



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## The practice of the ECtHR in economic and civil law and process: international legal experience

Практика ЄСПЛ в господарському і цивільному праві та процесі: міжнародно-правовий досвід

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Written by:

Yuliia Tsal-Tsalko<sup>70</sup>

https://orcid.org/0000-0002-4441-1309

Volodymyr Dryshliuk<sup>71</sup>

https://orcid.org/0000-0002-2274-441X

Oleksandr Antonenko<sup>72</sup>

https://orcid.org/0000-0001-7596-5841

Oleksandr Pashchenko<sup>73</sup>

https://orcid.org/0000-0002-1679-7689

Anhelina Korshun<sup>74</sup>

https://orcid.org/0000-0002-9829-9797

#### Abstract

The article examines the practice of the European Court of Human Rights (hereinafter referred to as the ECtHR) in commercial and civil law and process, in particular, in the context of implementing compliance in the company. In particular, it is determined which complaints regarding which provisions of the Convention affect business compliance practices and which conclusions from relevant cases the business community implements when building a compliance system. The article examines the question of classifying compliance as an asset that constitutes the company's added value, namely, the category of "goodwill" in accordance with the practice of the European Court of Justice in this area. The purpose of the work is to analyze the international legal experience of using the practice of the ECtHR in economic and civil law and process. The methodological basis of this study is the following methods: methods of analysis and synthesis, methods of induction and deduction, the system method, structural method, functional method, technical-dogmatic method, special-legal method, comparative method,

#### Анотація

статті досліджується практика Європейського суду з прав людини (далі -ЄСПЛ) в господарському і цивільному праві та процесі, зокрема - у контексті реалізації комплаєнсу в компанії. Зокрема, визначається, скарги щодо яких положень Конвенції впливають на комплаєнс-практики бізнесу та які висновки з відповідних справ бізнесімплементує спільнота при побудові комплаєнс-системи. У статті досліджується питання віднесення комплаєнсу до категорії активу, що становить додану вартість компанії, а саме до категорії «гудвіл» відповідно до сформованої y цій сфері практики Європейського суду. Метою роботи  $\epsilon$  аналіз міжнародно-правового досвіду використання практики ЄСПЛ в господарському і цивільному праві та процесі. Методологічним підгрунтям даного дослідження слугують такі методи, як: методи аналізу та синтезу, методи індукції та дедукції, системний метод, структурний метод, функціональний метод, техніко-догматичний спеціально-юридичний метод, порівняльний правового метод, метод

<sup>&</sup>lt;sup>74</sup> Postgraduate student of the Department of Economic Law and Economic Jurisdiction of the Educational and Scientific Institute of Law of Taras Shevchenko Kyiv National University, Ukraine.



<sup>&</sup>lt;sup>70</sup> Ph.D., Associate Professor of Department of Civil Procedure of National University «Odesa Law Academy», Ukraine.

<sup>&</sup>lt;sup>71</sup> Ph. D, Associate Professor, Head of the Department of Labor, Land and Commercial Law, Odessa State University of Internal Affairs, Ukraine.

<sup>&</sup>lt;sup>72</sup> Ph.D. Associate Professor of the Department of Labor, Land and Commercial Law of Odessa State University of Internal Affairs, Ukraine.

<sup>&</sup>lt;sup>73</sup> Ph.D. Professor at the Department of Labor, Land and Commercial Law of Odessa State University of Internal Affairs, Ukraine.

method of legal modeling, method of analysis and synthesis, a method of theoretical generalization and systematization. As a result of the study, the foreign experience of implementing the judicial practice of the ECtHR in economic and civil law and process was analyzed.

**Keywords:** European Court of Human Rights, precedent, decision, law enforcement, international legal experience.

#### Introduction

Modern economic and civil procedural law is developing under the influence of European integration processes, which determine its relationship and agreement with the principles and norms of international law.

One of the sources of international law is the practice of the ECtHR. Decisions of the ECtHR affect the law enforcement activities of judicial bodies and the practice of national courts of individual states in resolving disputes. The execution of decisions of the European Court of Human Rights, taking into account their specificity, is a specific legal institution, different from those provided for the execution of decisions of national courts, in connection with this, special mechanisms for the implementation of its decisions have been established.

With the establishment of the main foundations of the development of the market economy and European integration processes in Ukraine, connected with legal reforms, the legislation of Ukraine establishes guidelines for the application of the provisions of the ECtHR case law. Article 17 of the Law of Ukraine "On the Implementation of Decisions and Application of the Practice of the European Court of Human Rights" provides that courts apply the Convention on the Protection of Human Rights and Fundamental Freedoms and the practice of the European Court of Human Rights as a source of law when considering cases (Law 3477-Iv, 2006).

According to the Convention on the Protection of Human Rights and Fundamental Freedoms and the Law of Ukraine "On the Implementation of Decisions and Application of the Practice of the European Court of Human Rights", the following aspects are distinguished that characterize the specificity of the decisions of the European Court of Human Rights:

моделювання, метод аналізу та синтезу, метод теоретичного узагальнення та систематизації. В результаті дослідження проаналізовано зарубіжний досвід впровадження судової практики ЄСПЛ в господарському і цивільному праві та процесі.

**Ключові слова:** Європейський суд з прав людини, прецедент, рішення, правозастосування, міжнародно-правовий досвід.

- qualification of the Court's decision as an executive document;
- availability of a "single window" for the applicant to receive monetary compensation;
- the existence of a special item of state budget expenses for the payment of monetary compensation based on Court decisions;
- the existence of a special procedure for the execution of the Court's decisions, which differs from the procedure for the execution of the decisions of national courts;
- the existence of legal responsibility for nonexecution or improper execution of the Court's decision:
- availability of a supervisory mechanism by the Council of Europe for the implementation of the Court's decision;
- consideration of ECtHR decisions in national practice (United Nations, 1950; Law 3477-IV, 2006).

Although Ukraine has recently observed a trend of increasing cases of courts applying general jurisdiction in civil and commercial cases based on the ECtHR's case law, not all countries have established such provisions at the legislative level. Thus, the place of the Convention in the national legal systems of states is determined differently, accordingly, the procedure for the execution of ECtHR decisions is characterized by certain features in different countries.

Therefore, there are several peculiarities in the foreign experience of using and implementing decisions of the ECtHR in the consideration of court cases. These necessitates need a detailed theoretical analysis of the legal features of the application of ECtHR decisions during the settlement of civil and economic cases, which was done by the researches.

The authors also paid attention to the special mechanisms for the implementation of the orders of the Strasbourg Court and to the recommendations regarding the use and



justification of decisions by the courts of states. The mechanisms different implementation of the provisions of decisions of European courts in the administration of justice by national courts are revealed in detail, attention is paid to problematic issues, and ways of improving the existing practice are proposed to ensure the rule of law.

In addition to the above, the authors of the article investigated the practice of the ECtHR in the context of implementing compliance in the company. It is worth emphasizing that human rights and business are closely related, since (1) the rights provided for by the Convention in certain cases also apply to legal entities, respectively – companies can apply to the European Court of Human Rights; (2) companies may violate the rights of employees or other stakeholders guaranteed by the Convention. In the second case, as in other areas, the practice of preventing offenses through the company's internal regulation of processes, rules and rights of employees and other stakeholders, which is called "compliance", is based on the formed caselaw of the ECtHR in the relevant field. As scientists note, if stakeholders take effective preventive measures, the likelihood of adverse impacts and therefore the need for remedial action is reduced. Business can relate well to the emphasis on prevention as it allows them to be proactive in their human rights strategy rather than reactive to allegations of adverse impacts over which they have little or no control. In addition, many corporate compliance regimes such as those concerning food safety, financial services, human trafficking, and modern slavery seek to protect third parties often beyond national boundaries. This is precisely the ambition of business and human rights, which makes the corporate compliance function a useful tool for implementation of business and human rights standards (Korshun, 2022). In this context, compliance practitioners are guided by the experience of the ECtHR in providing mechanisms for the functioning of the compliance system.

#### Theoretical Framework or Literature Review

The specifics of the application of ECtHR decisions in the consideration of civil cases are discussed in the study guide by Andrusiv, Verba-Sydor, & Verkhola (2019). In the mentioned work, considerable awareness is settled on the place of the ECHR and its Protocols in the system of sources of private law under the legislation of Ukraine, a general description of the decisions of the ECHR is

carried out, the peculiarities of the interpretation of the ECHR and the ECHR in deciding civil cases are characterized, as well as the peculiarities of the application of the practice of the ECHR in the interpretation of general provisions and principles of civil justice, analyzed the right to a fair trial in the practice of the ECtHR. Particular engagement is paid to the civil protection of personal non-property and other rights following the ECHR and its Protocols, as well as the procedure for applying and enforcing decisions of the ECHR in civil

The foreign experience of the application of procedural means of protection of the defendant and the possibility of its use in the civil process of Ukraine was studied in the work of Gongalo (2019). In particular, attention is born to the institution of annulment in the case used in Great Britain and other progressive possibilities of foreign civil procedural legislation.

In the studies of Zavhorodniy (2013, 2020), the foreign experience of implementing decisions of the European Court of Human Rights was studied in detail and the influence of the practice of the European Court of Human Rights on legal activity in Ukraine was analyzed from the point of view of theoretical, methodological and applied aspects. The author noted that comparing the procedure for the implementation of ECtHR decisions in EU countries and Ukraine, one can see certain similar features, although each of the considered countries is characterized by its special approach. However, there are features specific to the countries of the European Union in question: a significant role in monitoring the implementation of decisions of the ECHR of the Constitutional Court; lack of possibility to decisions of national courts on administrative or economic cases; availability of control functions for the implementation of ECtHR decisions in the legislative body of the state; participation in the implementation of ECtHR decisions by the human rights commissioner, the general prosecutor.

The mechanism of ensuring the principle of "reasonableness of the terms of consideration of the case by the court" given foreign experience and application of the practice of the ECtHR was analyzed in the work of L. Zagorui & Zagorui I. (2020).

Some aspects of Ukraine's implementation of ECtHR decisions are considered in the research of Kochura (2015). The author concluded that a system of enforcement has been created in Ukraine, according to which every Decision of the European Court of Human Rights must be enforced by the state. Including the adoption of the Law of Ukraine "On the Implementation of Decisions and Application of the Practice of the European Court of Human Rights", according to the Court itself, is a positive experience of the system organization at the state level in the implementation of its decisions.

McBride (2010) explores the principles governing the interpretation and application of the European Convention on Human Rights. Jurisprudence regarding mass (group) and derivative lawsuits in the context of the regime of civil procedural security became the object of research by Melnyk (2018). The question of the application of precedent practice of the ECtHR by the courts of Ukraine in the context of human rights protection was investigated in the study of Orkhimenko (2022).

The experience of using the practice of the ECtHR in the courts of Great Britain and Ukraine was analyzed in the article by Popov (2010). The author believes that the decisions of the European Court of Human Rights in the context of precedential value are not necessarily persuasive precedents. They cannot be considered either as binding precedents under the doctrine of common law stare decisis, or as non-binding precedents under the doctrine of jurisprudence constante continental law. English and Ukrainian judicial practices, in the opinion of the author, confirm this conclusion.

General theoretical problems of the right to proper evidence in the Ukrainian judiciary in the context of the practice of the Strasbourg Court were examined in the work of Rabinovych and Ratushnaya (2014). In the study of Stoyanova (2017), the practice of the European Court of Human Rights is considered as a source of the civil procedural law of Ukraine.

A general study of the application of the practice of the European Court of Human Rights in the administration of justice was conducted by Fulley (2015). The experience of foreign countries in ensuring the right to a fair trial within a reasonable time in the context of the implementation of ECtHR decisions was reviewed by Tsuvina (2014). The author noted that the analysis of the legislation of individual states allows, depending on the purpose of the means of the legal protection of the right to a fair trial within a reasonable time, to distinguish two groups of such means: expediting and compensatory. The essence of the first is to

influence the terms of the trial utilizing a special complaint or a request to accelerate the trial to the head of the court or a higher court, which is used to prevent a violation of the reasonableness of the trial when the proceedings in the case have not yet ended. The essence of compensatory means is to award compensation for the already violated reasonable period of trial by filing a complaint or lawsuit, as a rule, to a higher court during the proceedings of the case or after it ends. The legislation of most foreign states provides for both remedies, which is more effective than using them separately.

Shcherbina and Reznikova (2018) investigated the main principles (principles) of the economic justice system of Ukraine, taking into account the provisions of the European Convention.

The literature analysis carried out above confirms the relevance of the question of the role of the ECtHR in civil and economic proceedings, and also indicates the need for a more detailed study of international legal experience on this issue.

#### Methodology

During the study of the international legal experience of using the practice of the ECtHR in economic and civil proceedings, methods of analysis and synthesis were used, which as logical operations made it possible to divide the whole into its constituent parts, as well as to study the phenomenon in general based on combining interrelated elements into a single whole. The specified methods contributed to the disclosure of the concepts that make up the subject of the study and made it possible to formulate intermediate and general conclusions.

Thanks to the benefit of induction and deduction methods, that is, through the transition from the partial to the general and vice versa, it became possible to conclude the content of the concepts "practice of the ECtHR", "implementation of decisions of the ECtHR", "judicial practice", "implementation", "legal influence".

Taking into account the complexity of the study of the foreign experience of applying the practice of the ECtHR, a system method was used, which makes it possible to consider the practice of the ECtHR as a certain system involved in a higher-level system and performing certain functions in it, connected to it by various connections. A systemic method is a universal tool for understanding complex phenomena and their impact on social relations, and its application is



critical in the study of both the essence of the practice of the ECtHR itself, as well as its impact on the economic and civil process, as well as the mechanism of implementation of decisions of the ECtHR, which are systemic phenomena of legal realities and consist of entities that are smaller in volume.

The usefulness of the structural method provides knowledge of the internal structure of the practice of the Strasbourg Court as a complex legal phenomenon, as well as the structure of the mechanism of implementation of the ECtHR practice in the national legal system, and judicial practice.

The functional method was used to determine the main aspects of the impact of the practice of the ECtHR on legal activity in Ukraine and its effectiveness.

The technical-dogmatic method served as an equally important research method. The specified method provides the study of statelegal phenomena as such, which exist independently of other types of social and state activity, outside the sphere of economics, politics, etc. The cognitive capabilities of this method in the study of the practice of the ECHR and its impact on legal activity made it possible to formulate definitions of the concepts that make up the subject of scientific knowledge, as well as to single out their essential features. Also, the application of a special-legal method of knowledge played an important role in revealing the content of the legal positions of the ECtHR in the field of civil and economic proceedings.

With the help of the comparative method, various homogeneous legal concepts, processes, and phenomena were compared to clarify their common and distinctive features. This made it possible to determine the relationship of the concept with adjacent categories that form a conceptual series. Also, the comparison method made it possible to find out the common features and differences in the mechanisms of implementation of the ECHR practice in the economic and civil process both in Ukraine and in individual states of the Council of Europe.

The application of the legal modeling method helped to study the object comprehensively and

to prepare proposals and recommendations for improving national legislation on the implementation of ECtHR decisions in civil and commercial proceedings. By using this method, it became possible to create an ideal model of the behavior of subjects endowed with stateauthority powers to take into account the legal positions of the ECHR.

#### **Results and Discussion**

Before proceeding to the analysis of the international legal experience of the use of ECtHR decisions in civil and economic proceedings, let us consider the general concepts of the legal nature of ECtHR decisions.

The most common positions regarding the legal nature of ECtHR decisions are to attribute them to interpretative acts or judicial precedents. The first position is based on the understanding of the decisions of the European Court as acts of interpretation of the Convention, while the other considers them as legal precedents and is somewhat controversial, although it can be considered more consistent. At the same time, it is worth noting that there are different types of judicial precedents: judicial precedent in the Anglo-Saxon legal family, the Romano-Germanic legal family, and persuasive precedent. In particular, given that the legal system of Ukraine belongs to the Romano-Germanic legal family, the main contradictions exist as to whether the decisions of the ECtHR can be included in the second or third categories. Popov notes that the precedent practice of the ECtHR, although confirmed many times, is difficult to include in the established judicial practice under the doctrine of continental precedent since the practice of the ECtHR is not the practice of the courts of the national judicial system, its decisions have the force of a convincing precedent (Popov, 2010). However, we cannot agree with this position, since the norms of the Commercial Procedural Code of Ukraine and the Civil Procedural Code of Ukraine stipulate that national courts apply the Convention and the practice of the ECtHR as a source of law when considering cases (Law 1798-XII, 1991; Law 1618-IV, 2004).

Let's consider the practice of foreign countries in more detail (Table 1).

**Table 1.**Characterization of the role of ECtHR practice in foreign civil and commercial proceedings.

Country	Application mechanism
Czech Republic	The procedure for using the practice of the ECHR was developed within the framework of social and political consensus regarding the high value of human rights and freedoms and the need for integration into European structures for the development of the country. This approach is reflected
	in the country's Constitution. The procedure for the application and execution of ECtHR decisions is formalized. It is defined by normative legal acts regulating the activities of the office of the authorized representative of the country at the ECtHR, as well as by-laws and acts that determine the competence of various authorities. The state has created a mechanism aimed at bringing laws and law enforcement practices in the country into compliance with the standards of the ECHR. This task is performed by the Constitutional Court, which monitors the practice of the ECHR and explains its content to subordinate courts in the form of recommendations. Also, the harmonization of national legislation with the standards of the ECHR is ensured by the participation of the State Representative in the ECHR in the law-making process. Parliament is obliged to receive opinions on each draft law from the Ministry of Justice, the structural division of Islands is the office of the
	Representative. Because the Constitution obliges the authorities to fulfill the international obligations of the state, the Constitutional Court has the authority to consider cases on the implementation of international treaties. These powers also apply to ECtHR decisions, as Czech legal doctrine considers them an integral part of the Convention.
	The procedure for the execution of ECtHR decisions is poorly formalized, but, despite this, the practice of implementing ECtHR decisions has developed in France, and this is primarily due to the high status of judicial acts in the country's national system. Court decisions are considered the most important source of law, as they provide interpretation of laws. Decisions of the ECtHR are regarded as sources of Convention standards. France seeks to implement the decisions of the
	ECtHR not by changing the laws, but by improving the law enforcement practice in specific categories of cases, as well as by using the principles and standards defined in the Convention and decisions of the ECtHR. Therefore, an important role in the implementation of ECtHR decisions in terms of measures of a general nature is played by state judicial bodies, prosecutor's offices, and other law enforcement entities. The Ministry of Justice coordinates the activities of these bodies.
Germany	In the German legal system, the Convention and the decisions of the ECtHR have the status of federal laws. Germany considers it necessary to implement not only the decisions of the ECtHR issued against it but also considers it necessary to integrate the decisions of other countries into its legal system. In Germany, the procedures for the execution of the decisions of the ECtHR are generally formalized by legislative and by-laws that determine the competence and procedure of work of various authorities, but there is no special law in Germany that would summarize all the norms related to the implementation of decisions of the ECtHR. The procedure for reviewing court
	decisions on civil and economic cases is currently not regulated. It is worth noting that the Constitutional Court of the Federal Republic of Germany defined the provisions of the Basic Law as having higher legal force than the provisions of the Convention, which provides for the implementation of national constitutional control of the provisions of the Convention and the practice of its interpretation by the European Court. (Zavhorodniy, 2013)

(Data provided by Zavhorodniy, 2013)

Taking into account the above analysis, we can conclude that other member states of the Convention define the role of applying the practice of the ECtHR as a source of law and control over the correct application of such decisions in different ways. Thus, the functions of the Constitutional Court, the human rights

commissioner, the general prosecutor, etc., are assigned to this issue.

Regarding the experience of applying the practice of the ECHR by the national courts of Ukraine, it is also worth noting that the following problematic issues are present (Table 2).



**Table 2.**Problematic issues of the application of the ECtHR practice by general and commercial courts of Ukraine.

A problematic question	Effect	Content
Reference to the practice of the ECtHR by the parties	Positive	In their statements/explanations, the parties refer to the Convention and the practice of the ECtHR, and in the future such a reference may be reflected in the relevant court decision in the case. In fact, the reference of such an interested party to the Convention and the practice of the ECtHR is formulated in such a way as to draw the attention of the Ukrainian court to certain violations of the Convention that have already occurred during the consideration of the relevant dispute, but could still be corrected at the national level without recourse to international judicial institutions.
Difficulties in providing judges with official translations of ECtHR decisions	Negative	To date, there is no information on the state of providing courts with official translations of ECtHR decisions.
Unequal application of ECtHR decisions by courts	Negative	The analysis of judicial practice shows the absence of a single approach to the application of ECtHR decisions. Courts of Ukraine have emphasized that when applying the decisions of the ECtHR as a source of law, the court must, firstly, clearly indicate which legal positions set forth in the decisions of the ECtHR do not correspond to the issue under consideration in a specific case, and secondly, show an obvious connection between the factual circumstances in which the ECtHR reached the relevant conclusion, and the case in which the Ukrainian court will already apply such a conclusion.

(Data provided by LIGA platform: ZAKON, 2018)

Thus, regarding the procedure for the application of ECtHR decisions by commercial and general courts in cases, there are problems of providing courts with translations of ECtHR decisions and uneven application of relevant decisions by courts.

As for the compliance there is currently no specific generalized definition of compliance either in the international arena or in the national legislation of Ukraine. Taking into account the numerous variations of its coverage, in our opinion, we should focus on the fact that compliance is an internal process organized by the company to ensure compliance of its activities with the requirements of legislation, of international legal acts norms extraterritorial effect, internal documents of the standards of self-regulatory company, organizations in a certain area and best practices , through a certain toolkit (forming a corporate culture, carrying out compliance control of risks that may lead to the application of legal and financial sanctions to such a business entity, loss of business reputation or other damage, as well as with the help of other means of implementing compliance) (Korshun, 2022).

The first thing to find out is whether the practice of the European Court exists in the context of establishing a relationship between the presence/absence of a compliance system in a company and a violation of the provisions of the

Convention. In the course of the study, the relevant practice was analyzed and it was established that there is no established direct connection between the specified facts in the practice of the ECtHR.

However, the practice of the ECtHR concerns compliance in slightly different aspects. When studying the materials of the European Court and scientific sources, one can come to the conclusion that the presence of a compliance system in the company is an asset that can be considered as protected by the Convention. Thus, in general, the property rights of individuals are protected by Protocol No. 1 to the Convention. Under the protection of this provision of the Convention there are various types of "property" and other property interests, for example, future income, claims and debts under a court decision, company shares and other financial instruments, business licenses, future income, intellectual property, destruction of property in situations international or internal armed conflict (Drozdov, Plotnikova, & Drozdova, 2019), as well as the company's right to the so-called "goodwill"... The practice of the ECtHR recognizes the right to goodwill regardless of its formal consolidation at the level of national legislation. The subjects of such a right can be both natural persons who carry out a certain type of professional and (or) entrepreneurial activity

that generates income, and legal entities (Poberezhnyk, 2019).

This allows us to conclude that the compliance system as goodwill is protected by the provisions of the Convention and, if necessary, the company's right to peaceful possession of the asset in the broad sense of this understanding will be ensured.

#### Conclusions

- The norms of the Convention have a generalized wording, and, therefore, the decisions of the ECtHR are extremely essential in the aspect of concretizing the norms of the Convention, and the principled positions, in particular, outlined in the socalled "model decisions" are decisive in the application of the norms of the Convention.
- A comparative analysis of the application of the practice of the ECtHR in conducting economic proceedings in France, the Czech Republic, Germany, and Ukraine was conducted and both common and distinctive features were identified.
- Among the features are various tools for bringing national judicial practice into line with the provisions of the decisions of the Strasbourg Court. In particular, these are: a significant role in monitoring implementation of decisions of the ECHR of the Constitutional Court; the lack of opportunity to review the decisions of national courts in economic availability of control functions for the implementation of ECtHR decisions in the legislative body of the state; participation in the implementation of ECtHR decisions by the human rights commissioner or the general prosecutor.
- 4. Attention is drawn to the problematic issues of applying the practice of the ECtHR by the courts of Ukraine, taking into account the uneven application of decisions and the difficulties in providing courts with official translations of such decisions.

Regarding compliance, it should be noted that companies are responsible for ensuring respect for human rights, which already involves risk management. Therefore, due diligence in the form of a system to prevent violations allows a company to monitor how human rights obligations are fulfilled by all divisions and structural parts of the company, and thus avoid the risk of negative consequences in the form of holding it accountable by national courts. At the same time, an additional positive point for the

company is that such a system is protected by the Convention as positive goodwill, that is, it is an intangible asset, the peaceful possession of which is guaranteed by Article 1 of Protocol No. 1 to the Convention. The practice of the ECtHR, in turn, forms the best practices for implementing compliance in companies, from ensuring the effective functioning of the system of notification of violations and protection of whistleblowers to procedures for the company's protection of personal data and ensuring confidentiality, based on cases regarding possible violations of Articles 8 and 10 of the Convention.

Regarding further scientific research in the field of application of the practice of the ECHR in civil and economic proceedings, we consider it necessary to pay more attention to the question of compliance of the decisions of national courts with the provisions of the Convention and the practice of the ECHR, to analyze problematic issues in this area and ways to solve them.

#### Bibliographic references

- Andrusiv, U.B., Verba-Sydor, O.B., & Verkhola, Yu.V. (2019). Peculiarities of the application of decisions of the European Court of Human Rights in the consideration of civil cases. Education manual. Lviv: LvDUVS. Retrieved from https://dspace.lvduvs.edu.ua/bitstream/1234 567890/2738/1/Юркевич% 20-- % 20Особливості% 20застосування% 20ЄС ПЛ--навч.% 20посібник.pdf
- Arbeláez-Campillo, D., Tatsiy, V., Rojas-Bahamón, M., & Danilyan, O. (2020). Contributions of critical thinking as a form of participation and political deliberation. Amazonia Investiga, 9(27), 5-12. https://doi.org/10.34069/AI/2020.27.03.1
- Drozdov, O., Plotnikova, V., & Drozdova, O. (2019). Guide to Article 1 of Protocol No. 1 of the Convention on the Protection of Human Rights and Fundamental Freedoms. Council of Europe: European Court of Human Rights. Retrieved from https://unba.org.ua/assets/uploads/news/publikacii/Guide\_Art\_1\_Protocol\_1\_UKR\_-2019.pdf
- Fulley, T.I. (2015). Application of the practice of the European Court of Human Rights in the administration of justice: A scientific and methodological guide for judges. Kyiv: Nayka. Retrieved from https://www.osce.org/files/f/documents/4/7/232716.pdf



- Gongalo, R.F. (2019). Foreign experience in the application of procedural means of defense of the defendant and the possibility of its use in the civil process of Ukraine. Odesa: VD "Helvetika". Retrieved from http://dspace.onua.edu.ua/handle/11300/216
- Kharytonov, E., Kharytonova, O., Kharytonova, T., Kolodin. & Tolmachevska, Y. (2019). Human rights as the basic value of the concept of private law in modern Europe. Amazonia Investiga, 477-485. Retrieved 8(20), https://amazoniainvestiga.info/index.php/am azonia/article/view/177
- Kochura, O.O. (2015). Certain aspects of Ukraine's implementation of decisions of the European Court of Human Rights. Scientific Bulletin of the Uzhhorod National University, 32(1), 116-121. Retrieved from https://core.ac.uk/download/pdf/187224007. pdf
- Korshun, A.V. (2022). On the question of the definition of the term "compliance" and its features in the business field. Bulletin of Taras Shevchenko National University of Kyiv. Legal Studies. 5(124)/2022, 55-61. Retrieved from https://doi.org/10.17721/1728-2195/2022/5.124-9
- Law 1618-IV. Civil Procedure Code of Ukraine.
  The Verkhovna Rada of Ukraine, 2004.
  Retrieved from http://zakon5.rada.gov.ua/laws/show/1618-15
- Law 1798-XII. Economic Procedural Code of Ukraine. The Verkhovna Rada of Ukraine, 1991. Retrieved from http://zakon.rada.gov.ua/laws/show/1798-12
- Law 3477-IV. On the implementation of decisions and application of the practice of the European Court of Human Rights. The Verkhovna Rada of Ukraine, 2006. Retrieved from
  - https://zakon.rada.gov.ua/laws/show/3477-15#Text
- LIGA platform: ZAKON. (2019). Review of the practice of application by judges of the Commercial Court of Cassation as part of the Supreme Court of the decisions of the European Court of Human Rights when adopting resolutions for 2018. Retrieved from
  - https://ips.ligazakon.net/document/VSS0024
- McBride, J. (2010). Principles governing the interpretation and application of the European Convention on Human Rights. Center for judicial studies. International

- Foundation. Kyiv: KIC. Retrieved from https://rm.coe.int/1680098ae0
- Melnyk, Ya. (2018). Judicial practice regarding mass (group) and derivative lawsuits in the context of the regime of civil procedural security. Entrepreneurship, economy and law, 7, 34-46. Retrieved from http://pgp-journal.kiev.ua/archive/2018/7/7.pdf
- Orkhimenko, S.C. (2022). Peculiarities of the application of precedent practice of the ECtHR by Ukrainian courts in the context of human rights protection. Actual problems of domestic jurisprudence, 4, 197-202. Retrieved from http://apnl.dnu.in.ua/4 2022/30.pdf
- Poberezhnyk, A. (2019). Goodwill is a monetary definition of a company's business reputation. Lawyer & Law. Retrieved from https://uz.ligazakon.ua/ua/magazine\_article/EA012937
- Popov, Yu. Yu. (2010). Decisions of the European Court of Human Rights as a convincing precedent: the experience of England and Ukraine. Entrepreneurship, economy and law, 11, 49-52. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abst ract id=3006699
- Rabinovych, P. M., & Ratushna, B. P. (2014).

  General theoretical problems of the right to proper evidence in the Ukrainian judiciary (in the light of the practice of the Strasbourg Court). Bulletin of the National Academy of Legal Sciences of Ukraine, 3(78), 7–19. Retrieved from http://visnyk.kh.ua/web/uploads/pdf/ilovepdf\_com-7-19.pdf
- Shcherbina, V., & Reznikova, V. (2018). Basic principles of economic justice in Ukraine. Law of Ukraine, 7, 13-33. Retrieved from https://rd.ua/storage/lessons/662/690Щерби на% 20Валентин% 20Степанович,% 20Резн ікова% 20Вікторія% 20Вікторівна.pdf
- Stoyanova, T. (2017). Practice of the European Court of Human Rights as a source of civil procedural law of Ukraine. Entrepreneurship, economy and law, 6, 55-58. Retrieved from http://pgp
  - journal.kiev.ua/archive/2017/6/13.pdf
- Tsuvina, T. A. (2014). Protection of the right to a fair trial within a reasonable time: the practice of the European Court of Human Rights and the experience of foreign countries. Theory and practice of jurisprudence, 1(5), 28-48. Retrieved from https://acortar.link/mqQNQr
- United Nations. (1950). Convention on the Protection of Human Rights and Fundamental Freedoms. Retrieved from



- https://www.echr.coe.int/documents/convent ion\_eng.pdf
- Zagorui, L.M., & Zagorui, I.S. (2020). The mechanism for ensuring the principle of "reasonableness of the terms of the judicial review of the case by the court". Bulletin of the LDUVS named after E.O. Didorenko, 4, 258-272. Retrieved from https://journal.lduvs.lg.ua/index.php/journal/article/download/1199/1088/
- Zavhorodniy, V.A. (2013). Foreign experience in the implementation of decisions of the European Court of Human Rights (on the example of some countries of the European
- Union). Scientific Bulletin of the Dnipropetrovsk State University of Internal Affairs, 1, 57–64. Retrieved from https://acortar.link/CipkG3
- Zavhorodniy, V.A. (2020). The influence of the practice of the European Court of Human Rights on legal activity in Ukraine: theoretical, methodological and applied aspects. Dnipro: Dniprop. state University of Internal Affairs affairs. Retrieved from https://er.dduvs.in.ua/bitstream/123456789/6 685/1/Монограф.\_Завгородній% 20В.А.\_1 9.10.2020% 20% 28остаточ.% 20та% 20редаг ов.% 29.pdf



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## The peculiarities of «welcoming the guests – 好客 » in Kazakh and Chinese linguoculture

#### Las peculiaridades de "dar la bienvenida a los invitados - 好客 " en la lingüocultura Kazaja y China

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Written by:
Anar Ibraimova<sup>75</sup>
https://orcid.org/0000-0001-5487-8765
Rauan Dossymbekova<sup>76</sup>
https://orcid.org/0000-0001-9556-0403

#### **Abstract**

Deep ties between China and Kazakhstan date back to ancient times. Starting from the ancient period of the Huns, Yuxin and the era of the independent Kazakh Khanate, under Abylai Khan, relations between the Kazakhs and the Chinese took place within the framework of political and diplomatic relations. researchers' works are limited to considering the differences and peculiarities between the Kazakh and Chinese languages, omitting the cultural spectrum of bilateral exchanges. This article describes the linguistic and cultural features of the concept of «welcoming the guests - 好客 / hàokè» in the Kazakh and Chinese languages. The norms of language etiquette based on respect and honor are used in the expression of customs and traditions. In addition to mastering a foreign language, knowledge of intercultural communication has a special place in the communication with representatives of various countries. Any nation has its own history of development, mentality, way of life and customs. Proper application of the rules and laws of language etiquette leads to a favorable and optimal outcome of communication between the interlocutors. The etiquette of «welcoming the guests - 好客 / hàokè» in the Kazakh and Chinese languages refers to a set of etiquette based on ancient customs and traditions.

**Keywords:** national code, linguacultural, custom, greeting, etiquette, communication, mentality, phenomenon.

#### Resumen

Los lazos profundos entre China y Kazajstán se remontan a la antigüedad. A partir del período antiguo de los hunos, Yuxin y la era del kanato kazajo independiente, bajo Abylai Khan, las relaciones entre los kazajos y los chinos se desarrollaron en el marco de las relaciones políticas y diplomáticas. Los trabajos de los investigadores se limitan a considerar las diferencias y peculiaridades entre los idiomas kazajo v chino, omitiendo el espectro cultural de los intercambios bilaterales. Este artículo describe las características lingüísticas y culturales del concepto de "dar la bienvenida a los invitados - 好 客 / hàokè" en los idiomas kazajo y chino. Las normas de etiqueta del lenguaje basadas en el respeto y el honor se utilizan en la expresión de costumbres y tradiciones. Además del dominio de un idioma extranjero, el conocimiento de la comunicación intercultural tiene un lugar especial en la comunicación con representantes de varios países. Cada nación tiene su propia historia de desarrollo, mentalidad, forma de vida v costumbres. La correcta aplicación de las reglas y leyes de la etiqueta del lenguaje conduce a un resultado favorable y óptimo de la comunicación entre los interlocutores. La etiqueta de "dar la bienvenida a los invitados - 好客 / hàokè" en los idiomas kazajo y chino se refiere a un conjunto de etiquetas basadas en antiguas costumbres y tradiciones.

**Palabras clave:** código nacional, linguacultural, costumbre, saludo, etiqueta, comunicación, mentalidad, fenómeno.

<sup>&</sup>lt;sup>76</sup> Ph.D. Acting Assistant Professor Al-Farabi Kazakh National University Oriental Studies Faculty, Republic of Kazakhstan.



<sup>&</sup>lt;sup>75</sup> Ph.D. Al-Farabi Kazakh National University, Oriental Studies Faculty, Republic of Kazakhstan.

#### Introduction

The national identity of any nation develops and is formed through language and is passed down from generation to generation through language. The research problem is the intercultural communication as a linguistic connection between Kazakh and Chinese people. This is because the communicative function of language plays an important role in society. The effectiveness of language communication between people is closely linked to the level of speech, culture and behavior of the people in that society. And in order to communicate with people of other nationalities in a foreign country, it is necessary to know the customs and traditions of the people rose in that country. The research focus is to analyze the language etiquette that greetings, farewells. thanking. congratulations, acquaintances, apologies and other norms in Kazakh and Chinese culture. Researchers of etiquette in a number of countries have claimed that the study of linguistic communication can lead to difficulties in language communication due to the cultural differences of nations. The research aim is to study the concept of of meeting guests - 好客 / hàokè of the Chinese and Kazakh peoples; to take into account the similarities and differences in the mentality and traditions of the Kazakh and Chinese peoples; to analyze the language etiquette used when meeting guests with Kazakhs and Chinese, to reveal the issue of the tendency to preserve traditions in the described cultures.

In this context was conducted a typological analysis from the perspective of ethnolinguistic, cognitive linguistics, psycholinguistics, and linguistic in the context of Kazakh/Chinese culture using the example of the study of the tradition of meeting guests - 好客 / hàokè. Research questions: to show the national mentality as well as Kazakhs and Chinese the peculiarities essence, to emphasize hospitality in these two cultures; to point out similarities, as well as differences in the mentality and traditions of Kazakhs and Chinese: to analyze the peculiarities of the tendency to restore ancient traditions, their original basis and essence in both cultures.

#### Theoretical Framework or Literature Review

Emphasis on teaching the culture of speech was first made by Protagoras of Ancient Greece by founding the art of oratory (Kizi, 2022). In addition, this problem was developed in parallel in Egypt, Assyria, Babylon and India. Kazakh

ethics developed thanks to the contribution of Korkyt, his philosophy, precepts, proverbs are a model for all Turkic peoples. A great number of scientists analyze socio-ethical issues, namely the concepts of mercy, kindness, conscience, wisdom and humility in Kazakh culture from a philosophical point of view. Many Chinese Suas authors continue the legacy of the great thinker of ancient China, Confucius (551-479 BC), continuing the analysis of human personality. In general, linguistic and cultural studies are a separate interdisciplinary direction that was established in the 90s of the 20th century. This subject consists of the «dialogical» or cognitivepragmatic richness of language and culture. The Kazakhs and Chinese etiquette is the main topic of research in order to understand the culture's essence (Ibraimova, 2022). Kurkina & Sternin (2018) suggest that any language consists of a unique system of symbols of the nation; the national feature of language etiquette is the features of the traditions of the nation. Whereas Leyla & Diyora (2021) noted that from the moment a person opens the door to the world, he hears the sounds of the future native language, as well as the language, the environment, the society he belongs to, and is filled with the information of its culture, value system, morals, and actions. Kazakh scientist Sakaeva (2018) mentioned that the rules of language etiquette contribute to successful and harmonious communication. In this context the researcher Morphy (2020) underlines that the main indicator of national identity is the main part of the Kazakh spiritual culture, etiquette is the quintessence of the Kazakh mentality. The life, history, psychology, customs and way of life of the people are clearly visible in that language. In addition, Xafizovna (2021) noted that language etiquette is a stable form of language communication formed by the culture, mentality and traditions of the people. Ge (2022), a researcher of Chinese etiquette, considered language etiquette to be the key to the establishment of social harmony in the country, the establishment of a civilized and polite language, the bridge of thoughts and feelings used in all spheres of social life. From the opinions of researchers, one can see that the role of language etiquette in human society is important, but also closely related to the traditions, nature, culture and way of life of the nation.





#### Methodology

Research methodology In the course of writing the article, analysis, description, historical, comparative and empirical research methods were used in relation to the peculiarities of the «welcoming the guests» etiquette in the Kazakh and Chinese linguoculture. The methods of analysis were used while working related scientific works, the description was used in examples data, historical analysis helped to understand the cross cultural ties between two different cultures, comparative and empirical as well as social research was kept during the two cultures comparison depending on the specifics of the concept of «welcoming the guests - 好客/ hàokè» in the Kazakh and Chinese languages. In addition. the theory and practice of communication in the field of sociology, linguistics related to the problems of human relations were considered. The main research method is descriptive and verbal-communicative methods. Using these methods, one conducted a study to identify similarities and differences between the etiquette of the Kazakh and Chinese peoples in terms of national traditions and mentality, and represented a number of examples.

#### Results and Discussion

The norms of etiquette in any nation are based on the national history, culture and traditions of the people, the factors of life. That is, the topic of etiquette is closely related to the way of life and environment of the people, lifestyle or the sciences of history, geography, ethnography, cultural studies, linguistics, theology, sociology and philosophy. Therefore, this topic requires interdisciplinary research.

The topic of etiquette in society dates back to ancient times. The reason for its emergence is based on the moral principles of «mutual respect» in society. From ancient times, people have believed in the existence of supernatural powers, such as gods, demons, and ghosts, and worshiped God. At the same time, they were sacrificing for the sake of their descendants. The Chinese believed in the concept of «礼 立于 敬 而源于祭/Lǐ lì yú jìng ér yuányú jì» associated with ghosts, meaning that «the ceremony is based on reverence and begins with sacrifice». This is the meaning of the Kazakh saying, «People won't be prosperous, until the dead are satisfied». Respect for the ancestors means respect for the elders and our ancestors. On the basis of this we can see the etiquette of the Kazakh people, respect for the upbringing and child's respect for

the parents. And the worship of the ancestral spirit and obedience to God is the only manifestation of the national spirit and religion, traditions and etiquette of the Kazakh people. This tradition has long been ingrained in the customs and traditions of the Kazakh people and passed down from generation to generation. According to the ancient history of the Chinese people, in the 13th century BC, during the reigns of Yao and Shun in the ancient country of 华夏 / huáxià, family members, in particular, father's sincerity, mother's, brother's and friend's kindness, respect for the younger, respect for the elder, and five specific rules of honoring the child's father regulated communication and speech of family members (Du et al., 2019). He also expressed the love and respect of the tribesmen for each other during hunting and farming, based on these principles. From this period, the positions of rulers and subordinates, men and women in feudal society were determined by the rules of etiquette in accordance with the hierarchical order. Etiquette is used to establish or maintain a respectful and polite relationship between a person and society. The rules of etiquette cover all aspects of public life, in particular: greeting, farewell, giving thanks, hospitality, and traditions. The tradition of «welcoming the guests - 好客 / hàokè» has a special place in human life. However, the main reason for the study is the peculiarities, similarities and differences in the development of the Kazakh and Chinese peoples in accordance with the national history, language and mentality, customs and traditions.

Hospitality in ancient times emerged in particular, during the first community building, due to the needs for human life, hunting and other factors caused by grouping. The tradition of hospitality is a widespread public institution that provides hospitality and respect for guests (Eskazinova & Smagulova 2020).

Kazakhs and Chinese welcome guests with special enthusiasm, generosity, open arms, are loyal to friendship, and are kind and friendly people. The Kazakh and Chinese people have a long tradition of hospitality and want to spend any holiday with their families and relatives. However, there are similarities and differences in the hospitality of these nations. It can be said that almost all types of language etiquette are used in the etiquette of hospitality in the Kazakh and Chinese societies.

Linguistic communication is carried out within the given components. The addressee composes a certain text and sends a message, and the

addresser understands the text, that is, receives the message (Jalilbayli, 2022). The addresser understands and accepts the meaning of the text. And the text is the connecting part between the addresser and the addressee (Erton, 2020). This is because through the exchange of ideas, people in society can share their ideas and thoughts, use the circles and methods of greetings in accordance with ethnic traditions, and further develop the theme of dialogue, combining

languages and skills. In particular, in the process of language communication between the host (addresser) and guests (addressee) - language norms of invitation, greeting, farewell, giving thanks, apology, giving a present, and congratulation are fully realized. The language etiquette in relation to the tradition of welcoming the guests - 好客 / hàokè» can be divided into three categories (Tab. 1):

**Table 1.** *Etiquette categories* 

Categories of «welcoming the guests - 好客 / hàokè» in Kazakhstan:

- 1. Norms of language etiquette for welcoming guests;
- 2. Norms of language etiquette used in the reception of guests;
- 3. Norms of language etiquette used when seeing off guests.

Source: Formed based on the author's analysis

The etiquette of welcoming guests develops depending on the internal and external factors of the population. For example, the Kazakh tradition of «welcoming the guests - 好客 / hàokè» appeared during the nomadic period. The Kazakh people welcomed visitors with great respect and hospitality. The Kazakh tradition of welcoming guests is based on improving the relationship between brothers, relatives, in-laws, friends, peers, based on morality and humility, increasing solidarity and maintaining social integrity. The tradition of hospitality begins with the etiquette of welcoming a guest, that is, greetings and meeting, continues with wishes and ends with farewell.

Kazakh tradition of welcoming the guests from linguoculturological point of view

Kazakhs have put special attention to the tradition of «welcoming the guests - 好客 / hàokè» from ancient times. The addressee, that is a host, when the guest comes to the house, he interprets it as «when a guest comes, a prosperity comes», «God will deliver the guest's share», «if a good guest comes, a sheep has twins» - One can see the special attention Kazakh people paid to the tradition of welcoming guest in an excerpt from the poem «Kazakh and Guest» by Kadyr Myrzaliev:

The life spent without guests and celebrations is not a life for Kazakh people. This is your Kazakh elder brother and brother. He dreamed of free society.

It is a burden for him to leave among people and not to communicate with them (Kadyr, 2005).

In this poem we can see that the Kazakh people uphold and glorify the tradition of hospitality. The hospitality culture of the Kazakh people is rich in traditions. In Kazakhs, the types of guests are divided into «God's» and «special». An uninvited or traveling guest is called a guest of God, and a guest invited to a party is called a special guest. The Kazakh people welcomed any guest with open arms. And special guests are invited by the hosts because of the joy in the family. The Kazakh people are very rich in traditions. Since the Kazakhs opened the door to the world, they had special celebrations such as «childbirth celebration», «cutting the cord», «circumcision», «first word», «wedding», «birthday», «anniversary», «housewarming» and continue to celebrate it nowadays.

The Kazakh people have always considered the shanyrak, the threshold and the cradle sacred. This is because the house starts from the threshold, and rises with shanyrak, and grows generations in the cradle. The house where one makes fire is a holy place for him. Therefore, respect for one's home begins with greeting the family. For example:

If you greet a guest By shaking his hand, It is the first sign of honor. And if you offer him bid-rains, This is the second sign of honor. And if you open the door





And lay the blanket,

This is the third sign of honor - said Aidabol poet (Akhmetova, 2005).

The tradition of welcoming the guests for Kazakh people starts with «greeting» etiquette. In the process of language communication the host, that is an addresser not only applies the rules of receiving guests, but also uses linguistic norms of «welcoming the guests – 好客/ hàokè» and says «Welcome!» «Make vourself at home! ». «Sit at the table», «Let your steps fill with light», «Let every step you made fills with flowers», «Was it a tiring journey? », «Did you encounter any problems? ». One of the reasons for this communication is to make guests feel comfortable. And the guests as addressees express their satisfaction spending on the reason for celebration in the following ways: «Congratulations!, Let your intentions be

positive!» on a child birth — «Let a baby be strong!, Let he be a big man!», «I wish him good health!», «Be happy!»; for the child's joy — «Dream big!, Live long!», «Let him be a significant citizen of his country and his people»; — for a wedding — «Let the married couple be happy!», «Let them have grandchildren»; for house warming — «Let your house be full with children and wealth», «Let your house be full of joy!»; on an anniversary — «Live long!», «Let you live a long life!».

And the Chinese are people who have lived a sedentary lifestyle since ancient times, and lived their lives based on their own experience and work. In China, the custom of «Welcoming the guests - 好客 / hàokè» originated in the time of Confucius, and the Chinese still follow this rule. There are several functions linguistic etiquette has in people's communication in society (Tab. 2):

**Table 2.** *Etiquette categories* 

#### Categories of «welcoming the guests - 好客 / hàokè» in China:

- 1. To establish a connection. Linguistic etiquette leads to acquaintance with the interlocutor, his attention, communication, collection of some information;
- **2.** To keep the communication going. It leads to the functions in the modern society such as giving thanks, apologizing, greeting, requesting which are necessary for communication in modern society;
- **3.** To order the actions of people in society. They oder the linguistic communication among people and display their roles in society

Source from: (Meirmanova, Khatran & Kabdoldina, 2020)

A common feature of these functions is that they do not cause embarrassment or tension between people in society through the application of the rules of etiquette, and, if possible, a peaceful solution, Usmanova, S. (2022). It is also true that language is a mirror of the worldview, customs and traditions, religion and culture of the people, the nation. In the field of linguistics, language is considered not only as a means of communication, but also as a form of informing about the history, customs and culture of each nation or people.

Chinese tradition of welcoming the guests from linguoculturological point of view

From ancient times, the Chinese have associated national values with verbal communication between subjects. The role of the «principle of respect» in Chinese culture in language communication is very important. Etiquette should be based on strengthening the friendly relationship between the communicator and the recipient. In ancient times, Zhao Gong's ritual

record states, When Zi Tai Shu saw Zhao Jian Tzu, he asked him about the ceremony of greeting and communicating with each other. He says it is an official tradition, not a ceremony.

«Excuse me, what is the ceremony? » - The late Dafu Tzu Chan said, «The ceremony is based on the movement of the sky, the order on earth and the actions of the people». If the movement of the sky and the earth is in constant motion, and the people follow it as an example, they will live in harmony. And if they are used inappropriately, then everyone's place will change and the people will lose their natural qualities (Erton, 2020). According to many researchers, the traditions of ancient society are based on the principles of ethics and procedure. In order to increase the compatibility of communication between people, it is necessary to follow the code and criteria of language communication. This is because in the process of communication, a person with a pure heart is friendly to the interlocutors.

The Chinese people are a hospitable nation. If we explore Chinese proverbs on hospitality such as «重要的客人最好的位置 / Zhòngyào de kèrén zuìhǎo de wèizhi – An importan geust takes an honorable place», «有朋自远方来,不亦乐乎? / Yǒu péng zì yuǎnfāng lái, bù yì lè hū? – Won't you greet your best friend with ajoy after a long journey?" or «客人越多,新闻越多 / Kèrén yuè duō,xīnwén yuè duō – The more guests you welcome, the more news you have», we will see the high respect for guest.

The Chinese should agree with the host in advance before visiting, only the best friends can be visited by people without a special invitation. And if you can't go, you need to warn the homeowners. Before crossing the threshold, it is necessary to knock on the door and wait for the hosts to greet those (Bikmullina & Zamaletdinov, 2020). Homeowners carefully prepare for the reception of guests. And if the guest crosses the threshold for the first time, they should get acquainted with family members. Hosts that are addressers greet the guests the following way - « 你们好! / Nimen hǎo! – Hello!», «欢迎,欢迎! / Huānyíng, huānyíng! -Welcome! ». Or «我们 欢迎你们!/Wŏmen huānyíng nǐmen! – Welcome! », «请进! / Qǐngjìn! – Come in!», « 见到你 我们很高兴! / Jiàndào nǐ wǒmen hěn gāoxìng! – I am glad to see you! », «路上辛 苦了吗? / Lùshang xīnkǔ le ma? - Was it a tiring journey? », «诸位请入席! / Zhūwèi qǐng rùxí! -Please, take your seats! », «请就坐吧! / Qǐng jiùzuò bā! - Have a seat! », 《希望你能感 觉象在自己家里一样! / Xīwàng nǐ néng gănjué xiàng zài zìjǐ jiā lǐ yīyàng! – Make yourself at home!», «请您坐舒服些; 请随便 坐! / Qǐngnín zuò shūfu xiē; Qǐng suíbiànzuò! – Please feel free! » (Konyratbayeva et al., 2021). These traditions are a special tribute of the hosts to the guests, that is, a special care for the guests to feel at home. There are the other usual ways of greeting «你们好! /Nimen hǎo! - Hello!», «早 上好!/ Zǎoshanghǎo! - Good Morning!», «晚 上好!/ Wănshàng hǎo! — Good Evening!», « 不要客气!/ Bùyào kèqi! - Make yourself at home!». And the guests, that is addressees reply to hosts: «你们好! / Nǐmen hǎo! - Hello!», « 谢谢! / Xièxie! - Thank you!», «我也很高 兴同你们见面!/ Wǒ yě hěn gāoxìng tóng nǐmen jiànmiàn! - I am glad to meet you!» and shake hands (Pae et al., 2021). In the given situations we see that the norms of etiquette take place in the process of communication between the communicators.

According to Mamasheva et al., (2021) Kazakh hospitality is highly valued not only by our writers, but also by other people. Zogg (2019) described Kazakh people as people that will feed the guest even if they are hungry themselves and will give the last piece of meat to them, is very hospitable and hungry Kazakhs. Zohirjonovna (2022) noted that Kazakhs are not only brave, but also humble to strangers, and consider it a great shame to offend a guest. Sinologists share their thoughts about China and their national features of communication. Having compared the national characteristics of the Kazakh and Chinese peoples described in the researcher's work, the etiquette is closely related the sciences of psychology ethnolinguistics, especially the researcher was able to describe the Kazakh people's hospitality and sincerity despite any hardships they experience, and the Chinese people's try to achieve their goals by smiling and talking. From this one can see the peculiarities of the national identity of peoples formed between society and the individual. In this context (Bondarenko et al., 2021) underlines that after welcoming the guests, the rules of language etiquette between the host and the guest, that is the addresser and the addressee, are further implemented. The Kazakh people, like the Chinese, have paid special attention to hospitality, trying to entertain guests by placing them at the table. However, the most important place for Kazakh guests is the table. From ancient times, the table was the «educational school» for every Kazakh shanyrak. According to the Kazakh tradition, respect for adults has a special place. In this regard, first adults and then young people sit at the table. According to Kazakh etiquette, young people do not reach for the table unless an adult starts eating. In comparison with the Kazakh tradition which is based on ancient ancestral traditions. writes that the Chinese follow the Confucian trend, gathering with family members to share good news and taste meals. Du et al., (2019) analyze the ritual of drinking tea in everyday life and at celebrations, in China. Hospitality is a linguistic expression of the traditions, national values and culture of each nation. The peculiarity of the Kazakh people from ancient times in hospitality is their cheerfulness and generosity. Kazakhs warmly welcomed the guest. This quality of the Kazakhs is in the fact that the ancestors brought up the child in a pluralistic way. Because the Kazakh people never knew how to be separated, no matter what decision they made and planned, they consulted with their relatives. This quality is passed down from generation to generation at the genetic level, which is unique to the Kazakh people. From this



we see that behavioral stereotypes affect the nature and mentality of the nation. In addition, the Kazakh people warmly welcomed and escorted guests at any time, no matter how many people came (Eskazinova & Smagulova, 2020).

Although the Kazakh and Chinese traditions of hospitality are similar, there are many differences. For example, the Kazakh and Chinese people's wish their congratulations and best wishes to the owners of joy. This tradition is also preserved in the Kazakh people. However, in addition to the good wishes of the Kazakh people, the tradition of «blessing» is a tradition of heartfelt gratitude and appreciation, which has been preserved since ancient times. Blessings come in many forms. In this context Ge (2022) describes how Chinese people welcome their guests. They do it thoroughly and at the same time they are good listeners. However, the Chinese people differ from the Kazakh tradition of «steppe etiquette» - they follow the culture of Confucius, among other things, in welcoming, and the main purpose of the teachings of the Great Philosopher is to promote moral and ethical values. However, the Chinese do not lack the ability to listen carefully to guests and try to get interesting information from them. The Chinese tradition of morality is considered to be the main way for people to achieve personal success, self-development, social harmony and cultural achievements (Ibraimova, 2022). In Kazakh nation, the host does not separate the guests and treats them regardless of their color or position. The guest in both Kazakh and Chinese nations should know the rules of being a guest; it can be seen from the meaning of the Chinese proverb «入乡随俗 / Rù xiāng suí sú». And there is a similar Kazakh proverb «A guest rules a bad house». Although the history and origins of the life and works of the two peoples are different, it is clear that their concept and outlook on life are the same. In other words, this is evidence that the guest who came to the house was modest and timid.

#### Conclusions

All types of etiquette language cause the occurrence of sciences such as ethnolinguistics, cognitive linguistics, psycholinguistics and lingua cultural studies by taking consideration the people who speak that language and their history, everyday life activities and culture, their spiritual soul reflected in customs and traditions passed from generation to generation, mentality and history. In the study of the tradition «Welcoming the guests - 好客 / hàokè» one discussed the national mentality and

essence of the Kazakh and Chinese people, the peculiarities of hospitality. In the study of the concept of «hospitality - oke / haoke» of the Chinese and Kazakh peoples, we considered that the Kazakh and Chinese peoples have similarities as well as differences in mentality and traditions. While studying the topic, we saw that the Chinese are different from the Kazakhs in welcoming the guests. In other words, we considered the language norms used in the etiquette of the Kazakh and Chinese people in the etiquette of greeting, welcoming, respecting, honoring, thanking, and saying goodbye to guests. A common issue in the mentality of the Kazakh and Chinese people is the importance of knowing their role, the role of the young and the old, the young and the senior. In contrast, the Kazakh «hospitality» tradition is a legacy of steppe civilization, passed down from father to son. The Kazakh people divide the guest into several types: special guest, god guest, relative guest and uninvited guest. However, the Kazakhs welcomed any guest with open arms. In this regard, the language etiquette used in welcoming guests of the Kazakh and Chinese people is different. This is because the language norms of «welcoming guests - 好客 / hàokè» are based on national traditions. And tradition is a complex phenomenon formed in society. Tradition is a phenomenon that has been formed and developed over the centuries, based on the principles and laws of any nation. Every nation must not only preserve the cultural heritage and traditions of its nation, but also further develop it. However, over time, these traditions have their own features and are renewed, but they must not lose their original basis and essence.

#### Bibliographic references

Akhmetova, Z. (2005). The Ethics of Steppe. The Memories about Baurzhan Momyshuly. Almaty: Bilim Publishing, 13, 142A.

Bikmullina, E. R., & Zamaletdinov, R. R. (2020). Linguocultural analysis of the most common greetings in the Russian, Tatar and Chinese languages. International Journal Criminology and Sociology, 9, 844-849. https://doi.org/10.6000/1929-4409.2020.09.83

Bondarenko, A., Semashko, T., & Moroz, O. (2021).Axiological density linguocultural concept. Linguistics and Culture Review, 5(1). https://doi.org/10.21744/lingcure.v5n1.1519

Du, H., Chen, A., Chi, P., & King, R. B. (2019). Person-culture fit boosts national pride: A cross-cultural study among 78 societies. Journal of research in

- personality, 81, 108-117. https://doi.org/10.1016/j.jrp.2019.05.008
- Erton, İ. (2020). Linguistic and cognitive aspects of translation and interpretation skills. Journal of Language and Linguistic Studies, 16(4), 1910-1920. https://doi.org/10.17263/jlls.851022
- Eskazinova, Z. A., & Smagulova, G. N. (2020). Ethnolinguistic significance of comparing human character with nature in Kazakh and English. Bulletin of the Innovative Eurasian University, 4, 18-23. https://doi.org/10.37788/2020-4/18-22
- Ge, Y. (2022). The linguocultural concept based on word frequency: correlation, differentiation, and cross-cultural comparison. Interdisciplinary Science Reviews, 47(1), 3-17. https://doi.org/10.1080/03080188.2021.1946 743
- Ibraimova, A. (2022). Linguistic features of "greeting" etiquette in Kazakh and Chinese languages. Journal of Oriental Studies, 100(1), 14-21. https://doi.org/10.26577/JOS.2022.v100.i1.0 2
- Jalilbayli, O. B. (2022). Forecasting the prospects for innovative changes in the development of future linguistic education for the XXI century: the choice of optimal strategies. Futurity Education, 2(4), 36–43. https://doi.org/10.57125/FED.2022.25.12.0.
- Kadyr M. A. (2005). Kazakh and Guest. Selected. Two-volume works. 1st Volume. Poems and Epos. Almaty: Jahushi, 11, 201.
- Kizi, S. B. Y. (2022). Linguo-cultural characteristics of speech etiquette occurring in discourse. Current Research Journal of Philological Sciences, 3(11), 59-63.
- Satemirova, Konyratbayeva, Z., D., В., Abdualyuly, Kenzhalin, K., & Akazhanova, A. (2021). Eastern and Western Linguocultural Map: Similarities Peculiarities (Based on Linguocultural Research). International Journal of Society, Culture & Language, 9(2), http://www.ijscl.net/article 246570 4aee18b c09a9c4364df5dc066e1a2e68.pdf
- Kurkina, A. S., & Sternin, I. A. (2018). Communicative behavior and communicative personality of language speaker. Scientific Journal Modern Linguistic and Methodicaland-Didactic Researches, 3, 86-101.
- Leyla, K., & Diyora, S. (2021). Comparative Analysis of the usage of Concept" Hospitality" in Materials of English, Russian and Uzbek Languages. American Journal of Social and Humanitarian Research, 2(9),

- 20-24.
- https://www.globalresearchnetwork.us/index .php/ajshr/article/view/600/495
- Mamasheva, O., Madmarova, G., Abytova, G., Berdibekova, B., Bolotakunova, G., Ormokeeva, R., ... & Abdullaeva, Z. (2021). Reflection of Nations Mentality in the Kyrgyz, Russian and English Language Phraseological Units. Open Journal of Modern Linguistics, 11(01), 24. https://doi.org/10.4236/ojml.2021.111002
- Meirmanova, G. A., Khatran, D., & Kabdoldina, G. A. (2020). The Transformation of the Hospitality Etiquette of the Kazakhs. Ethnographic Review, 2, 153-167.
  - https://doi.org/10.31857/s086954150009609
- Morphy, H. (2020). Becoming art: exploring cross-cultural categories. Routledge. https://doi.org/10.4324/9781003135579
- Pae, H. K., Sun, J., Luo, X., Ai, H., Ma, F., Yang, N., & Xia, D. (2021). Linguocultural cognition manifested in spoken narratives in L2 English by native Chinese and Korean speakers. Journal of Cultural Cognitive Science, 5(3), 345-365. https://link.springer.com/article/10.1007/s41 809-021-00088-3
- Sakaeva, L. (2018). Methodological bases of conceptology: features and structure of the linguo-cultural concept. Revista san gregorio, 23, 100-107. https://dialnet.unirioja.es/servlet/articulo?co digo=6587469
- Usmanova, S. (2022). The importance of nonverbal intercultural means in communication. ACADEMICIA: An International Multidisciplinary Research 12(5), 1244-1252. Iournal https://doi.org/10.5958/2249-7137.2022.00597.3
- Xafizovna, R. N. (2021). The category of politeness in different linguocultural traditions. ACADEMICIA: an International Multidisciplinary Research Journal, 11(2), 1667-1675. https://doi.org/10.5958/2249-7137.2021.00566.8
- Zogg, B. (2019). Kazakhstan: A centrepiece in China's belt and road. CSS Analyses in Security Policy, 249. https://doi.org/10.3929/ethz-b-000362184
- Zohirjonovna, G. Z. (2022). Methodology and types of linguocultural analysis. ACADEMICIA: An International Multidisciplinary Research Journal, 12(11), 152-155. https://doi.org/10.5958/2249-7137.2022.00863.1





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# Impact of communication competencies, job requirements and Academic performance on students' career development at the University of Hail, Saudi Arabia

تأثير كفاءات الاتصال ومتطلبات الوظيفة والأداء الأكاديمي على التطور الوظيفي للطلاب في جامعة حائل بالمملكة العربية السعودية

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Written by:

**Serhan Abdullah Alshammari**<sup>77</sup> https://orcid.org/0009-0005-5468-2128

الملخص:

Among the strategic competencies that will provide value to university students over the course of their career development plan are those that are relevant to both the needs of employers and the success of students in the classroom. This aims to examine how students' communication skills, job requirements, and academic performance at the University of Hail, Saudi Arabia, affect their professional career development. An online survey was used to obtain the data collected for this study, which was then analysed with SPSS version 25 using multiple linear regression, making it a quantitative study. 210 students from Saudi Arabia's University of Hail were randomly selected to participate in this study's sample. Findings indicate that two of the three independent variables significantly affect the dependent variable. Therefore, a student's career development is significantly impacted by both job requirements and students' academic performance, while communication competencies are not.

**Key word:** communication competencies, job requirements, Students Academic performance, career development, University of Hail, Saudi Arabia.

#### Introduction

An enormous amount of educational development is currently being carried out in order to realise the Kingdom of Saudi Arabia's lofty 2030 vision (Jenkins, 2023; Nurunnabi,

من بين الكفاءات الاستراتيجية التي ستوفر قيمة لطلاب الجامعة على مدار خطة التطوير الوظيفي الخاصة بهم تلك المتعلقة باحتياجات أصحاب العمل ونجاح الطلاب في الفصل الدراسي. تهدف هذه الدراسة إلى دراسة كيفية تأثير مهارات الارصال لدى الطلاب، ومتطلبات الوظيفة، والأداء الأكاديمي في جامعة حائل بالمملكة العربية السعودية على تطور حياتهم المهنية. تم استخدام استطلاع عبر الإنترنت للحصول على البيانات التي تم جمعها لهذه الدراسة، والتي تم تحليلها بعد نلك باستخدام SPSS الإصدار 25 باستخدام الانحدار الخطي المتعدد، مما يجعلها دراسة كمية. تم اختيار 210 طالباً من المتعدد، مما يجعلها دراسة كمية. تم اختيار 210 طالباً من الدراسة. تشير النتائج إلى أن اثنين من المتغيرات الثلاثة المستقلة تؤثر بشكل كبير على المتغير التابع. لذلك، يتأثر المستقلة تؤثر بشكل كبير بمتطلبات الوظيفة والأداء الأكاديمي للطلاب، بينما لا تتأثر كفاءات الإتصال.

الكلمة المفتاحية: كفاءات الاتصال، متطلبات الوظيفة، الأداء الأكاديمي للطلاب، التطوير الوظيفي، جامعة حائل، المملكة العربية السعودية

2017). The strategy, which was first set in 2016, aimed to reduce the country's reliance on oil imported from other countries while simultaneously making private investments in

<sup>&</sup>lt;sup>77</sup> Department of Management and Information Systems, college of Business Administration, University of Ha'il, Hail, Saudi Arabia.



the source of a key driver of economic expansion and job creation (Moshashai et al., 2020). A prosperous and progressive vision is envisioned, one in which people play a central role in driving both economic development and social progress. The Saudi government established a variety of programmes and national strategic plans for the universities to put the vision into reality and bring the country closer to its aims (Jenkins, 2023; Faqihi & Al-Ababneh, 2022; Nurunnabi, 2017). These were made to aid the country in accomplishing its objectives and realising its vision. Therefore, to prepare Saudi Arabian graduates for this new era of rapid change and innovation, it is essential to foresee the communication skills, job requirements, and academic programmes they will need to develop. This massive societal and economic shift, along with the rapid development of new technologies and the arrival of the fourth industrial revolution. has set the stage for an era when it will be essential to deal with unprecedented rates of change and innovation.

However, there is much disagreement among policymakers, business leaders, and academics regarding the future of the labour market and how it will be affected by the rapid changes brought on by technological breakthroughs (Acemoglu & Restrepo, 2020; Arntz et al., 2019). The advances that are being fuelled in fields such as the Internet of Things (IoT), artificial intelligence (AI), cloud computing, and big data are what are fueling the fourth industrial revolution. These developments, along with others, will make it possible to develop new career paths in the future (Kurt, 2019). As an order, companies must invest in their employees' competency development in preparation for the next industrial revolution. It is widely acknowledged that the academic programmes that students enrol in, as well as their ability to communicate effectively and satisfy the requirements of their competencies, are major factors in a country's economic success. Levesque-Bristol et al., (2019) have studied student career development with the aim of developing future-planning models and visions for the field. In addition to expanding the significance of the students' career development as a strategic component of policy development at the national and organisational levels that can be evaluated using the numerous published papers and technical reports available in the literature. Nghiem et al., (2023) conducted a study on the competencies that college students need to develop to successfully navigate the evershifting landscape of the business world. Similarly, Petruzziello et al., (2023) investigated

disparities in skill-set requirements for future career development and found that employers' wage levels were significantly correlated with the level of employees' cognitive and social Touahmia et al., (2020) talents. Sonnenschein & Ferguson (2020) have examined the communication skills, professional needs, and academic programmes available in Saudi Arabia's universities. Despite the fact that there is an ever-growing body of research dedicated to the topic of the jobs of the future (Autor, 2019; Howcroft & Taylor, 2022). Universities in Saudi Arabia are currently being driven by the Saudi Vision 2030 within the context of a national momentum. The Saudi Ministry of Education is investing in this line of inquiry to better understand the skills, knowledge, and attitudes students will need in the workplace and in the classroom in the future (Jenkins, 2023; Moshashai et al., 2020). The funding is intended to facilitate strategic responses and close the gap between the demand for and supply of appropriate talent.

Therefore, this research aims to provide insights into the future communication competencies, job requirements, and academic programmes that Saudi Arabian universities will need to implement to meet the demands of the new labour market. The study's goal is to build a theoretical foundation for anticipating the skills, knowledge, and abilities in communication that will be needed in the workforce and in educational settings. This forecasting will be grounded in an analysis of the Saudi Vision 2030 objectives, with the sole aim of educating Saudi universities and other relevant policymakers on how to prioritise educational and training investments for maximum return on human capital development. Furthermore, the study's findings are expected to have significant implications for the Saudi government, businesses, and academics as they work to address the skills gap that has emerged as a result of labour market shifts.

#### Literature Review

## **Effect of Communication Competencies on Students' Career Development (SCD)**

Competition among enterprises has intensified with the advent of globalisation (Abels & Bieling, 2022), and advances in information technology have altered the very character of work itself (Rantšo, 2022). There are two primary effects that these alterations will have on both graduates and universities. Graduates, for instance, anticipate that the degree programmes



they choose at their various universities will adequately prepare them for the world of work, while employers, for their part, anticipate that graduates will make a seamless transition to effective performance in their respective professions upon graduation. According to Deveci & Wyatt (2022), universities list interpersonal and Communication Competencies as the most important qualities for graduates to possess. Furthermore, Deveci & Wyatt (2022) and Prada et al., (2022) claim that effective communication is essential for achieving one's professional goals.

Because of this discrepancy, it is clear that the literature fails to accurately reflect the gap between graduates' ability levels and the requirements of effective corporate communication. For instance, Goulart et al., (2022) observe that the skills taught in written communication are often different from those necessary in the industry. Additionally, they believe that it is impossible to develop transferable communication skills that can be used in any work setting, as the specific skills required for written communication vary from business to business. Communication is one of the graduates' least developed skills, but Siddique et al., (2022) argue that the graduates' written communication skills are not nearly as terrible as is typically believed. Despite the fact that Siddique et al., (2022) concluded that improving written communication interpersonal skills was a study of the curriculum for the relevant course, he observed that graduates lacked these skills. In order to keep education relevant to the needs of the labour thev call for the inclusion communication skills within the curriculum at all levels. As many authors have stressed, establishing an evaluation of the use of communication skills is crucial to informing and enabling successful teaching and learning in higher education.

For instance, several studies in Saudi Arabia have focused on the significance of developing communication skills and how universities view the attributes of recent graduates. However, the views of graduates, and particularly Saudi Arabian graduates, have received very little research attention (Alharbi, 2022). Graduates' perspectives and reflections on their use of the attributes of excellent communication skills, which should be taught in higher institutions, are important to study because of the disagreement between various stakeholders regarding the manifestation of these attributes in the workplace

(Alharbi, 2022; Sheerah et al., 2022; Bhatti et al., 2022).

Similarly, it's vital to examine the effects of utilising this crucial graduate attribute upon entry into the Saudi Arabian labour market, along with the varying needs of employers in this area. Betti et al., (2022) insist that universities put more emphasis on helping students develop their "soft skills" rather than just their "hard skills," since the former is not enough to get a good job on its own. It's true that there's a lot of disagreement over which specific skills are necessary, but nobody disputes the value of being able to communicate effectively. Research shows that excellent communication is either a top priority for organisations when hiring recent college graduates or is highly regarded as one of the most important skills for workers in general. Although studies have highlighted the importance of verbal, written, and interpersonal skills, AlKhamaiseh (2022) have shown that employers typically place a higher priority on one skill set than the others. For instance, Priyadarshini (2022) argues that communication is an important interpersonal skill and states that oral communication skills which are arguably the most important skill, is always consider to be the ability to articulate and present ideas to a wide audience. Because of this, the following hypothesis is offered for consideration:

H1: There is a significant relationship between Communication Skills and students' career development at the University of Hail, Saudi Arabia.

#### Effect of Job requirement on Students' Career **Development (SCD)**

Siddique et al., (2022) have been published in the graduate job requirements literature, and they focus on the topic of preparing students for the job market. Some of these studies relied on questionnaires in order to determine if students' coursework prepared them for entry-level jobs (Braun & Brachem, 2015). Other graduates have employed a variety of studies, including student work, focus groups, and interviews with business professionals. In an even more substantial corpus of research, Weligamage & Siengthai (2003) have drawn on a wide variety of primary and secondary sources to make their suggestions for the change of graduate job requirements.

Pefanis Schlee & Harich (2010) and Venable (2010) have also been conducted to learn how the Internet and other technologies have altered the traditional steps for getting a job after college.

Despite a variety of studies indicating an increase in the quantitative character of professions, studies of basic job requirements have found that university graduates typically lack the quantitative skills required for the workplace. Importantly, Schlee & Karns (2017) and Pefanis Schlee & Harich (2010) have suggested strategies for improving students' quantitative abilities in a wide variety of ways. However, Gray et al., (2005) discovered that quantitative skills are valued more highly by companies. The biggest challenge in meeting this primary criterion is that many students seem to have chosen the area due to a lack of quantitative skills and, as a result, eschew instruction that is numerically focused whenever practicable. Therefore, if university students realise the significance of analytical skills in the business sector, they may feel forced to develop their quantitative analysis skills. This leads to the following speculation:,

H2: There is a significant relationship between Job requirement and students' career development at the University of Hail, Saudi Arabia.

# Effect of Student academic performance (SAP) on Students' Career Development (SCD)

Student academic performance (SAP) is the most prevalent indication of achievement in the context of professional development, and it is one of the most important criteria in determining how successful graduates were in their educational pursuits (Özlen & Arnaut, 2013). When it comes to career advancement in the workforce, a student's academic success is one of the most important factors to take into consideration. Douglas & Gammie, (2019) pointed out that, Qualifications, technical skills, and non-technical skills are some of the other aspects of the student's future profession that are taken into consideration during the process of career development. Thus, according to Ganyaupfu, (2013), the academic achievement of students is a valuable predictor for companies to use in the early stages of selection when they are trying to decide whether or not to recruit an individual.

Gamlath, (2022); Harrington, (2022): Lent et al., (1986) and has discovered a connection between the academic success of university students and the way in which they go about developing their careers. A strong association between students' anxieties about their future careers and their academic performance was discovered in a study

that was carried out by El Ansari et al., (2017) among undergraduates in Finland. The grade point averages (GPAs) of the students were calculated three times throughout the course of the academic year to provide the basis for the data used in that study. In the meantime, Ahmad et al., (2016) investigated the connection between the education that students receive at Yamen University's hospitality and tourism programmes and the preparations they make for their future careers. In accordance with the findings of the study, the extent to which a student's academic performance and careerpreparation behaviours influence the student's professional behaviour and learning significant.

In other words, a student's performance in the classroom was a factor in the ability they possessed to make choices concerning their future careers. However, earlier research conducted by Basri et al., 2018 and Salem et al., 2013) have demonstrated that there is only a tenuous connection between students' academic success and the advancement of their careers in Saudi Arabia. According to the findings, university students who have a better degree of academic success also have a higher level of occupational uncertainty and are more likely to be nervous and unsure about their future career development. Because the majority of them have not decided what they want to do with their lives in the future, they are typically more interested in the variety of professional paths open to them. When it comes to making judgements about their future careers, these students have a stronger sense of the need to investigate both potential careers and themselves. Conversely, students who have a lower overall academic achievement level are more likely to be anxious about choosing a future profession. Because of their poor academic achievement, individuals are more likely to seek the advice and direction of professionals in order to boost their sense of selfworth and confidence during the process of recruiting and selection. This underlines how important it is to recognise and appreciate the connection between a student's academic success and the progression of their career (see the conceptual model in Fig. 1). Given this, the following hypothesis is proposed consideration:

H3: There is a significant relationship between Student academic performance (SAP) and students' career development at the University of Hail, Saudi Arabia.



As a result, this paper delves into the reasons for and benefits of good communication skills, as well as their relevance to various professions and educational paths. The literature review delves into the most up-to-date topic of professional development. The literature further confirms the use of communication skills to conform to modern occupational standards and take part in educational programs, which provided the impetus for these lines of thought. The argument that it is important to pay attention to the importance of communication skills, job requirements, and academic programmes at universities is supported by this paper.

In addition to this, this paper also makes an argument in favour of expanded accessibility to resources in the areas of graduates' communication skills, job requirements, and academic programmes geared towards enhancing students' career development. In this paper, we consider the viability of several approaches to fostering better communication skills, job and academic requirements, programme

requirements for graduates of universities in Saudi Arabia; the usefulness of communication skills, job requirements, and academic programme requirements to universities; and the further development of communication skills, job requirements, and academic programme requirements. One primary goal of this study is to gain insight into the processes by which students at the University of Hail feel about the importance of employability characteristics, including communication skills, requirements, and academic programmes, as well as the development of these skills there.

#### Conceptual framework and Hypothesis

In regard to the previous research that has been conducted, this study makes a recommendation for a research conceptual model that has a total of four variables, of which one is a dependent variable and the other three are independent variables. As a result, the model serves as a foundation around which the survey can be built (Figure 1).

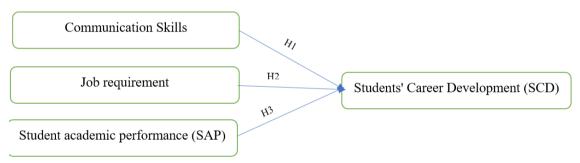


Figure 1. Conceptual framework Designed as compiled by the authors

#### Methodology

The questionnaires used to collect the data for this study were administered online through Google and sent over WhatsApp to several distinct student groups at the University of Hail in Saudi Arabia. And this technique has allowed for a more comprehensive collection of responses. The measurement scales for the variables of the study communication competencies (CCP), job requirements (JRQ), student academic performance (SAP), and career development (CDV) Were adapted from studies of previous research. To determine the degree to which respondents disagree or agree with the various statements presented in the various sections of the questionnaire, each of the statements was presented on a 5-point Likert

scale (ranging from strongly disagree to strongly agree). To this end, a total of 210 respondents participated in the online survey that was conducted by Google, and multiple regression analysis was carried out on the data using SPSS version 25.

#### Results

In the model summary seen in Table 1, the R value, which is considered to be the correlation coefficient, is shown to have a high value of 77.1% between students' academic performance (SAP) and job requirement (JRQ). This means that multicollinearity does not exist, indicating that the results are sufficiently good to proceed with further analysis.

**Table 1.** *Correlation* (The results of the analysis are from SPSS)

		CCP	JRQ	SAPS	CDV
ССР	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	210			
JRQ	Pearson Correlation	.617**	1		
	Sig. (2-tailed)	.000			
	N	210	210		
SAPS	Pearson Correlation	.648**	.777**	1	
	Sig. (2-tailed)	.000	.000		
	N	210	210	210	
CDV	Pearson Correlation	.512**	.708**	.627**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	210	210	210	210

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Communication Competencies (CCP), Job Requirement (JRQ), Students Academic Performance (SAPS) and Career Development (CDV)

The next step, which comes after the results of the correlation assumption test have been carried out and the overall results show that the regression model satisfies the assumptions, is to analyse and interpret the multiple regression model. This step follows the completion of the correlation assumption test results. The multiple regression model in this study was to examine the effect of the independent variables Communication Competencies (CCP), Job Requirements (JRQ), and Student Academic Performance (SAP) on students Career Development (CDV).

**Table 2.** *Model Summary* 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	.721 <sup>a</sup>	.520	.513	.71700			
a. Predictors: (Constant), SAPS, CCP, JRQ							

The coefficient of determination, often known as R square, is a statistical measure that can be used to assess how well the independent variables were selected for their ability to predict the dependent variable. It gives an explanation of how much variance there is in the dependent variable, which in this case is career development (CD), based on the regression line. When the value is higher, the regression line provides a more accurate description of the data. Table 2 displays that the regression model has a coefficient of determination of 52 percent (R square). This reveals that a change of one unit in each of the independent variables is responsible for explaining 52% of the variance in career development (CD) among college students in

Saudi Arabia. From the output display of the summary model shown in table 2, we may infer the following. First, the modified coefficient of determination is 0.513. This value indicates that the association between the three variables in the regression model is stronger as the adjusted R square increases. Secondly, it is possible to draw the conclusion that 72.1% of the students Career Development (CDV) variables can be explained by independent variables. These independent variables include communication competencies (CCP), job requirements (JRQ), and student academic performance (SAP). This means that, other variables that are not accounted for in the model can account for the remaining 27.9% of the variance in the data.



**Table 3.** *Coefficients*<sup>a</sup> (The results of the analysis are from SPSS)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta	_	
1	(Constant)	474	.317		-1.496	.136
	CCP	.110	.093	.077	1.177	.240
	JRQ	.707	.104	.537	6.790	.000
	SAPS	.223	.114	.160	1.957	.002
a. Depe	endent Variable	: CDV				

Table 3 displays the regression equation depicting the partial relationship between the independent variable and the dependent variable. On the basis of the equation, the following may be deduced concerning the correlation amongst the three dependent variables: The value of the constant is -0.474, which indicates that if there is no change in the communication competencies (CCP), job requirements (JRQ), or student academic performance (SAP), then there will be no change in the career development (CDV), which is currently -0.474. The value of the Communication Competencies (CC) coefficient is 0.110, which also indicates that if performance of the Career Development (CDV) will increases by 0.11%, then communication competencies (CCP) will equally increases by 1%, and it is assumed that the Job Requirement (JRQ), Student Academic Performance (SAP), and the constant are all 0. This demonstrates that communication competencies (CCP) and career development (CDV) of Saudi university students have a positive relationship with one another. If the level of job requirement (JRQ) increases by 1%, then it is assumed that job requirement (JRQ) and the constant are both 0, and the performance of the Career Development (CDV) programme at the University of Hail increases by 0.70.7%. This is because the regression coefficient of job requirements (JRQ) is 0.707. This demonstrates that the job requirements (JRO) at the University of Hail contribute more positively to career development (CDV) than communication competencies (CCP) and student academic performance (SAP). Similarly, the regression coefficient of student academic performance (SAP) is 0.223, which indicates that it is assumed that student academic performance (SAP) will improve by 0.22.3% at the University of Hail if the level of job requirement (JRQ) increases by 1%, and the constant is 0. This also demonstrates that the student academic performance (SAP) at the University of Hail makes a significant contribution to the student's career development (CDV).

#### Discussion

H1: There is a significant relationship between Communication competencies and students' career development at the University of Hail, Saudi Arabia.

The coefficient table 3 reveals that the value of communication competencies (CCS) is .077, whereas the value that is significantly different is 0.240. The value of significance for the communication competences (CCS) determined to be 0.01 < 0.05, in accordance with the findings. It is possible to draw the conclusion the regression coefficient of communication competencies CCS is greater than 0.1 and, as a result, is regarded as being statistically insignificant. This indicates that the regression coefficient for the communication competencies (CCS) has no meaningful effect on a student's career development (CDV) at the University of Hail, Saudi Arabia. Therefore, we cannot accept Hypothesis 1. As a consequence, the findings of this study are consistent with the findings of a study that was carried out by Fahmi, I., & Ali, H. (2022), which demonstrated that the communication skills that are taught in universities need to be effective in order for students' career development to be improved and for it to have a positive impact on the organisations that they work for.

H2: There is a significant relationship between Job requirement and students' career development at the University of Hail, Saudi Arabia.

From the coefficient table 3, the value of job requirement (JRQ) is 0.53, while the significant value is 0.00. And going by the results obtained for the job requirement (JRQ), the value of significance is 0.001 < 0.05. It can be concluded that the regression coefficient of the job requirement (JRQ) is < 0.05 and therefore is considered significant. This means that the regression coefficient on the job requirement (JQR) has a significant effect on student's career

development (CDV) in Saudi Arabia. Therefore, we accept the second hypothesis. Consistent with prior research by Sharf (2016) and McDow & Zabrucky (2015), this study found that job qualifications are very helpful to students in advancing their careers and gaining entry into more efficient and better organisations.

H3: There is a significant relationship between Student academic performance (SAP) and students' career development at the University of Hail. Saudi Arabia.

The coefficient table 3, reveals that the value of student academic performance (SAP) is 0.16, whereas the value that constitutes statistical significance is 0.05. In addition, based on the results that were gathered for the Student Academic Performance (SAP), the value of significance is found to be 0.001 < 0.05. Additionally, one might draw the conclusion that the regression coefficient of the student academic performance (SAP) is less than < 0.05 and is hence regarded as significant.

This further bolsters the conclusion that the regression coefficient of student academic performance (SAP) has a significant effect on student's career development (CDV) in Saudi Arabia. Therefore, Hypothesis 3 is equally accepted. The findings of this study are in line with those of studies by Kuftyak (2022), which demonstrated that the academic performance of students has a significant correlation with the career development of university students.

#### **Practical Implications**

This study examined how a student's career development in Saudi Arabia is affected by their communication skills (CCS), job requirements (JQR), and academic performance (CVD). The population were student from the University of Hail. Results from the study have backed up most of the hypotheses, proving that the proposed conceptual model has practical application. According to the results of this study, both male and female students are interested in advancing their professional careers. Hence, both male and female students should be encouraged to use career development as a tool to help them prepare for the competitive job market and high expectations of modern employers. One of the most potent and significant drivers of economic expansion and development is career development, because it contributes to economic growth and stability.

Career development in Saudi Arabia is fraught with difficulties as a result of the country's rapidly evolving information and communication infrastructure. Understanding how many factors affect students' career development is crucial for assisting them in advancing their professions. This could be accomplished by ensuring that students have access to the factors that support them and assisting them in overcoming challenges. A student's perception of his or her future career can thus be trained and shaped. In a nutshell, the results of this study may be of interest to policymakers and university administrators in Saudi Arabian universities. People can think more clearly about career development with the aid of this comprehensive model and the results of this study. With this, college sttudnts have a better chance of achieving success in their careers and contributing to the nation's overall development. Youth should be encouraged to help the Saudi Kingdom achieve its goals by being given good work because they are considered potential employees of the future. The field of human resources will thus expand among young people in Saudi Arabia as a whole by highlighting the factors that affect how students' careers develop. The results would also provide colleges with exciting new data on how to best assist young people in establishing their professional career in the future.

#### Conclusion

Students' career paths at Saudi Arabia's University of Hail were investigated to determine the impact of factors, such as students' communication skills, job requirements, and academic performance. Thus, this study was about how students at the University of Hail, Saudi Arabia, develop their careers in a setting and with a population that have a lot in common. The study found that job requirement (JQR) and academic performance student (SAP) measurements have a big effect on how Saudi Arabian students' careers develop. Even among students, statistical data show a strong link between job requirements (JQR) and student academic performance (SAP) and how students' careers develop. The results of this study are very important because they help government agencies learn more about how to help young college students learn and understand more about there career path.

This study, like many others, has some weaknesses that the authors are aware of so that they can be addressed in future studies. This study examines how CCS, JQR, and SAP affect the student's career development and how they



affect that development. Instead of focusing on the individual components of a student's communication competencies (CCS), job requirements (JQR), and academic performance (SAP), it examines how they affect the general student's career performance (CVD). As a result, this study proposes that future research on career development (CVD) in universities should think about incorporating CVD and its impacts. Second, it was hypothesised in this study that college students had less background knowledge in career development (CVD). Therefore, to better understand how communication skills (CCS), job needs (JQR), and academic thinking (SAP) affect a student's career performance, we recommend that future studies at Hail University look at students from institutions other than Hail University (CVD). Third, there is only one Saudi Arabian public university included in the study's sample. To further test and generalise the study's findings, it is recommended that future research expand the sample size to include universities outside of Saudi Arabia with varied cultural backgrounds, as well as public and private universities in Saudi Arabia. There were no moderators or mediators in this study, which is the fourth caveat. We therefore think that future studies should test the mediating or moderating variables.

#### **Bibliographic references**

- Abels, J., & Bieling, H. J. (2022). Infrastructures of globalisation. Shifts in global order and Europe's strategic choices. Competition & Change, 10245294221130119.
- Acemoglu, D., & Restrepo, P. (2020). The wrong kind of AI? Artificial intelligence and the future of labour demand. Cambridge Journal of Regions, Economy and Society, 13(1), 25-35.
- Ahmad, S. Z., Buchanan, F. R., & Ahmad, N. (2016). Examination of students' selection criteria for international education. International Journal of Educational Management, 30(6).
- Alharbi, A. M. (2022). Reading skills among EFL learners in Saudi Arabia: A review of challenges and solutions. World Journal of Advanced Research and Reviews, 15(3), 204-208.
- AlKhamaiseh, O. S. (2022). Communication skills and its role in decreasing tension in online learning during covid 19 pandemic: Case study of public schools. Cypriot Journal of Educational Sciences, 17(2), 357-371.
- Arntz, M., Gregory, T., & Zierahn, U. (2019). Digitization and the future of work: macroeconomic consequences. In Handbook

- of labor, human resources and population economics (pp. 1-29). Cham: Springer International Publishing.
- Autor, D. (2019). Work of the Past, Work of the Future (No. w25588). National Bureau of Economic Research.
- Basri, W. S., Alandejani, J. A., & Almadani, F. M. (2018). ICT adoption impact on students' academic performance: Evidence from Saudi universities. Education Research International, 2018.
- Betti, A., Biderbost, P., & García Domonte, A. (2022). Can active learning techniques simultaneously develop students' hard and soft skills? Evidence from an international relations class. Plos one, 17(4), e0265408.
- Bhatti, M., Alyahya, M., Alshiha, A. A., Qureshi, M. G., Juhari, A. S., & Aldossary, M. (2022). Exploring business graduates employability skills and teaching/learning techniques. Innovations in Education and Teaching International, 1-11.
- Braun, E. M., & Brachem, J. C. (2015). Requirements higher education graduates meet on the labor market. Peabody Journal of Education, 90(4), 574-595.
- Deveci, T., & Wyatt, M. (2022). Reflective writing and the self-perceived development of intrapersonal communication skills among first-year university students in the UAE. Reflective Practice, 23(1), 68-80.
- Douglas, S., & Gammie, E. (2019). An investigation into the development of non-technical skills by undergraduate accounting programmes. Accounting Education, 28(3), 304-332.
- El Ansari, W., Suominen, S., & Draper, S. (2017). Correlates of achieving the guidelines of four forms of physical activity, and the relationship between guidelines achievement and academic performance: undergraduate students in Finland. Central European Journal of Public Health, 25(2), 87-95.
- Fahmi, I., & Ali, H. (2022). Determination of Career Planning and Decision Making: Analysis of Communication Skills, Motivation and Experience (Literature Review Human Resource Management). Dinasti International Journal of Management Science, 3(5), 823-835.
- Faqihi, Y. A. A., & Al-Ababneh, A. F. A. (2022). A Proposed Strategy for Promoting Entrepreneurship Education and Attitude to Entrepreneurial University in Light of Saudi Vision 2030. European Journal of Social Sciences Studies, 7(3).
- Gamlath, S. (2022). Peer learning and the undergraduate journey: a framework for



- student success. Higher Education Research & Development, 41(3), 699-713.
- Ganyaupfu, E. M. (2013). Factors influencing academic achievement in quantitative courses among business students of private higher education institutions. Journal of Education and Practice, 4(15), 57-65.
- Goulart, V. G., Liboni, L. B., & Cezarino, L. O. (2022). Balancing skills in the digital transformation era: The future of jobs and the role of higher education. Industry and Higher Education, 36(2), 118-127.
- Gray, F. E., Emerson, L., & MacKay, B. (2005). Meeting the demands of the workplace: Science students and written skills. Journal of science education and technology, 14(4), 425-435.
- Harrington, C. (2022). Student success in college: Doing what works! Cengage Learning.
- Howcroft, D., & Taylor, P. (2022). Automation and the future of work: A social shaping of technology approach. New Technology, Work and Employment.
- Jenkins, S. (2023). Higher Education in Saudi Arabia: A Vehicle for Global Promotion and Advancement. In The Past, Present, and Future of Higher Education in the Arabian Gulf Region (pp. 143-158). Routledge.
- Kuftyak, E. (2022). Procrastination, stress and academic performance in students. ARPHA Proceedings, 5, 965-974.
- Kurt, R. (2019). Industry 4.0 in terms of industrial relations and its impacts on labour life. Procedia computer science, 158, 590-601.
- Lent, R. W., Brown, S. D., & Larkin, K. C. (1986). Self-efficacy in the prediction of academic performance and perceived career options. Journal of counseling psychology, 33(3), 265.
- Levesque-Bristol, C., Maybee, C., Parker, L. C., Zywicki, C., Connor, C., & Flierl, M. (2019). Shifting culture: Professional development through academic course transformation. Change: The Magazine of Higher Learning, 51(1), 35-41.
- McDow, L. W., & Zabrucky, K. M. (2015). Effectiveness of a career development course on students' job search skills and selfefficacy. Journal of College Student Development, 56(6), 632-636.
- Moshashai, D., Leber, A. M., & Savage, J. D. (2020). Saudi Arabia plans for its economic future: Vision 2030, the National Transformation Plan and Saudi fiscal reform. British Journal of Middle Eastern Studies, 47(3), 381-401.

- Nghiem, T. T., Nguyen, L. T. M., Van Pham, T., Nguyen, H. T. T., & Mai, K. T. (2023). Competency improvement for functional department managers in universities satisfying job description requirements. In Educational Innovation in Vietnam (pp. 84-103). Routledge.
- Nurunnabi, M. (2017). Transformation from an oil-based economy to a knowledge-based economy in Saudi Arabia: the direction of Saudi vision 2030. Journal of the Knowledge Economy, 8(2), 536-564.
- Özlen, M. K., & Arnaut, D. (2013). Career Decisions of University Students. Journal of Community Positive Practices, 13(2).
- Pefanis Schlee, R., & Harich, K. R. (2010). Knowledge and skill requirements for marketing jobs in the 21st century. Journal of Marketing Education, 32(3), 341-352.
- Petruzziello, G., Mariani, M. G., Guglielmi, D., van der Heijden, B. I., de Jong, J. P., & Chiesa, R. (2023). The role of teaching staff in fostering perceived employability of university students. Studies in Higher Education, 48(1), 20-36.
- Prada, E. D., Mareque, M., & Pino-Juste, M. (2022). Teamwork skills in higher education: is university training contributing to their mastery? Psicologia: Reflexão e Crítica, 35.
- Priyadarshini, S. (2022). Its nice to be nice at work: role of interpersonal skills for career success. Strategic HR Review.
- Rantšo, T. A. (2022). Technology Innovation Among Handicraft Artisans in Lesotho. In Artisan and Handicraft Entrepreneurs (pp. 239-257). Springer, Cham.
- Salem, R. O., Al-Mously, N., Nabil, N. M., Al-Zalabani, A. H., Al-Dhawi, A. F., & Al-Hamdan, N. (2013). Academic and sociodemographic factors influencing students' performance in a new Saudi medical school. Medical teacher, 35(sup1), S83-S89.
- Schlee, R. P., & Karns, G. L. (2017). Job requirements for marketing graduates: Are there differences in the knowledge, skills, and personal attributes needed for different salary levels? Journal of Marketing Education, 39(2), 69-81.
- Sharf, R. S. (2016). Applying career development theory to counseling. Cengage Learning.
- Sheerah, H. A. H., & Yadav, M. S. (2022). An analytical investigation of flipped classroom to improve Saudi EFL learners' speaking skills: A case study at Applied College. Arab World English Journal, spec iss 8, p. 274-298
- Siddique, S., Ahsan, A., Azizi, N., & Haass, O. (2022). Students' Workplace Readiness:





- Assessment and Skill-Building for Graduate Employability. Sustainability, 14(3), 1749.
- Sonnenschein, K., & Ferguson, J. (2020). Developing professional communication skills: Perceptions and reflections of domestic and international graduates. Journal of University Teaching & Learning Practice, 17(3), 5.
- Touahmia, M., Aichouni, M., Alghamdi, A., Kolsi, L., & Alzamil, H. (2020). A Foresight Study about the Skills and Competencies Needed for Quality Professionals in 2030: An Empirical Study of Saudi Arabia.
- Engineering, Technology & Applied Science Research, 10(5), 6176-6182.
- Venable, M. A. (2010). Using technology to deliver career development services: Supporting today's students in higher education. The career development quarterly, 59(1), 87-96.
- Weligamage, S., & Siengthai, S. (2003). Employer needs and graduate skills: the gap between employer expectations and job expectations of Sri Lankan university graduates. In 9th International conference on Sri Lanka Studies. Matara, Sri Lanka.

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# Examining the perceptions of executives regarding accounting information system (AIS). Evidence from listed companies in Saudi stock exchange (TADAWUL).

المحاسبي المعلومات نظام نحو التنفيذيين توقعات أختبار (AIS) (تداول) السعودي المال بسوق المسجلة الشركات حالة در اسة

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Written by:

ملخص:

Faran Ahmad Qadri<sup>78</sup> https://orcid.org/0000-0003-4892-0335

Sultan Altass<sup>79</sup>

https://orcid.org/0000-0003-3733-7400

Qaiser Aman80

https://orcid.org/0000-0003-4358-7940

#### **Abstract**

The present study was conducted to investigate the effect of accounting information system (AIS) on the firm performance of selected companies listed in Tadawul, the stock exchange of Kingdom of Saudi Arabia (KSA). Data was collected through a self-administered online questionnaire during 2022 from 180 executives working at different levels in selected companies. The sample size of the study included 51 listed companies from different sectors. Corporate governance, customer satisfaction, and profitability were the proxy variables used to determine firm performance. The relationship among the variables was subsequently tested by multiple regression. The outcomes exhibited the positive relationships among them.

**Keywords:** AIS, customer satisfaction, corporate governance, profitability, KSA, companies, regression.

#### Introduction

The Kingdom of Saudi Arabia (KSA) is one of the top 18<sup>th</sup> economies in the world, and the largest economy in the Middle East. KSA, an

هذه الدراسة تتحقق من أثر نظم المعلومات المحاسبية على اداء الشركات المدرجة في تداول، سوق الأسهم في المملكة العربية السعودية. تم تجميع البيانات من خلال استبيانات في عام ٢٠٢٢ من خلال ١٨٠ مدير تنفيذي يعملون في مختلف المستويات الادارية. حجم العينة يتضمن ٥١ شركة مدرجة في مختلف القطاعات. حوكمة الشركة، رضاء العميل، وربحية الشركة هي مقابيس متغيرة تم استخدامها لتحديد اداء الشركة. العلاقة مابين المتغيرات تم اختبارها بختبارات الانحدار المتعدد. النتائج تؤكد العلاقة الايجابية مابين تلك المتغيرات

الكلمات المفتاحية: نظام المعلومات المحاسبي، اكتفاء العملاء، الحوكمة، الربحية، المملكة العربية السعودية، الشركات، الأنحدار

emerging market with great potential, has been growing fast in the past decade. It has performed best among all the emerging markets during the

<sup>80 (</sup>Ph. D), Associate Professor, Accounting department, College of Business, King Abdulaziz University Jeddah, Rabigh Campus, Saudi Arabia.



<sup>&</sup>lt;sup>78</sup> Associate Professor, Accounting department, College of Business, King Abdulaziz University Jeddah, Rabigh Campus, Saudi Arabia.

<sup>&</sup>lt;sup>79</sup> Vice Dean, College of Business, King Abdulaziz University Jeddah, Rabigh Campus, Saudi Arabia.



pandemic by making effective policies to combat economic recession. The country has made several economic and structural reforms in the beginning of the year 2021 which include permitting 100% ownership in some sectors to foreign investors, no sales tax or (VAT); no personal income tax or property tax; allowing carry forward losses indefinitely; tax incentives on investments made in undeveloped provinces for 10-year, providing interest-free loans upto SR 3 million, exemption from import tariffs of spare parts, raw materials, and plant machinery. All these reforms were also appreciated by International Monetary Fund (IMF) and International Bank for Reconstruction and Development (IBRD). Such reforms augment the number of companies and make the very competitive environment in KSA. Each and every company would like to make continuous innovation to survive amid heavily competitive market. To pace up with innovation, companies are using different information systems to like management information system (MIS), Transaction processing system (TPS), Executive support system (ESS), and accounting information system (AIS).

Accounting Information System (AIS) includes all the tools and systems that are created for the collecting and display of accounting information (Esmeray, 2016). It is a discipline that incorporates information systems, generally construed, with theory and practice in accounting and auditing. The related disciplines of MIS and computer science, accounting, auditing, other business disciplines like management and marketing, as well as the fields of economics, psychology, sociology, philosophy, and history, are all used by AIS in this process (Trabulsi, 2018).

AIS is the instrument that help firms to develop a competitive advantage. A company utilises an AIS framework to gather, organise, process, retrieve, and report its financial data so that auditors, business analysts, managers, chief financial officers (CFOs), regulators, and tax authorities may use it. (Salehi et al, 2015). The primary task of AIS is to collect and store data about an organization's financial activities efficiently and effectively. This includes gathering transaction data from documents and recording transactions. Besides, another function is to provide data that may be used to make decisions, such as creating financial reports, managerial reports, and ensuring that controls are in place for proper data recording and processing (Nizar, Ahmad, & Mohamad, 2016).

The concept of AIS has recently increased attention from executives because it is beneficial in the overall performance by boosting the morale of employees, speeding up the task, reducing the complaints. It has been one of the key areas of accounting research. However, empirical studies of AIS in the context of KSA have been almost negligible. Considering theoretical and contextual gaps on how AIS affects firm performance, this study made an attempt to test the implications of AIS on corporate governance, profitability, and customer satisfaction by collecting data through online surveys from the top level managers, conducted statistical analysis using regression technique and discussed outcomes of the study. This research was divided into many sections: introduction, literature review, research gap, hypotheses, objectives and research methodology, results and discussions, and conclusion.

#### Literature Review

Samuel (2013) used interview to examine the role played by AIS in the effectiveness of organization. The sample size was managers working in automobile companies in Kenya. It was found that AIS helps in making effective decisions, higher productivity which reduced costs, more profits due to higher sales, and maintaining better coordination among different departments. Neogy (2014) conducted a research on two mobile telecommunication companies in Bangladesh from 2008 to 2012. Data was collected from high level executives including Chartered Accountants and Cost Management Accountants. Chi square test was used for analyzing data. It was revealed that AIS opportunities for the telecommunication companies to perform the accounting functions more effectively and efficiently and helps in the prevention of frauds.

Odero (2014) analyzed the relationship between AIS quality and financial performance by collecting data through questionnaires in Nairobi County. The sample included 50 small and medium business enterprises chosen from different sectors. Binary logistic regression was used to test the proposed relationship. The study highlighted a positive relationship between the quality of accounting information system and ROI (proxy variable of financial performance) of SMES in Nairobi County. The researcher suggested for using computerized AIS for all enterprises in the county to save time and to enhance operational efficiency, reliability, and for overall growth in the firms.

Hanifi & Taleei (2015) tried to find out how the decision making process is influenced by AIS in ParsGrama, the popular firm in Iran. Data was collected through questionnaires from the sample of 115 respondents. The author tested the impact of AIS through PLS-SEM on six different components. The outcomes highlighted a significant and positive role of AIS on quality, accuracy, economic, validity, and on time. However, the relationship was insignificant between AIS and speed. Alnajjar (2017) examined the effect of AIS on the organizational performance of 74 SMEs in UAE. 150 self administered questionnaires were distributed online and offline to collect data from managers working at top level in the selected SMES. The author applied cronbach alpha for testing reliability and SEM modeling for testing hypotheses. It was found that knowledge held by accounting managers and support received from top management significantly affects AIS and organizational performance.

Al Dalayeen (2018) in analyzed the role played by AIS on the performance (financial) of the large size companies in Jordan. The research used questionnaires to collect data from the sample of 540 managers working in selected companies. AIS (independent variable) was divided into four minor components like speed, quality, work simplification, and security whereas profitability and market share were the proxy components used to determine financial performance. The author suggested that there must be harmonious relationship between different departments of the firm to get the full benefits of AIS and the companies must recruit trained staff so that they can used it in organized manner. The results after application of regression highlighted significant impact of AIS on profitability as well as market share.

Nurdiono, Farichah, & Surya (2018) examined the impact of AIS on supply chain management practices in manufacturing sector of Indonesia especially furniture, electronics, and food production industry. People, procedures, data, software and IT were the components of AIS used by the researcher. PLS-SEM was used for testing the proposed relationship. Prior to testing hypotheses, normality, composite reliability, and CFA were also applied. The authors brought to the conclusion that selected firms benefitted much after implementation of AIS.

Gamayuni (2019) analyzed the effect of management accounting information system on good governance in Lampung, Indonesia. Accountability, transparency, and participation

were the components used for governance. Ouestionnaires were used to collect data from respondents and tested by Partial Least Square (PLS-SEM). Management accounting information system positively affects information quality of management accounting. It was found that good governance influenced by MAIS directly.

Al-Attar (2020) examined the impact of AIS on corporate governance in pharmaceutical industry in Jordan by using structured questionnaires collected data from 72 managers. Better control, commitment to accounting standards, performance evaluation and credibility in the firm were the dimensions of corporate governance used in the study. The findings highlighted highest effect on control whereas least effect was found on commitment. The author concluded that AIS helps in enhancing overall quality that leads to better decisions.

Onodi, Ibiam, & Akujor (2021) examined the impact of management AIS on the financial performance of consumer goods firms in listed in Nigerian Stock Exchange with the application of simple liner regression and ANOVA. It was revealed that there was a positive relationship between management reporting and organizational profitability.

#### Research Gap

From the above comprehensive literature review, it was found that there are large number of studies in the context of Jordan, Kenya, Nigeria, Iran, Indonesia, India etc regarding AIS, its implementation on the firm performance particularly profitability, customer satisfaction, and corporate governance. However, there is not a single primary research in KSA which examines the impact of AIS on parameters namely corporate governance, customer satisfaction, and profitability.

#### **Research Objectives**

- 1. To examine the impact of AIS on corporate governance of listed companies in KSA.
- 2. To find out the role played by AIS in building customer satisfaction in listed companies in KSA.
- 3. To investigate the impact of AIS on profitability of listed companies in KSA.

#### **Hypotheses Developed**

 $H_1$ : AIS has a significant impact on corporate governance in listed firm in KSA.





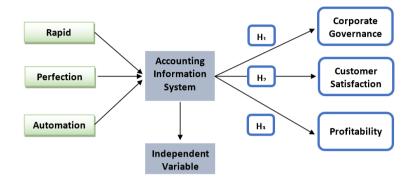
H<sub>2</sub>: AIS has a significant impact on customer satisfaction in listed firm in KSA.

H<sub>3</sub>: AIS has a significant impact on profitability in listed firm in KSA.

#### Research Methodology

Conceptual Framework of the study

The conceptual framework as shown in figure 1 was constructed as per the objectives of the study. AIS was the independent variable which was measured by three components on the basis of previous empirical researches. Corporate governance, profitability, and customer satisfaction were the dependent variables. All were measured by different statements in the questionnaire.



*Figure 1.* Framework of the Research. Source: Developed by Researcher

Sampling Technique and Sample Size

There are 203 listed companies in Tadawul, the stock exchange of KSA as on December, 2020. A total of 51 companies (25% of 203) chosen randomly. The attempt was made to take companies from different sectors. Thereafter, five higher level executives from each company were chosen for sending questionnaire link. It means 255 (5X51) questionnaires were send during January, 2022 to May, 2022. However, 190 executives sent their questionnaires back wherein 10 questionnaires were rejected later due to incomplete information. It gives the sample size of 180. The sample size was also considered rational because it was more than the formula propounded by Green (1991).

N > 50 + 8p where p is the number of predictors N > 50 + 8X3 = 74 (number of predictors are 3)

Questionnaire and Statistical tools

The current study used a structured online questionnaire (see Appendix) that was prepared

under the expert guidance. It was designed on five point Likert scale. This method was also used previously by Odero (2014), Al Dalayeen (2018), Melhem & Rabi, (2021); Ahmad & Al-Shbiel, (2019). The online survey link was sent to top level executives of the selected companies only. 18 items were used to measure the relationship among six variables. The statistical tools used in the research were multiple regression technique, cronbach alpha, KMO and Bartlett's test of spherecity, and EFA.

#### KMO and Bartlett's test

KMO was used to examine the appropriateness of sample size for factor analysis. KMO equalled at 0.773 (table 1) which falls under the required range of 0.6-1. Besides, Bartlett's test of Sphericity checks that whether or not the variables are uncorrelated. The BTS value of 0.000 also shows no correlation among study variables. Therefore, Factor analysis was appropriate for this construct.

**Table 1.** *KMO and Bartlett's test* 

Kaiser-Meyer-Olkin (KMO) of Sampling Adequacy 0.773			
	Approx. Chi Square	1574.585	
Bartlett's Test of Sphericity (BTS)	Df	387	
	Sig.	0.000	

Source: Output of SPSS\_24



## Exploratory Factor Analysis (EFA) and Reliability

Table 2 shows EFA loadings and alpha values on all constructs. As per Hair et al., (2010), EFA shall be run where the sample size must be 10 times of number of questionnaire statements. In the current study, the sample size is 180 which

fulfill the criterion of Hair et al., (2010). Moreover, EFA loadings of all constructs were greater than 0.4 which were matched with the guidelines of Watkins (2018). Similarly, alpha values were also greater than 0.6 which are matched with the guidelines of Taber (2018). It makes it clear that data was reliable for further analysis.

**Table 2.** *EFA and Cronbach Alpha* 

No	Items	EFA Loadings	Cronbach Alpha
1.	It performs work very fast and in simplified manner.	0.547	0.911
2.	Right quantity of inventory at right time is maintained after AIS.	0.624	0.871
3.	It provides accurate and valid information as and when needed.	0.689	0.654
4.	Products reached whenever they are required and hence unnecessary delays are avoided after AIS.	0.609	0.773
5.	The duplication of work has been completely eradicated after AIS.	0.711	0.667
6.	It has reduced the transactions done on paper and supports green accounting.	0.593	0.634
7.	It helps in reducing manpower.	0.707	0.779
8.	The efficiency and effectiveness of accounts department has improved due to automation.	0.638	0.792
9.	Its proper implementation helps the firm in making set rules to record the accounting transactions.	0.745	0.642
10.	It helps in fighting fraudulent activities and brings transparency in operations.	0.739	0.633
11.	It helps the accounts department to achieve its objectives.	0.627	0.724
12.	It makes firm competitive in the market.	0.662	0.758
13.	It helps in reducing different types of overheads due to automation.	0.693	0.690
14.	It contributes to lean production.	0.657	0.935
15.	It improves cash flow.	0.597	0.768
16.	AIS aids in addressing consumers' complaints properly.	0.748	0.914
17.	It helps in storing customer data which helps the firm in future for taking feedback, promotion of company products etc.	0.739	0.754
18.	It makes happy and satisfied customers and also helps in maintaining customer loyalty.	0.772	0.738

Source: Output of SPSS\_24

#### **Results and Discussions**

Table 3 highlights the multiple regression results produced by SPSS version 24 related with H<sub>1</sub>, H<sub>2</sub>,

and H<sub>3</sub> in consolidated manner. It shows beta coefficients, t statistics, VIF, adjusted R square, durbin Watson, and ANOVA (F value).



**Table 3.** Multiple Regression Results  $[H_1, H_2, \text{ and } H_3]$  in consolidated form

Model 1 Corporate Governan		ance	Model 2 ce Customer Satisfaction			Model 3 Profitability			
Independent Variables	β	t	VIF	β	t	VIF	β	t	VIF
Rapid	0.353**	2.257	1.987	0.442*	3.487	2.857	0.362 **	1.954	3.154
Perfection	0.399*	5.098	2.745	0.317**	6.338	3.147	0.299**	4.477	2.652
Automation	0.287**	7.884	2.391	0.402**	1.615	3.004	0.414*	5.338	2.786
ANOVA (F value)=104.227** Adjusted R <sup>2</sup> =0.512 Durbin Watson=2.047			ANOVA (F value)=65.745** Adjusted R <sup>2</sup> =0.601 Durbin Watson=2.234			ANOVA (F value)=92.337 ** Adjusted R <sup>2</sup> =0.544 Durbin Watson=2.572			

<sup>\*\*</sup>Significant at 5% confidence level

Source: Output of SPSS 24

Under model 1, the adjusted R square (0.684) indicates that 68% of the variations in the corporate governance can be predicted from AIS and rest of the variations were unexplained. The model constructs were also validated (F=184.574; p<0.005). Besides, Variance inflation factor (VIF) statistics corresponding to all variables were below 3 which shows that muticollinearity problems were not exist among variables. Moreover, beta coefficients rapid ( $\beta$ =0.353, p<0.05), perfection ( $\beta$ =0.399, p<0.05), automation ( $\beta$ =0.287, p<0.01) were significant to corporate governance. Hence, H<sub>1</sub> is accepted.

Under model 2, the adjusted R square (0.601) indicates that 60% variations in customer satisfaction can be predicted from AIS and rest of the variations were unexplained. The model constructs were also validated (F=65.745; p<0.005). Besides, Variance inflation factor (VIF) statistics corresponding to all variables were below 4 which shows that muticollinearity problems were not exist among variables. Furthermore, the results highlighted that all independent variables of AIS were significantly associated with the customer satisfaction. Rapid

 $\begin{array}{ll} (\beta = 0.442, \, p < 0.01), \, perfection \, (\beta = 0.317, \, p < 0.05), \\ automation \, \, (\beta = 0.402, \, \, p < 0.05) & Thus, \, \, H_2 \, \, is \\ accepted. \end{array}$ 

Under model 3, the adjusted R square (0.544) indicates that 54.4% variations in profitability can be predicted from AIS and rest of the variations were unexplained. The model constructs were also validated (F=92.337; p<0.005). Besides, Variance inflation factor (VIF) statistics corresponding to all variables were below 4 which shows that muticollinearity problems were not exist among variables. Furthermore, the results highlighted that all independent variables of AIS were significantly associated with the profitability. Rapid ( $\beta$ =0.362, perfection  $(\beta=0.299,$ p < 0.05), p < 0.05), automation ( $\beta$ =0.414, p<0.01) Thus, H<sub>3</sub> is accepted.

The findings related were supported with the previous studies Kasasbeh (2017); Khan (2017); Uyar et al., (2017); Beg (2018); Albashabsheh, et al., (2018); Ahmad & Al-Shbiel (2019); Al-Rashdan, Alwadi, & Iskandar (2020); Lutfi et al., (2020); Melhem & Rabi (2021).

**Table 4.**Summary of Hypotheses Tested

No	Hypotheses	Results
1.	AIS has a significant impact on corporate governance in listed firm in KSA.	Accepted
2.	AIS has a significant impact on customer satisfaction in listed firm in KSA.	Accepted
3.	AIS has a significant impact on profitability in listed firm in KSA.	Accepted

Table 4 highlights the summary of hypotheses tested. All the hypotheses were accepted which brought us to the conclusion that AIS has a significant impact on corporate governance,

customer satisfaction, and profitability in listed firms in Kingdom of Saudi Arabia (KSA).



<sup>\*</sup>Significant at 1% confidence level

#### Conclusion

#### **Practical Contribution**

The study would be worthwhile to different stakeholders like employees, managers. suppliers, government, customers. On the experimental and factual aspect, the study provides a path to high-level executives of those companies which have not implemented AIS yet, that they should implement it without further delay, so that they can provide themselves with tremendous benefits like reduced operational costs, higher accuracy, greater transparency, happy and satisfied customers, etc. All these factors would help in the overall growth and will also help the companies to survive in the competitive market. Additionally, the companies which have implemented it must provide sound training to employees so that it could be more user-friendly and they could use it with full of joy which leads to higher productivity, low absenteeism, low attrition, which even aids in saving higher recruitment costs. Furthermore, the research provides a broader perspective and detailed knowledge to entrepreneurs, who are facing issues of higher operational costs, poor customer satisfaction due to non-availability of products at right time, would be getting an insight into how effective utilization of AIS can lead to better coordination among departments and greater transparency, higher efficiency.

Besides, while discussing the benefits that can be reaped by the government in KSA, we would like to explain that KSA government could also earn higher profitability earned by companies on account of implementation of AIS would become a good antecedent of earning and more tax revenue that shall be utilized for social benefits. Finally, a major benefit to the development of the whole economy of KSA could be seen. So, I believe that if the government could reduce the amount of cost of the software available for the users and also for the companies then in result surplus benefits can be reached to the official users and even to the government in terms of economic growth.

### Limitations and instructions for upcoming research

This study depends on information gathered through online survey conducted in mid 2022 from 180 executives selected randomly. Lack of interest in filling out the questionnaires by the executives might make varied results is a limitation. Therefore, scholars in the future should use another sampling technique and large sample size to make results more reliable.

Listed companies of KSA were used in the current study. Therefore, comparative studies between different industries within KSA or outside KSA might be taken in the future. Furthermore, multiple regression technique was used for analyzing the impact of study variables in the current research. It is advised to use the latest techniques like SEM modeling with including some other parameters of corporate performance which were neglected in this study.

#### **Appendix**

Questionnaire and Sources

Variable	Items	Source
	It performs work very fast and in simplified manner.	Al Dalayeen (2018)
Rapid	Right quantity of inventory at right time and at right place is ensured after AIS.	Self Developed
Perfection	It provides accurate and valid information as and when needed.	Onodi, Ibiam, & Akujor (2021)
	Products reached whenever they are required and hence unnecessary delays are avoided after AIS.	Self Developed
	The duplication of work has been completely eradicated after AIS.	Adapted from Al Dalayeen (2018)
	It has reduced the transactions done on paper and supports green	Adapted from Al
	accounting.	Dalayeen (2018)
Automation	It helps in reducing manpower.	Self Developed
Automauon	The efficiency and effectiveness of accounts department has improved due to automation.	Self Developed
Corporate Governance (CG)	Its proper implementation helps the firm in making set rules to record the accounting transactions.	Self Developed
	It helps in fighting fraudulent activities and brings transparency in operations.	Gamayuni, (2019)
	It helps the accounts department to achieve its objectives.	Self Developed



	It makes firm competitive in the market.	Self Developed
Profitability (PR)	It helps in reducing different types of overheads due to automation.	Self Developed
	It contributes to lean production.	Self Developed
	It improves cash flow.	Self Developed
	AIS aids in addressing consumers' complaints properly.	Self Developed
Customer	It helps in storing customer data which helps the firm in future for taking feedback, promotion of company products etc.	• Self Developed
Satisfaction (CS)	It makes happy and satisfied customers and also helps in maintaining customer loyalty.	Self Developed

Source: Self Developed

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#### **Bibliographic references**

- Ahmad, M.A., & Al-Shbiel, S.O. (2019). The effect of accounting information system on organizational performance in Jordanian Industrial SMEs: the mediating role of knowledge management. International Journal of Business and Social Science, 10(3), 99-104. doi: 10.30845/ijbss.v10n3p9
- Al-Attar, K.A. (2020). The effect of accounting information system on corporate governance. 99-110. DOI: Accounting, 21. 10.5267/j.ac.2020.10.008
- Albashabsheh, Alhroob, A.A., M.N., Irbihat, B.E., & Javed, S. (2018). Impact of accounting information system in reducing costs in Jordanian banks. International Journal of Research-Granthaalayah, 6(7),
  - https://doi.org/10.5281/zenodo.1336672
- Al Dalayeen, B.O.D. (2018). The impact of information accounting system effectiveness of financial performance of selected industries in Jordan. (Doctoral thesis) Department of commerce, Aligarh Muslim University, Aligarh, (India). URL: http://hdl.handle.net/10603/208404
- Alnajjar (2017).Impact of accounting information system on organizational performance: a study of SMEs in the UAE. Global Review of Accounting and Finance, 20-38. 8(2), DOI: 10.21102/graf.2017.09.82.02.
- Al-Rashdan, M.T., Alwadi, A.G., & Iskandar, T.B.M. (2020). The role of accounting information system features on companies financial performance in Jordan. IJCIRAS, 3(2).http://www.ijciras.com/PublishedPaper/IJCI RAS1638.pdf

- Beg, K. (2018). Impact of accounting information system on the financial performance of selected FMCG companies. Asian Journal of Applied Science and Technology (AJAST), 2(3), 8-17. URL: http://ajast.net/data/uploads/6001.pdf
- Esmeray, A. (2016). The impact of accounting information systems (AIS) on performance: empirical evidence in Turkish small medium sized and enterprises. International Review of Management and Marketing, 6(2), 233-236. Retrieved from https://www.econjournals.com/index.php/ir mm/article/view/1814
- Green, S.B. (1991). How many subjects does it take to do a regression analysis? Multivariate Behavioral Research, 26, 499-510.
- Gamayuni, R.R. (2019). The effect of management accounting information system application on information quality and its implication on good government governance. International Journal of Scientific & Technology Research, 8(08). https://www.semanticscholar.org/paper/The-Effect-of-Management-Accounting-Information-on-Gamayuni/9b3d992cfb4232dab6fe14748bef 7c425a566982
- Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E. (2010) Multivariate Data Analysis. 7th Edition. New York: Pearson.
- Hanifi, F., & Taleei, A. (2015). Accounting information system and management's decision making process. Management Science Letters, 5, 685-694.
- Khan, A. (2017). Impact of accounting information system on the organizational performance: a case study of Procter and Gamble, Star Research Journal, 5(12), 26-30. http://starresearchjournal.com/2017/12/2017 \_v5\_i12/Paper%206.pdf
- Kasasbeh, F.I.O. (2017). Impact of corporate governance on the effectiveness accounting information system in Jordanian industrial companies. International Business Research, 10(10). doi: 10.5539/ibr.v10n10p1



- Lutfi, A., Al-Okaily, M., Alsyouf, A., Alsaad, A., & Taamneh, A. (2020). The impact of AIS usage on AIS effectiveness among Jordanian SMEs: A multi-group analysis of the role of firm size. Global Business Review. https://doi.org/10.1177/0972150920 965079
- Melhem, W.G.B., & Rabi, A.M. (2021). Business strategy and firm performance: the mediating role of accounting information systems. Journal of Business & Economic Policy, 8(1). Doi: 10.30845/jbep.v8n1p4
- Neogy, Dr. (2014). Evaluation of Efficiency of Accounting Information Systems: A Study on Mobile Telecommunication Companies in Bangladesh (2014). Global Disclosure of Economics and Business, 3(1). Available at SSRN: https://ssrn.com/abstract=2604404
- Nizar, S., Ahmad, F., & Mohamad, M. (2016). Evaluation of accounting information systems in meeting the requirements of financial and managerial performance: "field study in the United Arab Emirates private hospitals. International Journal of Humanities and Social Science, 6(4), 170-176. URL: https://www.ijhssnet.com/journals/Vol\_6\_N o\_4\_April\_2016/21.pdf
- Nurdiono, N., Farichah, F., & Surya, R.L. (2018). Impact of accounting information system on supply chain management practices in Indonesian manufacturing sector. International Journal of Business Research, 8(3), 154-167. URL: http://repository.lppm.unila.ac.id/13245/1/I mpact% 20of% 20Accounting% 20Information% 20System.pdf
- Odero, A.O. (2014). The effect of accounting information system quality on financial performance of SMEs in Nairobi County, Unpublished Research Project, University of

- Nairobi School of Business, Nairobi. URL: http://hdl.handle.net/11295/75156
- Onodi, B.E., Ibiam, O., & Akujor, J.C. (2021). Management accounting information system and the financial performance of consumer goods firms in Nigeria. European Journal of Business and Management Research, 6(1), DOI: http://dx.doi.org/10.24018/ejbmr. 2021.6.1.684
- Salehi, M., Dashtbayaz, M. L., Bahrami, M., & Teymoori, E. (2015). The effect of implementation of accounting information system on efficiency, profitability and productivity of SMEs in Iran. Banks and Bank Systems, 10(3), 79-86.
- Samuel, N. (2013). Impact of accounting information systems on organizational effectiveness of automobile companies in Kenya. (Master of business administration) University of Nairobi, Kenya.
- Taber, K.S. (2018). The use of cronbach's alpha when developing and reporting research instruments in science education. Res Sci Educ, 48, 1273-1296. DOI: 10.1007/s11165-016-9602-2
- Trabulsi, R.U. (2018). The impact of accounting information systems on organizational performance: the context of Saudi's SMEs. International Review of Management and Marketing, 8(2), 69-73
- Uyar, A., Gungormus, A.H., & Kuzey, C. (2017). Impact of the accounting information system on corporate governance: evidence from Turkish Non-Listed companies. Australasian Accounting, Business and Finance Journal, 11(1), 9-27. doi: 10.14453/aabfj.v11i1.3
- Watkins, M.W. (2018). Exploratory factor analysis: a guide to best practice. Journal of Black Psychology, 44(3), 219–246. DOI: 10.1177/0095798418771807



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# Decision-making attractors in the conditions of war (the modern Russian-Ukrainian war example)

#### Центри тяжіння прийняття рішень в умовах війни (на прикладі сучасної російськоукраїнської війни)

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#### **Abstract**

Features of the phenomenon of human decisionmaking in the conditions of war are analyzed. The paper is revealing the phenomenon of decision-making during war based on the events form the modern Russian-Ukrainian war. The research findings state that decision-making in the conditions of war has differences between people who defend their lives, family, country, and aggressors who seek to seize territories, turn free people into acolytes or colonies of their state, and impose autocracy on a democratic society. The authors defined the attractors of people's decision-making in war, such as: "home", "heart and mind", "strength and will", "heroism and dignity", "social order and victory". The conducted research has a conceptual nature and serves as a methodological basis for conducting practical scientific research on the development of effective decision-making skills in conditions of destructive human influence and existential disasters.

**Keywords:** attractor, decision making, home, actor, peace, war.

#### Анотація

У статті розкривається сутність феномену прийняття рішень в умовах війни на основі аналізу подій сучасної російсько-української війни. Результати дослідження свідчать, що прийняття рішень в умовах війни відрізняється між людьми, які захищають своє життя, сім'ю, країну, і агресорами, які прагнуть захопити території, перетворити вільних людей на прислужників чи колонії своєї держави, нав'язати авторитаризм. Автори визначили атрактори прийняття рішень людьми на війні: «дім», «серце і розум», «сила і воля», «героїзм і гідність», «суспільний лад і перемога». Проведене дослідження має концептуальний характер і слугує методологічною основою для проведення практичних наукових досліджень з розвитку навичок ефективного прийняття рішень в умовах деструктивного впливу людини та екзистенційних катастроф.

**Ключові слова:** атрактор, прийняття рішення, дім, суб'єкт, мир, війна.

<sup>84</sup> PhD, Associate Professor, Associate Professor of Sociology department, Zaporizhzhia National University, Zaporizhzhia, Ukraine.



<sup>&</sup>lt;sup>81</sup> Doctor of Philosophy, Professor, Academician of the Ukrainian Academy of Sciences, Academician of the European Academy of Sciences of Ukraine, Professor of Sociology department, Zaporizhzhia National University, Zaporizhzhia, Ukraine.

<sup>82</sup> Doctor of Philosophy, Professor, Professor of Social Philosophy and Public Administration department, Zaporizhzhia National University, Zaporizhzhia, Ukraine.

<sup>83</sup> Doctor of Philosophy, Associate Professor, Academician of the European Academy of Sciences of Ukraine, Head of Sociology department, Zaporizhzhia National University, Zaporizhzhia, Ukraine.

#### Introduction

War changes the everyday life of people, social relations, structure, modes of operation of life everything that defines stability and certainty of the social system in which people live and make decisions. In this context, war appears before people as conditions of uncertainty, complexity, and instability of the social system, where people begin to organize their lives. This provides an opportunity to apply the theories of selforganization and synergetics, which are applied to complex, unstable, and chaotic systems. At the same time, according to the theory of selforganization, we study the process of ordering the social system and people's lives as a series of decisions, which we consider as a phase transition from certainty to uncertainty, from a stable state of life to an unstable one, and the tendency of people towards ordering centers – to attractors.

Using the example of the modern Russian-Ukrainian war, where democratic and autocratic values collide, and where the international order of the democratic world depends on the resilience of the Ukrainian people and support from the global community, we investigate decisionmaking attractors, which depend on the choices of specific individuals and define their dynamics and the dynamics of their lives. First, we consider the choice of decision-making guidelines during the war, examining the home as an attractor for deciding whether to stay at home on the frontline, near the frontline, in the rear, or to be an internally displaced person or a refugee. The home, in a broad sense, defines the center of gravity for organizing everyday social life.

After addressing this issue, we turn to the foundation of subjectivity in conditions of uncertainty and threats to life, such as the "heart and mind" as the balance between rational and irrational decision-making (cognitive and emotional attractors), "strength and will" as attractors that determine people's capabilities in the conditions of military uncertainty (praxeological and conative attractors), and "heroism and dignity" as the axiological attractors, asserting the meaning of life in the war, defending the values that people are willing to fight for.

The research on the state and role of organizing decision-making in wartime conditions is defined as the structures of organizing social life that create the social order of the state in wartime and define the image of victory as an attractor for organizing life, the image of a desired future in

decision-making that carries the meaning of victory.

#### **Theoretical Framework**

Our research was based on:

- analysis of the interaction of emotional and rational systems (Kahneman, 2020), the subjective influence on a person's perception of the world (Berne, 1975), (Fisogni, 2022), (Jung, 1953), as well as the logical interrelationship development of optimism and pessimism, which determines the extent of existence during non-standard situations (Lepskiy, 2006), (Perellin, 2009);
- 2) analysis of previous victories and defeats, where well-known examples of heroic behavior of the past and present (Lane-Poole, 2018), (Rusch, 2022), as well as traumatic experiences that needs to process by a human (Herman, 2015) and the world (Benard et al., 2022);
- 3) synergistic methodology of I. Prigogine, I. Stenger (Prigogine & Stengers, 1984), and the fractal approach to scaling selforganizing processes by J. West (West, 2016) and attraction and repulsion in migration (Lepskiy, 2016).

#### Methodology

The authors of the article investigate war as a state of chaos in people's lives, who perceive peace as order and war as disorder, uncertainty, and chaotic processes. Therefore, our methodology applies the concept of social synergetics, transitioning from the peaceful order through the chaos of war to the military state, to the attractors of military order (sometimes strange attractors). In synergetic methodology, we rely on the works of I. Prigogine, I. Stenger (Prigogine & Stenger, 1984), and the fractal approach to scaling self-organizing processes by J. West (West, 2016).

The main method of the research is document and content analysis of Ukrainian mass and social media concerning Russian-Ukrainian war. At the center of our research is mainly civilian population, which makes decisions about its fate. At the same time, with all the uncertainty of the processes, there are attractors that determine individual and group decisions, and scale to mass decisions, as they are replicated. War also determines the processes of repulsion from ordinary everyday life, attractors of people's



movement, which, together with centripetal forces, determine people's decisions (directions of movement) in war conditions. Decisionmaking is a central process of management and organization of actors' activity, the meaningful aspect of which is the cognitive and evaluative and volitional choice of alternatives for solving the problem by a person. This central organizational process provides communicative process that supposedly permeates all management and organizations. All these processes are under the pressure of the war situation, which is another phase of the society.

#### Results and Discussion

Peace is considered as a special phase of the existence of society and relations between societies, in which the desire for progressive development and evolutionary improvement of living arrangement prevails. This phase of society's development has its own economy, politics, culture and technology, ecology and orientation of social relations. War is considered as a phase of confrontation and irreversible destruction (protection from destruction) of society and relations between societies, living arrangement is restructured to ensure this destruction and the social development of peace is destroyed, the question arises of survival and victory over the enemy. It is important for us to understand that war has a negative, destructive economy, since it is aimed at the survival of society, the development of means of death and defeating the enemy.

Decision-making phenomenon during wartime is a complex, multi-layered representation that is often influenced by propaganda, ideological and sometimes insane influences, information war for worldview, thought patterns and impulsive mass actions. The war phase has a simplification of the multifaceted activity of peaceful life and the stability of everyday life in the search for a balance of human relations, the military sphere is in a "cold" (minimally sufficient) or "warm" restorative state of security readiness. Everything is changing during the war: the military and security spheres become dominant which restructure the social organism of the country according to their needs, according to the needs of the survival of society and the state, and victory over the enemy.

People's actions during war are determined by instincts (for example, life and death), vital needs, as C.G. Jung wrote, by that what defines the body, archetypes - that what defines the psyche in the collective unconscious, and senses,

which determines the mind and will. The satisfaction of vital needs in instincts shifts from the usual everyday life to the deficient everyday life and adaptation to the new social reality. The archetypes of social relations are shifting to the mobilizing collective unconscious, in its way in Ukraine there is an actualization of the archetypes of protective heroes - Cossacks, warriors, women guards, generals, diplomats, at the same time, in the full-scale aggression of the Russian Federation, we see an actualization of the archetypes of criminals, looters, executioners and others. War, as the military psychologist Lawrence LeShan proved, always tends to the transition to the level of archetypes, to the transition from sensitive reality to mythological (LeShan, 1992).

No less interesting is the study of emotions and irrationality, meanings and rationality in decision-making. According to the Nobel laureate D. Kahneman, there are two modes of human thinking that lead to impulsive and rational decisions (Kahneman, 2020). However, the question arises about the specifics of the functioning of these modes in wartime conditions. Practice has shown that impulsive emotional decisions at the beginning of the Russian-Ukrainian war were dominant in the short-term behavior of most people. It is generally accepted that a person based on emotions chooses life through escape. However, this is only half the truth. The emotion of indignation at aggression can also trigger a choice in favor of weapons and self-sacrifice for the benefit of a common future. There are many reasons for choosing one of the options, but the basis is the dominance of egoism and altruism in the value world of a person and society.

Previous attempts to rationally evaluate the behavior of a potential aggressor were erroneous. At the root of the flaw in the rational understanding of war lies in a person's habituation to risk during his long stay in his/her life. Such a problem is characteristic of the inhabitants of the whole world. Analyzing the complexities of danger perception in the USA, C. Perellin remarks on specific blindness: "I have been interested for years in the near – total lack of connection between perception and reality of fear. If you think about this, you can easily find many examples. About 3,000 people died in 9/11. Forty-two thousand Americans die on our highways each year. How proportional is our government's response?" (Perellin, 2009, 144). So, this is an irrational unwillingness of a person to see the near non-existence and to think about its possibility, to accept the fact that death is

always nearby and accompanies his/her life. That is, evil that is constantly present in our living space ceases to be perceived as a danger, and unexpected evil creates panic and suspicion. This can be attributed to the periodic return of Ukrainian refugees to their homes before the war gives rise to a new shock.

### 1. Choosing decision-making guidelines during war

Within the framework of the philosophical discourse, the worldview of peace and the worldview of war are separately distinguished, in which optimism and pessimism are combined with the help of evaluative and volitional activity. In the worldview, optimism is established through the measure of life (the existence of people, the acquisition of soul and spiritual, and their implementation in practical activities), and pessimism is realized through the measure of death (as the protection of the measure of life from irreversible destruction – the measure of death), this dichotomy always has an intensity of force vs powerlessness, will vs lack of will.

War as an existential tension illuminates this measure of life and death of people, society, which becomes a homeland, humanity, manifestation of a dignified and fulfilled life. As claimed by K.G. Jung, death instinct is about the fullness of life (Jung, 1953). The value orientations of a person immerse the activity to the deep essence - "who is a person in this humanity". The measure of death acquires an intersubjective character. Arises the spectrum of emotions of mortido and destrudo instincts. Sometimes endless revenge can become the leitmotif of existence, destroying the soul and spiritual. Affirmation of life becomes possible only after accepting the fact of its vulnerability, near and accidental end.

Decision-making in the conditions of war has differences between people who defend their lives, family, country, and aggressors who seek to seize territories, turn free people into acolytes or colonies of their state, and impose autocracy on a democratic society.

Human behavior during war is based on the priorities of survival and achieving victory, development in the negative destructive political economy of war is compressed and moved mainly to the military sphere and its provision. Basic human aspirations, as well as ideal images of life, are contained in a worldview with a divided reality, where the desired and

unacceptable, pre-war and wartime, are clearly demarcated, which is what constitutes the space for finding solutions, as well as models of behavior and activities of its participants.

War is a choice of one's own destiny, which differentiates people into military and civilian, "ours" and "enemies", not only in the reality of warring actors, but also at the level of awareness of their desired future. At the same time, these roles become part of a person's worldview, which directly affects the decision-making process. A problematic question arises - what are the attractors of people's choices in war-decisionmaking? This choice is based on an identity that allows to survive in difficult conditions. R. Nalbandov explains it as follows: "Specific identity constructs force them to choose different options not based on the objective utility calculations but on their subjectively constructed assessment of the objective reality" (Nalbandov, 2013, 94). In our case, the decision is made on the basis of a subjectively constructed assessment of objective reality, which turns into directed actions, which is based on the identification of a person with war or with peace, and the main formation of reality, the interaction of people in the social relations of war. In our opinion, these are the following attractors: "home", "heart and mind", "strength and will", "heroism and dignity", "social order and victory".

#### 2. Home

"Home" is a multi-layered semantic concept that determines people's decisions to leave or stay home. For instance, the first wave of refugees (IDPs) in Ukraine was caused not so much by the war itself, but by its threat. People left their homes to move to a safe territory or country. Sometimes the motives were also the search for a better fate, a new home - under the pretext of war. The search for safety as a shelter, sometimes a temporary home, was both global, international, and regional (within the country) (Razumkov Center, 2022a). The second wave is refugees from the areas near the frontline zone, which is exposed to shelling, and the frontline zone, where hostilities are taking place, has significant differences in the psychological state of people. Often it is a home destroyed by the war, a family that lost loved ones or was injured. Their motivation to seek shelter and often find a new home is to "start over" (Razumkov Center, 2022b). "Home is under fire", "home is a fortress", "ruined home" is not only the conditioning of decisions – it is also a long-term trauma and motivation of the defenders to fight



against the occupiers. The third wave of refugees is determined by displacement from the occupied territory, it is "home under occupation" (BBC Nvs, Zaporizhia, 2022). A home under occupation is a home in lawlessness and looting. The occupation is "home under the rule of violence", destroyed self-governance and everyday life, it is a home of lawlessness. "Home under occupation" causes resistance and the formation of partisans and the underground.

Let's turn to the decisions of the people-of-war who chose the path of fighting and destroying the enemy. Here, the most important component of life is the feeling of family unity with people with whom you have experienced a common disaster and overcame insurmountable challenges. In fact, this is a reproduction of family relations in the military circle. A special category is the "home of military personnel", when a military unit becomes the image of a family - with a father as a commander, brothers, and sisters. As an example, let us give the return to the ranks of one of the most famous British officers of the First World War, "Crazy Jack" Z. Sassoon, who was treated by V. Rivers for post-traumatic stress disorder after the death of part of his squad. Thus, having gained the experience of reconstructing the life narratives of his protégé Z. Sassoon, his friend and doctor V. Rivers claimed: "The most effective motivation to overcome that fear was something stronger than patriotism, abstract principles, or hatred of the enemy. It was the brotherly love of soldiers for one another" (Herman, 2015, 22). That is, shared grief, the challenge of death and victory over it form a stable "family circle" that influences decisionmaking in wartime. This happens due to the establishment of landmark actors, to which an active or former participant in hostilities listens. A similar situation is typical for the military, as well as for medics and volunteers, as well as all those who have experienced the devastating effects of war together.

#### 3. Heart and mind

I. Moiseyv defines a category as "cordocentrism" which "accompanies the genesis of personal selfawareness. The heart is primarily a valuable integrator of the integrity of being. Cordocentrism attributes feeling, cognition (intuitive), will, contemplation, memory to the heart, which to a certain extent inhibits the differentiation and systematic subordination of these abilities" (Moiseyv, 2002, 303). The concept is consistent with an idea of the Arbinger Institute. They convince that even in war the heart can be at peace and war, and the difference is in the attitude towards other people: "The contrast between Saladin's taking of Jerusalem and the Crusaders' taking of Jerusalem teaches an important lesson: almost any behavior – even behavior as stark as war – can be done in two different ways" (The Arbinger Institute, 2015, 43). Such way there is two ways of being with "heart at peace" and "heart at war". "Heart in peace" defines the protection of human rights, equality. Unjust war, unmotivated aggression asserts "heart in war", where people are objects, the fight is for territories, for acolytes, but not for people, their dignity and the future. The heart can be in the past, revanchism, political and geopolitical traumas, but certainly not in peace, these are the signs of the heart in war. The extreme forms of the heart in war, to recall Erich Fromm, are necrophilia, the love of death and destruction, or, to recall Karen Horney (Horney, 1994), the neurotic lust for power. The heart at war always seeks to impose its will on others in war crimes.

#### 4. Strength and will

The beginning of the Russian-Ukrainian military conflict in 2014 proved that the strength of a society striving to preserve the independence of its own state can be weakened by the position of "pacification" of the aggressor, unreadiness to protect its own interests, this also relates to international actors that make international security architecture. The full-scale aggression of the Russian Federation in 2022 showed that the will to fight of people and society has changed the course of aggression. The war decision-making leader sets not only the nature of decision-making within the group, but also acts as a model for decisions regarding interaction with the enemy. Thus, describing Sultan Saladin's victory over Saif al-Din in the conquest of Syria, S. Lane-Pool wrote about the exemplary dignity of the victory consideration in the use of its results. Saladin did not take any of war mining for himself: "In this he displayed alike the instincts of a generous nature and the foresight of a statesman. He bound both his own troops and the enemy's to him with ties of gratitude and personal devotion" (Lane-Poole, 2018, 111). Therefore, the image of the military-political leadership, the rulergeneral, who builds connections with other participants in the conflict based on complicity in their lives, and also models the nature of "usthem" interaction, is of great importance in the decision-making process in war.

Difficult events in the life of the country and the world can leave their mark on decision-making both during war and in peacetime. The Battle of Thermopylae (480 BC), the Siege of Jerusalem (1187), the Battle of the Alamo (1836), the Verde Meat Grinder (1916), the Battle of Kruty (1918) and the defense of the Donetsk airport (2014) became not only the object of attention of researchers of military history, but also the choice in favor of the decision to self-sacrifice for the sake of the collective good, which still affects people today who associate themselves with the participants of those events, regardless of the conditions of life and circumstances. The image of war affects the nature of people's decisions even in periods of peace at the subconscious level. K.G. Jung diagnosed the danger of irrational behavior of a Swiss patient who dreamed of the tragic and desperate battle of the Swiss army at Basel in 1444 (Jung. 1953). Therefore, the image of important battles of the past can serve as an example for heroic behavior during war, as well as an indicator of the tendency to make unreasonably risky decisions in peacetime.

Any society in the conditions of war lives in a mythical reality, where evil exists here and now, and the fight against it can only be to the death. At the same time, the accumulated malice towards the enemy in a civilian does not have a direct outlet in the form of armed confrontation. Something similar to the sublimation of the mortido takes place, whereby civilians respond to reflexive calls of conscience and contribute, real or illusory, to a common victory. A supporter of mortido sublimation was E. Berne, who insisted that: "Mortido can also be I sublimated, as in stonecutting, carpentry, and mining, which create beautiful or useful things by attacking inanimate objects. Surgery involves one of the most useful sublimations of mortido" (Berne, 1975, 65). We note that the attack is carried out on an object, but at the same time the image of the enemy is used, which is defeated at the level of a creative act. In such cases, a civilian in the conditions of war associates himself with a soldier, but gives his forces not to the front, but to the rear. Thus, when it is impossible to use force in war to satisfy the need for revenge, the energy of the mortido is directed into sublimation. It manifests itself in active volunteering for the defense of the country, wartime songs, informational marathons, works of street artists and other similar humanitarian and patriotic activities.

#### 5. Heroism and dignity

War is a special time for every person. Time to rethink your own existence. Updated weighting of your deeds from birth and probable death. And

here it will be appropriate to modernize M. Heidegger's thesis: "...the meaningfulness of human existence rest on our "being - towards death" (Bowring, 2021). That is, during the war, only the active fulfillment of life until death gives meaning to existence. In order to determine the value of life before its end, standards of social interaction are needed, which serve as "beacons" decision-making. Here it is worth distinguishing two attractors "Hero" "Antihero", which depend on the vector of interaction "man - world", as well as on the choice of being and non-being by a person for himself and for the surrounding world. Overall, these attractors are fundamental components that define the decision-making space in war. The basic characteristics of hero are dignity and respect for the opponent. One of the first illustrations of this thesis can also be found in S. Lane-Poole, who describes the course of the relationship between René de Chatillon and Saladin in 1184 during the siege of the last castle of the city of Carac, in which the wedding took place: "Reginald sent Saladin meat and wine, as it were a piece of the bridecake, - to share in the feast; and in return the Sultan gave strict orders, proclaimed to the army, that the nuptial tower of the bride and bridegroom should be scrupulously respected by his archers and artillery!" (Lane-Poole, 2018, 136). That is, chivalrous manners and noble decisions during war are possible, but this requires the proper behavior of all parties to the conflict. Today, the code of ethics in making decisions in war is effective only if the participants in the conflict agree to rely on the reference images of the heroes of the past. Another important virtue of a hero is self-sacrifice. H. Rusch sees it as: suicide" "...altruistic operationalized protecting comrades from explosions using their own body as a shield" (Rusch, 2022, 239). That is, it is a choice in favor of death, but from altruistic motives and with the preservation of optimism, but in relation to the already immeasurable future of the war participant. In addition, the author's conclusions about the fact that the heroic behavior of a person is fixed and developed with the help of symbolism and identification with intangible values important. According to H. Rusch, the owners of the Medal of Honor in the US armed forces act more courageously and selflessly than those who do not have such a distinction. So, social responsibility recorded through identifying symbols and a code of honor promotes heroic behavior of individuals, and in some cases, groups of people. However, people must share the values and ideals of society that produce such



symbols, as well as pass them down from generation to generation.

If heroism is the acceptance of the energy of mortido as a certain driving force for continuing life in war conditions, then treason is the sublimation of mortido, when a person's loss of honor, property, value orientations, love, social status turns into a desire to fill the insufficiency of being by going to the opponent of militarily conflict. Starting from Tarpeia (the daughter of a Roman general) to modern collaborators - all traitors try to fill the void of existence, but "nothing" materializes just after their decision to change the side of the conflict in the war, the measure of life is determined only by existence, the soul and spiritual are distorted by the lack of unity with humanity and humanness, fear pushes them to the side of the aggressor. The ratio of altruism and selfishness is especially important in choosing the next role model. The main functional load of the role of the defender is a reference point for the continued existence of the world. Opposite to the defender is the role model of the terrorist, who is involved in making a decision about the complete destruction of the enemy's world. At the same time, the most brutal form of this is the destruction of the future enemy at the expense of killing and raping the civilian population. I. Chowdhury and M. Lanier note: "Dating from the very first wars and civil disturbances, "rape and pillage" of the losing force has been one of the "spoils of war" taken by the victors. In ancient times in addition to rape and pillage, slavery was commonly employed against losing families, tribes, city-states or countries (Chowdhury & Lanier, 2012, 47). It illustrates the nature of terrorism, which, unlike the activity of the defender, is built on the destruction of the world of a hypothetical or real enemy. At the same time, the authors of the terrorist act build their own irrational reality, where the value of justice as the harmony of life is replaced by retribution to the world. In contrast to protection, terror does not carry a constructive social meaning, but is only a means for the formation of a vicious circle of resentment, when the emptiness of nothingness is transferred from the terrorist to the victim.

The role of a peacemaker as a guide to life is not possible without forgiveness, but in war there can be no forgiveness without atonement, which in the end gives rise to revenge. Forgiveness and revenge are attempts to restore the balance of interaction between a person and the world based on the restoration of life in oneself or through the realization of a subjective idea of justice. This is reflected not as the pacification of the aggressor,

the rapist and the terrorist, but as the restoration of justice after victory in the free choice of the heart in peace. S. Benard and co-authors associate such restoration of balance as an increase or restoration of social status: "Whether moral behaviors are perceived to be status worthy, and whether morality provides a pathway from intergroup revenge or forgiveness to intragroup status" (Benard et al. 2022, 123). However, revenge in war or after it has much deeper roots, because it touches the categories of being and non-being, and also forms the possibility of a constructive future. Accordingly, the role of a peacemaker and an avenger is a story not only about social status, but also about finding a solution to how to live on in the conditions of war and after it.

Another question arises: how to make difficult decisions in the conditions of war and not become pure evil? Comparing the views of H. Arendt and T. Aquinas, P. Fisogni considers evil as the possibility of action without thought: "The norms taken as a parameter of the action, ('you must') had been able to de-empower human responsibility both with respect to reason (I do not need to think about what I do, but only at the command of the norm) and will (which follows the 'you must' command)" (Fisogni, 2022, 143). That is, a constructive decision during a war is not possible not only without thought, but also without a proper evaluative and volitional act, when the chosen model of the future is supported by a positive emotional assessment and the will to win.

#### 6. Social order and victory

The organization of society as a relationship between civil society and the state determines the strength of the integrity of society, this happens both in peacetime and in wartime. Civil society in Ukraine is formed as an extension of selforganization, first of all, starting from opposition to corrupt political system and falsification of elections in 2004, then to the revanchist postcolonial state in 2013 and finally to Russian fullscale military aggression in 2022. This resistance formed a special large-scale phenomenon – the volunteer movement as a self-organization of society (Liubyva, 2022). Civil society progressed with the development of local self-government and a network of public organizations, which proved the effectiveness and stability of Ukrainian society in the war. Civil society puts pressure on the state and co-evolutionarily fills the gaps in the state system. Civil society forces the state to overcome inertia, stiffness, overbureaucratization, inflexibility, since the price of the issue is the life of soldiers at the front or citizens in the areas near the frontline, the frontline and liberated territories. contradiction also manifests itself in the military sphere as the interaction of territorial defense and professional military units. This approach determined the creativity, flexibility and responsibility of the junior command and officer staff. Admiral James Stavridis claims that under the new conditions of confrontation between global actors, the joint actions of the armies of the democratic world, the coordination of the actions of irregular military formations and the professional regular army are needed. "In the end, the nation needs to maintain the lighthouse of deterrence shining well away from its shores, where it can have the most effect. And it is on the anvil of those forward deployments that it will forge the most combat-ready force. Together, the anvil of deployment and the lighthouse of deterrence must remain the touchstones of the Navy and Marine Corps team in this turbulent 21st century" (Stavridis, 2022).

Such an interaction of civil society (which came to like the image of "a beehive that stings an aggressor bear") and the state has greater speed, maneuverability and ability to innovate in the military sphere, as opposed to an autocratic state. The disadvantages of the autocratic state with its slow hierarchical system, dependent on the decisions of the autocrat, which nevertheless has a great potential for forced mobilization, but despises and destroys the democratic social potential of creativity of individuals and reference communities. An important problem of the organization of society is the harmonization of "civil society - state" relations as a of self-organization representation organization of society for victory.

#### **Conclusions**

Summarizing the results of this study, we note that decision-making during war is a complex and multi-vector process of approval by the decision-making actor of a plan of action for further life, which depends on the existing construction of the interaction "man – world" and its emphasis on existence and non-existence in the conditions of a military conflict. The decision-making process during war is determined by several attractors, which named as "home", "heart and mind", "strength and will", "heroism and dignity", "social order and victory".

Attractor "home" ensures the stability of the people in war, as people identify themselves with

this source of existence and gravitate towards it. "Heart and mind" is the basic attractor during decision process, which determine priorities "Peace - War" and "I - World". The heart and mind in peace give birth to actors' decisionmaking models that are reflected in the heroic defense of one's world against an aggressor. The heart and mind in war give birth to objectified models of behavior of traitors and terrorists. "Strength and will" and "heroism and dignity" attractors form and reflect the figures of decisionmaking leaders whom one wants to follow, whom one wants to transfer power and place responsibility on them. War actually gives birth to a mythical reality, but it is not a degradation of world perception, but the creation of a basis for a potential change of reality in the desired direction. Civil society resistance together with self-organization contributes to the restoration of the balance "society - state", "individual collective", which should lead the country to victory.

#### Bibliographic references

BBC Nvs, Zaporizhia (2022). How Ukrainians from the occupied territories will build a new "iron curtain" URL: https://www.bbc.com/ukrainian/features-63142849

Benard, S., Doan, L., Nicholson, D.A., Meanwell, E., Wright, E.L., & Lista, P. (2022). To Forgive Is Divine? Morality and the Status Value of Intergroup Revenge and Forgiveness. The Russell Sage Foundation Journal of the Social Sciences, 8(6), 122-139. https://doi.org/10.7758/RSF.2022.8.6.07

Berne, E. (1975). A Layman's Guide to psychiatry and psychoanalysis. New York: Simon and Schuster.

Bowring, F. (2021). Death and the form of life. European Journal of Social Theory, 25(3), 349-365.

https://doi.org/10.1177/13684310211024534 Chowdhury, I., & Lanier, M. (2012). Rape and HIV as Methods of Waging War: Epidemiological Criminology's Response. Advances in Applied Sociology, 2, 47-52. https://doi.org/10.4236/aasoci.2012.21006

Fisogni, P. (2022). The Emptiness of Evil: A Dialogue between Arendt and Aquinas. Sun Text Rev Neurosci Psychol, 3(1), 141-147. https://doi.org/10.51737/2766-4503.2022.041

Herman, J. (2015). Trauma and Recovery: The Aftermath of Violence - From Domestic Abuse to Political Terror. New York: Basic Books.





- Horney, K. (1994). The Neurotic Personality of Our Time. New York, London: W. W. Norton & Company. URL: https://books.google.pl/books?id=oA9RVp0 mrwC
- Jung, C.G. (1953). The Symbolic Life: Miscellaneous Writings (The Collected Works of C. G. Jung, Volume 18) Illustrated Edition. New York: Princeton University Press.
- Kahneman, D. (2020). Thinking, Fast and Slow. Jakarta: Main Library Gramedia, Year. URL: https://www.goodreads.com/book/show/114 68377-thinking-fast-and-slow
- Kharvtonov. E., Kharvtonova. O., Kharytonova, T., Kolodin, D., & Tolmachevska, Y. (2019). Human rights as the basic value of the concept of private law in modern Europe. Amazonia Investiga, 477-485. 8(20). Retrieved from https://amazoniainvestiga.info/index.php/am azonia/article/view/177
- Lane-Poole, S. (2018). Saladin and the Fall of Jerusalem. Cairo: Ozymandias Press.
- Lepskiy, M. (2016). Human security in the local, state and international dimension and the contemporary functioning of the border. Ethnic conflicts and religious security in local, national and international dimensions. KRAKÓW "NOMOS": University of Wrocław & Publishing House. (pp. 189-228). (in Polish)
- Lepskiy, M.A. (2006). Interconnection between Optimism and Pessimism: Problem of Social Perspective. Kyiv: Institute of Higher Education of the Academy of Pedagogical Sciences of Ukraine. (in Ukrainian).
- LeShan, L. (1992). The Psychology of War: Comprehending Its Mystique and Its Madness. Helios Press.
- Liubyva, T. (2022). Civil identity of the inhabitants of Ukraine on the eve and in the conditions of the war. Ukrainian society in wartime. 2022: Collective monograph / Dembitskyi, S., Zlobina, O., Kostenko, N. & others; Golovakha, Ye. (ed.), Makeiev, S. (ed.). Kyiv: Institute of Sociology of the National Academy of Sciences of Ukraine, pp. 284-291. URL: https://i-

- soc.com.ua/assets/files/monitoring/maket-vijna...2022dlya-tipografiivse.pdf
- Moiseyv, I. (2002). Cordocentrism. Philosophical encyclopedic dictionary. Kyiv: Abris. (p. 303). (in Ukrainian). URL: https://shron1.chtyvo.org.ua/Shynkaruk\_Volodymyr/Filosofskyi\_entsyklopedychnyi\_slovnyk.pdf
- Nalbandov, R. (2013). Irrational Rationality of Terrorism. Journal of Strategic Security, 6(4), 92-102. http://dx.doi.org/10.5038/1944-0472.6.4.5
- Perellin, Ch. J. (2009). How NASA Builds Teams. Hoboken: John Wiley & Sons, Inc.
- Prigogine, I., & Stengers, I. (1984). Order Out of Chaos: Man's New Dialogue with Nature; with a foreword by Alvin Toffler. Toronto, New York, London: Sydney Bantam Books.
- Razumkov Center (2022a). Ukrainian refugees: attitudes and assessments (March 2022) URL:
  - https://razumkov.org.ua/napriamky/sotsiolog ichni-doslidzhennia/ukrainski-bizhentsi-nastroi-ta-otsinky [Ukrainian refugees: attitudes and assessments (March 2022)]
- Razumkov Center (2022b). Attitudes and assessments of Ukrainian refugees (July–August 2022). URL: https://razumkov.org.ua/napriamky/sotsiolog ichni-doslidzhennia/nastroi-ta-otsinky-ukrainskykh-bizhentsiv-lypen-serpen-2022p
- Rusch, H. (2022). Heroic behavior: A review of the literature on high-stakes altruism in the wild. Current Opinion in Psychology, 5(43), 238-243.
- https://doi.org/10.1016/j.copsyc.2021.07.024 Stavridis, J. (2022). The Anvil and the Lighthouse: Why Forward Deployments Are Vital. US Naval Institute, 148/7/1, 433. https://www.usni.org/magazines/proceedings /2022/july/anvil-and-lighthouse-whyforward-deployments-are-vital
- The Arbinger Institute. (2015). The Anatomy of Peace: Resolving the Heart of Conflict. Oakland, CA: Berrett-Koehler Publishers.
- West, B. J. (2016). Fractional Calculus View of Complexity: Tomorrow's Science. Boca Raton: CRC Press.

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# Categories and methods of civilizational approach in modern philosophical and historical discourse

#### Категории и методы цивилизационного подхода в современном философскоисторическом дискурсе

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Written by:

Alfinur A. Galiakberova<sup>85</sup>

https://orcid.org/0009-0006-9502-8277

SPIN-код: 1240-5712

Azat G. Mukhametshin<sup>86</sup>

https://orcid.org/0009-0005-6521-9171

SPIN-код: 1837-7534

Norair M. Asratyan<sup>87</sup> https://orcid.org/0000-0001-6075-2018

SPIN-код: 748501

Irina V. Kornilova<sup>88</sup>

https://orcid.org/0000-0003-0910-8897

SPIN-код: 6727-2777

Rustem M. Galiev<sup>89</sup>

https://orcid.org/0000-0002-5096-8648

SPIN-код: 2399-5862

#### **Abstract**

The diverse contradictions of the modern world, social and international conflicts, the growing trends of both globalization and national isolation, the rapid development communication technologies against the background of growing gap between poverty and wealth of the countries and within them are evidence of another crisis in the system of international relations, of the entire world order. The growth of entropy has once again raised the question of the lack of a holistic and systematic understanding of the processes of sociohistorical development, and actualizes the need to analyze theories that consider the development of large socio-cultural communities. In this regard, it is important to study sociophilosophical and philosophical-historical theories and views, united in a civilizational approach. The dominance of the formational approach in Soviet historical science ended in the late 1980s. And in 1995 the Russian Academy of

#### Аннотация

Многообразные противоречия современного социальные международные конфликты, нарастание тенденций глобализации, так и национальной изоляции, стремительное развитие коммуникационных технологий на фоне роста бедности и богатства между странами и внутри них являются свидетельством очередного кризиса системы международных отношений, всего Нарастание миропорядка. энтропии очередной раз поставило вопрос об отсутствии целостного и системного понимания процессов социально-исторического развития, актуализирует необходимость анализа теорий, развитие рассматривающих крупных общностей. социокультурных R этом важным изучение отношении является социально-философских философскоисторических теорий взглядов, объединенных в цивилизационный подход. Доминирование в советской исторической

<sup>89</sup> Candidate of Pedagogical Sciences, Senior Researcher Naberezhnye Chelny State Pedagogical University, Russia.



<sup>85</sup> Candidate of Economic Sciences, Associate Professor Naberezhnye Chelny State Pedagogical University, Russia.

<sup>&</sup>lt;sup>86</sup> Doctor of Pedagogical Sciences, Professor Naberezhnye Chelny State Pedagogical University, Russia.

<sup>&</sup>lt;sup>87</sup> Candidate of Philosophical Sciences, Associate Professor Naberezhnye Chelny State Pedagogical University, Russia.

<sup>88</sup> Doctor of Historical Sciences, Professor Naberezhnye Chelny State Pedagogical University, Russia.



Sciences recognized that civilizational theory can serve as one of the conceptual principles for analyzing and describing the historical process in textbooks for schools and universities. The object of our article is the essence of the civilizational philosophical and historical concept. The subject is the discourse, in the space of which there is developed a methodology, and are analyzed the categories of the civilizational approach to history. We apply general theoretical research methods: analysis, synthesis, comparison, interpretation. It is shown that within the framework of the theory under consideration methodological differences are significant, so several theoretical varieties are identified and the key categories of the civilizational concept in them are interpreted differently.

Keywords: culture, civilization, civilizational approach to history.

#### Introduction

In modern Russian philosophical and historical discourse there is observed an antagonism between two opposing conceptual approaches formational and civilizational. The basis of the formational approach is the Marxist theory, according to which human history is a linear process, the driving force of which is the class struggle. The periodization of history is built on this principle, where after the primitive society there come a slave-owning, feudal, capitalist ones. And the highest stage (formation) is recognized as an ideal communist society, in which all major social contradictions are resolved that leads to social homogeneity and social harmony. Proponents of the formational concept try to separate utopian elements from rational ones in it. And critics point to the key shortcomings of this theory: materialism considers the spiritual life of a person in a simplified way, does not see the cultural identity and diversity of peoples, does not identify the reasons for their uneven development, and belittles the role of the individual in history. A view of history based on a civilizational concept puts at its core the concepts of civilization and culture. This approach pursues the main goal the study of local cultures and civilizations in all the diversity and richness of their most important phenomena: religion, art, rituals, customs, crafts, principles of education, the nature of the family. It is recognized that the historical process has a variety of forms and represents a complex mosaic

науке формационного подхода завершилось в конце 1980-х годов. А в 1995 г. Российская Наук Академия признала, цивилизационная теория может служить одним из концептуальных принципов для анализа и описания исторического процесса в учебниках для школ и университетов. Объект нашей сущность цивилизационной философско-исторической концепции. Предметом является дискурс, в пространстве которого разрабатывается методология, анализируются категории цивилизационного подхода истории. Используются общетеоретические методы исследования: анализ, синтез, сравнение, интерпретация Показано, что и в рамках рассматриваемой теории методологические различия существенны. выделены несколько разновидностей, R которых по-разному трактуются ключевые категории цивилизационной концепции.

Ключевые слова: культура, цивилизация, цивилизационный подход к истории.

picture. However, critics of the civilizational concept argue that it does not give us a holistic, but a fragmented picture of history, does not reveal to us the general laws of the sociohistorical process. Repeated attempts by a number of philosophers and historians to find ways to harmonize both methodological approaches and present them as complementary ones have not been successful. However, no matter what conceptual principles scientists adhere to, their research should be aimed at comprehending objective truth and represent a respectful and benevolent view of the history and culture of each nation.

#### Methodology and design

The categories of culture and civilization, their correlation are of fundamental importance for the study of society, its structure, and understanding of the most important historical events. Considered in a philosophical and cultural vein, these categories make it possible to form holistic and systematic ideas about the features of the development of social communities within certain spatial and temporal boundaries, to identify objective laws in their development, to consider the place of certain events and processes within the life cycle of society, to predict the manifestation of certain trends.

The object of our article is the essence of the civilizational philosophical and historical concept. The subject is the discourse, in the space of which there is developed the methodology, are studied the main principles of the civilizational concept and analyzed the categories of the civilizational approach to history. The work implies general theoretical research methods: analysis, synthesis, comparison, interpretation.

On this basis, the following tasks are formulated:

- to study the essence and methodology of the civilizational approach;
- to consider the relationship between the concepts of "civilization" and "culture";
- to study and evaluate the discussions within modern philosophical and historical investigations concerning the most important categories on which civilizational theory is based;
- to reveal the strengths and weaknesses of this theory, the possibilities of its integration with other conceptual approaches.

#### **Analysis and Discussion**

#### 1. The concept of Civilization

The appearance of the word "civilization" dates from the middle of the XVIII century. The term comes from the Latin "civilis", interpreted as "civil, state". Based on the etymology of the term, it is possible to say that we are talking about a period when society left its primitive state, there arose an organization in the form of a state, and active development started to characterize cultural life.

The English thinker of the 18th century. A. Ferguson used the concept of "civilization" to study the early stages of the development of peoples. As criteria for "civilization" the author named the transition of peoples from shepherding to production, as well as the appearance of property rights (Ferguson, 1792).

Analyzing the modern application of the term, B.S. Erasov identifies 9 variants of its usage. Most often it is used to denote the stage of development of society, to describe the development of mankind in terms of its place in the Universe, to designate a particular society, taken within certain time and territorial boundaries, to identify the level of development of society, as well as with an axiological purpose (Erasov, 2002).

E.B. Chernyak gives the following definition of this concept: "civilization is an integral self-developing system that includes all social and non-social components of the historical process, the entire set of material and spiritual objects created by the human being" (Chernyak, 1996).

A similar opinion is presented by M.M. Mchedlova: "civilization is an extremely wide, stable socio-cultural community that exists in certain spatial and temporal coordinates" (Mchedlova, 2008). At the same time, the author points out that civilizations are characterized by a certain ratio of different value categories.

#### 2. The concept of culture

The word "culture" has Latin roots and comes from "cultura", which means "cultivate". Initially, it was meant that this concept neither refers to the natural habitat (nature) nor to human nature (organism), but to the methods and results of "cultivation", changing the external material environment, as well as to transforming people themselves. Therefore, the field of culture is an artificial environment created by people, which includes diverse spiritual values, social relations and artifacts, as well as bodily and spiritual abilities and social traits acquired by people in the process of upbringing and socialization.

Due to the versatility of this concept, there have developed many of its definitions, each of which being based on a certain conceptual approach. Here are the following major features for the definition of culture (Kuznetsova, 2013):

1) objective (culture is a set of material and spiritual values created by people); 2) procedural (culture is a process of production, distribution and development of cultural values); 3) semiotic (culture as a sign system that preserves the experience of generations in various symbols – words, concepts, art, tools, consumer goods); 4) functional (culture as a way of existence and a system of means that allows individuals and communities to solve diverse problems they face); 5) activity (culture as practice for the creation, mastery and implementation by individuals of the wealth accumulated by mankind: knowledge, skills, abilities).

In accordance with certain approaches, the authors define culture as generally accepted ideas, manifested in actions and artifacts that characterize a particular society (Redfield, 1941); as a set of non-biological manifestations of a person (Pelipenko & Yakovenko, 1998); as a practical implementation of universal and



spiritual values (Vyzhletsov, 2016); as a special semiotic mechanism and a set of genetically noninherited information in the field of human behavior (Lotman, 1996); as a historically established system of norms of behavior and activity (Il'enkov, 1991).

V.Zh. Kelle noted that, in relation to historical development, the concept of "culture" was first used by German researchers in the 18th century. This concept in this period "was applied mainly to the phenomena of the spiritual sphere as the highest layer of the peoples' life" (Kelle, 2008). At the same time, the researchers made a conclusion about the diversity of cultures, their significant differences from each other, uniqueness and intercultural relations. In the same period, within the context of German Romanticism development, there was formed a concept of culture as a worldview: each culture sees the world in its own way, it represents an original picture of the world.

Starting with the prominent American philosopher and ethnologist Robert Redfield (1952), the concept of integrity and consistency of each culture is presented and studied as a general cultural picture of the world (Ariarskiy, 2001; Arnol'dov & Kruglikov, 1987; Bibikhin, 2007; Bykhovskaya, 2017). At the same time, many scientists are delving into different aspects of the world picture in order to study them in detail.

In connection with the aggravation of the human problems and the crisis of culture in the modern era, the relevance of the humanitarian picture of the world is significantly increasing (Torosyan, 2020; Asratyan et al., 2018b; Galiakberova et al., 2018). Being part of the general cultural picture of the world, it generalizes and synthesizes the key results of research in many fields of the humanities. In its turn the humanitarian picture of the world contains an ethnic picture of the world (Gibadullin et al., 2018; Zverev, 2011; Seredkina, 2014), an artistic picture of the world (Averintzev, 1975; Bakhtin, 1990; Borev, 1970; Blokh et al., 2019; Grakhova et al., 2019; Asratyan et al., 2020) a religious picture of the world (Tillich, 2015; Grigor'eva, 2008) a linguistic picture of the world (Asratyan et al., 2018a; Kornilov, 2003; Zaliznyak et al., 2005).

#### Correlation between the concepts of "civilization" and "culture"

We have analyzed how different concepts consider the relationship between the categories of civilization and culture. As a result, there were identified three groups of concepts:

- Concepts where the notions of "civilization" and "culture" act as being close or synonymous. For an example, we can refer the theory A. Toynbee, where civilization is considered as one of the stages in the development of culture. At the same time, attention is focused on the spiritual component, and religion is considered its main component (Toynbee, 2011; 1993).
- Concepts that consider both the similarity and difference of culture and civilization. This group of concepts includes the theory of F. Braudel, who proceeded from the position that civilization is the basis of culture. At the same time, the author also focuses on the spiritual aspect of civilization, but he assigns the central role to mentality (Braudel, 2008).
- Concepts where culture and civilization are antagonists. This group certainly includes the theory of O. Spengler, set forth in his work "The Decline of Europe". Civilization within the framework of this theory is presented as the final stage of the existence of culture, as its disintegration (Spengler, 1993; 1998).
- L. M. Martseva considers the semantic commonality of the concepts of "civilization" and "culture" and claims that they correlate "as a dialectical unity of content and form ... The dialectical unity of content (dominant spiritual and moral values, moral behavioral norms) and its expression (laws and regulations) fixes "cultural code of the development of the nation" (Martseva, 2017).
- V.M. Strogetskiy (2020) believes that most modern concepts proceed from the fact that there are points of intersection between civilization and culture, while there is no complete compatibility. The author points out that culture is associated with various types of human creative activity, while civilization reflects the broad context of social development from the functioning of social groups to the creation and use of material values. At the same time, the category of civilization least of all refers to the individual's contribution society. to V.M. Strogetskiy, like L.M. Martseva, makes a conclusion about the dialectical connection between civilization and society.
- S.I. Levikova, exploring this issue, indicates that in the English-language works the concepts of



"civilization" and "culture" are considered as synonymous. However, the situation is different in the discourses of other countries.

The author points out that the first attempts to "unite civilization and culture" date back to the 18th century. Later on the study of this issue was significantly developed in the 19th century, in the works of German philosophers. This problem aroused considerable interest of researchers in the 20th century. S.I. Sevikova points out that the source of the problem of the relationship between civilization and culture is scientific and technological progress, which has had a significant impact on the social life of a person (Levikova, 2018).

V.D. Komarov seeks to integrate the ideas of dialectical materialism and the civilizational approach. He points out that civilization combines the material foundations of society life, political institutions and socio-cultural processes, the way of people's life. The author comes to the conclusion that "civilization - in the most general definition – is such a historical state of society in which the accumulation of material social wealth and the development of social freedom determine the humanistic progress of culture" (Komarov, 1998). At the same time, the author introduces the concept of "civilized culture", thereby pointing to the relationship between culture and the stage of development of society. Thus, culture is based on the current level of development of society (including its material component). In turn, the development of culture creates the basis for the development of a human being at this stage of the development of society (social being).

In our opinion, the categories of "culture" and "civilization" should be considered in a complex dialectical contradiction. Although concepts are very close, their identification leads to a narrowing and impoverishment of the content, does not take into account important semantic shades. Culture proceeds from the priority of spiritual principles over material factors, while civilization is firmly connected with the material and technical component of society's life. It is also important to take into account that the development of both culture and civilization contains not only the characteristics of a linear movement, but also the continuity of previous experience and its accumulation. However, each new level, if it is achieved through free creativity, huge constructive efforts, can represent a special inimitable quality, historical uniqueness. At the same time, human history is full of examples of cultural degradation and historical regression.

From this we can conclude that modern humanity retains the possibility of both the formation of united civilization, which was mentioned by K. Jaspers (1994), and is able to slide into an even more pronounced differentiation in the spirit of S. Huntington's theory of the clash of civilizations (Huntington, 1996).

### 4. The essence and methodology of the civilizational approach

The use of the category "civilization" in itself does not indicate a commitment to a civilizational approach in understanding history. Thus, the already mentioned A. Ferguson, as well equally outstanding figures of L.H. Morgan (1934) and H.T. Buckle, who during all his lifetime was writing "The History of Civilizations" (2000-2002), took a linear progressive view of history as a single process. They considered civilization to be the stage following "savagery" "barbarism", and civilization meant a higher historical stage, the superiority of some societies over others that did not reach this stage.

The emergence of the civilizational concept gave this term a fundamentally different meaning. The classical principles of the civilizational approach imply a rejection of understanding history as a single linear process of movement. The emphasis is replaced on the uneven development of various communities, their self-sufficiency and autonomy. Within the same time period, different communities can be at different stages of their development.

The process of formation of a civilizational approach went through a number of stages. The first of them dates from the 2nd half of the 19th century, when for the first time there appeared a view of history not as successive stages of development, but as the coexistence of different cultures. This position was quite clearly expressed in the work of H. Rickert (1908). In Russia it's possible to attribute to this stage the ideas of N. Danilevsky (1995), who distinguished 10 types of cultures. At this stage, the concepts of civilization and culture were not yet opposed to each other.

The second stage starts at the beginning of the 20th century. Here the key role belongs to the work of O. Spengler "The Decline of Europe" (1993, 1998), in which civilization is understood as a time of decline following the period of



culture. O. Spengler's ideas are comparable with the position of N.A. Berdyaev (1969), who spoke of the soullessness of civilization as opposed to the religiosity and spirituality inherent in culture. The third stage can be dated from the beginning of the second half of the 20th century, associating it with the concept of A.J. Toynbee (2011-1993), which explored the life cycle of civilizations. A. Toynbee introduced the term "local civilization", combining in it various aspects of existence of civilization (territorial, ethnic, religious). Similar ideas were shared by the Russian-American scientist P.A. Sorokin (1992).

As a result of this evolution, civilizational theory has acquired many features that require scientific analysis. L.G. Koroleva (2019) highlights the following peculiarities that are characteristic of modern theories within the civilizational approach:

- an indication of the diversity of historical forms of development;
- the study of the whole manifold interweaving picture of interests, values and ideals various socio-cultural of communities' representatives;
- recognition of the possibility of two or more systems coexistence within the framework of world civilization.

V.T. Novikov & N.A. Kandrichin (2007) identify approaches that differ in their understanding of self-sufficiency of civilizations or their interdependence.

The concepts of the first group form ideas about the mosaic nature of the world picture, emphasize the regional features of the various structures that make up civilization. Here, less importance is attached to the issues of interaction between cultures, than to those of a single civilization society development. The authors refer to the concepts of this group the theories of O. Spengler, L. Gumilyov (1989), J. Derrida (2012) and others.

The second group of concepts is focused on the spiritual component. When considering the stages of civilization development, we won't find strict cause-and-effect conditionality, there are no rigid frameworks and criteria for belonging to a particular civilization. The authors refer to this group the views of P. Sorokin, K. Jaspers and others.

The concepts of the third group connect civilizational problems with the modern processes of globalization and glocalization. The

emphasis is on common features in the development of civilizations and on the factors influencing this process. In these theories, attempts are made to identify general patterns, to reveal possible directions and prospects for the development of civilizations. This group of theories, according to the authors, is the most promising.

In an effort to generalize numerous studies, different authors in their own way in a concentrated form represent the essence of the civilizational approach.

According to E.V. Chepikov, this entity includes:

- rejection of the end-to-end periodization of all the mankind history, the discreteness of the historical process;
- as subjects of history there are considered cultural-historical types (according to Danilevsky), great cultures (according to Spengler), civilizations (according to Toynbee) or large cultural super-systems (according to Sorokin); they fundamentally different from the historical stages analyzed within the framework of ideas about linearly progressive historical development:
- recognition of the originality of each civilization, the uniqueness of its spiritual
- acknowledgement of the cyclical nature of civilization: as a rule, there are distinguished the stages of its birth, flourishing and death (Chepikov, 2010).

A slightly different algorithm is proposed by A.N. Polyakov, who proceeds from the peculiarities of socio-economic development and priority values, therefore sees the following typological features of civilizations:

- the presence of a "social" core of civilization (strata of the population that are freed from productive labour);
- study of the features of management and lifestyle;
- analysis of the key values inherent in this community;
- studying the correspondence between axiological and economic components (Polyakov, 2007).

A.V. Lubskiy proposed to make a theory based on the unity of the following components of civilization:

the leading role of social integration;



- psychological type of the super-ethnos (mentality, values and worldview);
- correlation between needs and the most typical living conditions (Lubskiy, 2005).

#### **Conclusions**

Thus, the civilizational approach itself is a field of discussion, it includes a wide range of concepts. However, in most studies as the key features of this approach there are recognized discreteness, singularity, uniqueness of civilizations, cyclicality and multivariance of their development. Such a view significantly distinguishes civilizations from all sorts of historical stages studied in the context of a linear approach to history.

The actualization of civilizational methodology is explained by the noticeable shortcomings of the linear and, in particular, formational approaches, in which the uniqueness and singularity of individual social objects are leveled. In contrast to them, civilizational methodology emphasizes the diversity of social reality, the cultural and historical context of human activity, helps to describe the historical process as a cultural mosaic of specific human communities and individuals.

However, it is obvious that the civilizational approach is not free from shortcomings either. This is especially evident when there is a need for a comprehensive study of social processes, their forecasting in conditions of increasing entropy. This method is deprived of tools that should help to understand and define versatile human and global problems, universal principles that determine the geopolitical processes of the modern world.

The methodological crisis that has developed in modern studies of socio-historical processes is due to the dichotomy of two approaches - linear and civilizational. Meanwhile, in the conditions of a stochastic picture of society and geopolitical realities that are difficult to predict, such a situation is becoming increasingly unacceptable. Obviously there is a necessity that in modern theories their authors should more and more strive not to isolate the civilizational approach and oppose it to other ones, but to combine them in a complicated way. Consequently, further deepening and meshing of the civilizational approach should lead it to ever greater intertwining with other approaches and thereby enrich the historical panorama. It is necessary to take into account and study both trends in world history: the trend towards universalization, the formation of a single world civilization and the one towards differentiation, towards peoples' awareness of the uniqueness of their culture, the desire to preserve it as their most important asset. And this is possible on the basis of a new methodology based on the synthesis of various approaches.

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#### **Bibliographic references**

Ariarskiy, M.A. (2001). Applied cultural studies. Saint Petersburg: EGO. https://studfile.net/preview/1611283/

Arbeláez-Campillo, D., Tatsiy, V., Rojas-Bahamón, M., & Danilyan, O. (2020). Contributions of critical thinking as a form of participation and political deliberation. Amazonia Investiga, 9(27), 5-12. https://doi.org/10.34069/AI/2020.27.03.1

Arnol'dov, A.I., & Kruglikov, V.A. (1987). Culture, the human being and the picture of the world. Moscow: Nauka. https://vk.com/doc35927296\_360336584

Asratyan, Z.D., & Sadrieva, G.A., Potanina, A.V., & Kiselevskaya, V.A. (2020). Discourse in Artistic Literature. Revista Inclusiones, 7(num Especial), 228–237. https://acortar.link/iJ8LFN

Asratyan, N.M., Gibadullin, R.M., Asratyan, Z.D., Magizov, R.R., R.V., Nurullina. Shpeka, I.I., Levchenko, M.V. (2018a). Language Processes and Bilingualism in Polyethnic Environment: The Investigation in the Republic of Tatarstan. Modern Journal of Language Teaching Methods, 8(3), 173–182. https://miltm.org/article-1-173-en.html

Asratyan, N.M., Mukhametshin, A.G., & Asratyan, Z.D. (2018b). Humanitarian World Picture within Pedagogical Education.



- Modern Journal of Language Teaching Methods, 8(7), 119–123. https://mjltm.org/article-1-109-en.pdf
- Averintzev, S.S. (1975). Preliminary Notes on the Study of Medieval Aesthetics. Old Russian art. Foreign connections. Moscow: Nauka, 371–382. https://pedlib.ru/Books/3/0249/index.shtml?from\_page=32
- Bakhtin, M.M. (1990). The creative work of Francois Rabelais and the folk culture of the Middle Ages and the Renaissance. Moscow: artistic literature. https://www.booksite.ru/fulltext/bah/tin/fra/nsu/ara/ble/index.htm
- Berdyaev, N.A. (1969). The meaning of history.
  Paris V: YMCA-Press.
  http://www.odinblago.ru/smisl istorii
- Bibikhin, V.V. (2007). World. St. Petersburg: Nauka. Grandmother. http://www.bibikhin.ru/mir
- Blokh, M., Asratyan, Z., & Asratyan, N. (2019).

  Topic of the Imaginative Text and Its Philosophical and Linguistic Presentation.

  Journal of History Culture and Art Research, 8(2), 128–135.

  https://pdfs.semanticscholar.org/1c37/a62ac 0d935a114f3c36c6c931353c29763da.pdf
- Borev, Yu.B. (1970). The comical. Moscow: Iskusstvo. https://biblio.imli.ru/images/abook/teoriya/borev\_yu\_komicheskoe\_ili\_o\_tom\_kak\_smekh kaznit nesovershens.pdf
- Braudel, F. (2008). Grammaire des civilisations. Moscow: Ves' mir. https://www.rulit.me/books/grammatikacivilizacij-read-244795-1.html
- Buckle, H.T. (2000–2002). History of civilizations. History of Civilization in England. Moscow: Vol. 1, 2. https://knigogid.ru/books/101984-blyuz-116-go-marshruta/toread?ysclid=leh0ioyojp9922117
- Bykhovskaya, I.M. (2017). Culturological analysis as a means of forming a humanitarian style of thinking. Uchyonyi sovet, 3, 37–44. https://publications.hse.ru/mirror/pubs/share/folder/xaykhhhecp/direct/206243475
- Chepikov, E.V. (2010). Transformation of the civilizational teachings of A. Toynbee: Abstract of the thesis of philosophical sciences cand. Khabarovsk. https://www.dissercat.com/content/transform atsiya-tsivilizatsionnogo-ucheniya-toinbi
- Chernyak, E.B. (1996). Civiliography. The science of civilization. Moscow: International relations, 78.

- https://www.nkbooksellers.com/books/?rid=83350&lang=cyr
- Danilevsky, N.Ya. (1995). Russia and Europe. St. Petersburg: Glagol Publishing House. https://danilevsky.ru/rossiya-i-evropa/
- Derrida, J. (2012). Marges de la philosophy. Moscow: Academic project. https://djvu.online/file/Vk8tXjoiXVtjM
- Erasov, B.S. (2002). Civilizations: Universals and Identities. Moscow: Nauka. https://acortar.link/dqsl6N
- Ferguson, A. (1792). Principles of Moral and Political Science. Edinburg. https://books.google.ru/books?id=mcoLAA AAIAAJ&printsec=frontcover&hl=ru#v=on epage&q&f=false
- Galiakberova, A., Asratyan, N., Asratyan, Z., & Mukhametshin, A. (2018). Conceptual, Linguistic and Pedagogical Aspects of Humanitarian World Picture. Journal of History Culture and Art Research, 7(3), 43–50.
  - http://kutaksam.karabuk.edu.tr/index.php/ilk/article/view/1753/1247
- Gibadullin, R., Asratyan, N., Asratyan, Z., Nurullina R., & Iljuhin, A. (2018). Ethnic Self-Consciousness and Interethnic Relations in the Poly-Ethnic Region: A Research in Tatarstan. Journal of History Culture and Art Research, 7(4), 340–346. http://kutaksam.karabuk.edu.tr/index.php/ilk/article/view/1855/1315
- Grakhova, S.I.. Gaifutdinov, A.M., S.F., & Asratyan, N.M., Mustafina, (2019). General Sharafetdinova, Z.G. regional studies aspects and facilitation technologies in the study of creations of leading painters and outstanding writers. Amazonia Investiga, 8(19), 540- 546. https://amazoniainvestiga.info/index.php/am azonia/article/view/267/244
- Grigor'eva, L.L. (2008). Religious picture of the world and its reflection in phraseology. Gramota, 8(15), 45–48. https://www.gramota.net/articles/issn\_1993-5552\_2008\_8-2\_18.pdf
- Gumilyov, L.N. (1989). Ethnogenesis and biosphere of the Earthю St. Petersburg: Crystal, 2001. https://vk.com/wall-63038783\_62319?ysclid=lfcwn29pb492551 1184
- Huntington, S.P. (1996). The Clash of Civilizations and the Remaking of World Order. New York: Simon & Schuster. https://archive.org/details/clashofciviliza00h unt/mode/2up
- Il'enkov, E.V. (1991). Philosophy and culture.

  Moscow: Politizdat.
  https://platona.net/load/knigi\_po\_filosofii/ku



- lturologija/ilenkov\_eh\_v\_filosofija\_i\_kultur a 1991/16-1-0-1429
- Jaspers, K.T. (1994). The meaning and purpose of history. Moscow: Republic. http://imwerden.de/pdf/jaspers\_smysl\_i\_naz nachenie\_istorii\_1991.pdf
- Kelle, V.Zh. (2008). Civilization approach and problems of historical process theory formation. Problems of social theory, 2(1-2), 356–374.
  - https://iphras.ru/uplfile/root/biblio/vst/2008/kelle.pdf
- Komarov, V.D. (1998). Philosophy of civilization. Philosophy and Society, 3, 55–112.
  - https://www.socionauki.ru/upload/socionauki.ru/journal/fio/1998\_3/55-112.pdf
- Kornilov, O.A. (2003). Language pictures of the world as derivatives of national mentalities. Moscow: ChePo. https://www.elibrary.ru/item.asp?id=197658
- Koroleva, L.G. (2019). Civilization approach in modern philosophy of history. Scientific notes. Electronic scientific journal of Kursk State University, 3(51). https://www.elibrary.ru/download/elibrary\_4 1232851\_31825387.pdf
- Kuznetsova, E.V. (2013). Definition of culture: a variety of approaches. Perspectives of Science and Education, 5(5), 49–55. https://www.elibrary.ru/download/elibrary\_2 0357201 25633218.pdf
- Levikova, S.I. (2018). The problem of correlation between culture and civilization: socio-philosophical aspect. Creativity and culture in the light of philosophical reflection. Creativity of culture and culture of creativity. Ulyanovsk: Ulyanovsk State University, 48–56.
  - http://lib.ulstu.ru/venec/disk/2017/233.pdf
- Lotman, Yu.M. (1996). On the semiotic mechanism of culture. Anthology of cultural thought. Moscow: publishing house "ROU", 323–327.
  - https://uchebnikfree.com/kultura/semiotiche skom-mehanizme-kulturyi-68831.html
- Lubskiy, A.V. (2005). Alternative Models of Historical Research. Moscow: Social and Humanitarian Knowledge. https://acortar.link/MgCM1z
- Martseva, L.M. (2017). The relationship between the concepts of "culture" and "civilization". National Priorities of Russia, 1, 34–47. https://www.elibrary.ru/download/elibrary\_2 8913849\_67302987.pdf
- Mchedlova, M.M. (2008). Russian civilization: challenges of the XXI century: textbook.

- Moscow: Peoples' Friendship University of Russia.
- Morgan L.H. (1934). Ancient Society, or An Inquiry into the Lines of Human Progress from Savagery through Barbarism to Civilization. Leningrad: Institute of the Peoples of the North Peoples of the Central Executive Committee of the USSR. https://www.pseudology.org/Sex/MorganLG DrevneeObshestvo2.pdf
- Novikov, V.T., & Kandrichin, N.A. (2007). The Phenomenon of Globalization and Value Priorities of the East Slavic Civilization Human Being. Philosophical problems of civilizational dynamics, 1, 27-37. https://core.ac.uk/download/pdf/290217310.pdf
- Pelipenko, A.A., & Yakovenko, I.G. (1998). Culture as a system. Moscow: Languages of Russian culture. https://acortar.link/sOQ05L
- Polyakov, A.N. (2007). Civilization as a social system: theory, typology and method. Problems of History, 11, 63–70. https://www.elibrary.ru/item.asp?id=957628
- Redfield, R. (1952). The Primitive World View. Proceedings of the American philosophical Society, 94, 30. https://www.taylorfrancis.com/chapters/mon o/10.4324/9781315129440-16/primitive-world-view-robert-redfield-clifford-wilcox
- Redfield, R. (1941). The Folk Culture of Youcatan: Chicago: University of Chicago Press, 132. https://ehrafworldcultures.yale.edu/cultures/ nv10/documents/016
- Rickert, H.J. (1908). Philosophy of history. Saint Petersburg: D.E. Zhukovskiy, XIV. https://cyberleninka.ru/article/n/filosofiyaistorii-spb-1908
- Seredkina, N.N. (2014). Ethnic picture of the world in the context of modern social research. Sociodynamics, 10, 26–59. https://e-notabene.ru/pr/article\_13441.html
- Sorokin, P.A. (1992). Human being. Civilization. Society. Moscow: Politizdat. https://www.booksite.ru/fulltext/1179666/te xt.pdf
- Spengler, O. (1993). Decline of Europe. Essays on the morphology of world history. Vol. 1. Gestalt and reality. Moscow: Mysl'. http://yanko.lib.ru/books/cultur/spengler=za kat-1=ann.htm
- Spengler, O. (1998). Decline of Europe. Essays on the morphology of world history. Vol. 2. World-historical perspectives. Moscow: Mysl'. https://acortar.link/eyCZF8
- Strogetskiy, V.M. (2020). Fundamentals of cultural studies. Moscow: Yurait.





- https://www.elibrary.ru/item.asp?id=375393
- Tillich, P.J. (2015). Selected works. Foundation shake. Moscow; St. Petersburg: Center for Humanitarian Initiatives. https://fictionbook.ru/static/trials/12/15/67/1 2156796.a6.pdf
- Torosyan, V.G. (2020). Humanitarian picture of the world: history and modernity: textbook. Moscow; Berlin: Direct Media. https://biblioclub.ru/index.php?page=book\_r ed&id=572438
- Toynbee, A.J. (1993). A Study of History. Nobsword.
  - https://nobsword.blogspot.com/1993\_10\_17 nobsword archive.html
- Toynbee, A.J. (2011). Civilization before the court of history. Moscow: ACT. https://vk.com/wall-

- 52136985\_23820?ysclid=lfcut97m41038065
- Vyzhletsov, G.P. (2016). Axiology of culture at the turn of the century. International Journal of Cultural Research, 33(3), 15–26. https://www.elibrary.ru/download/elibrary\_2 6234560 63264138.pdf
- Zaliznyak, A.A., Levontina I.B., & Shmelyov, A.D. (2005). Key ideas of the Russian language picture of the world. Moscow: Languages of Slavic Culture. http://rusgram.ru/sites/default/files/liter/pres upp/zal-lev-shm\_keyideas.pdf
- Zverev, O.V. (2011). Ethnic picture of the world as an expression of the mentality of an ethnic group. Bulletin of the Moscow State University of Culture and Arts, 4(42), 105–108.
  - https://www.elibrary.ru/download/elibrary\_1 6964354\_21777017.pdf

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# The main ways to solve the problems of document management in higher education (the Ukrainian case)

Las principales vías para resolver los problemas de la gestión de documentos en la enseñanza superior (el caso Ucraniano)

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Written by:
Nataliia Ridei<sup>90</sup>
https://orcid.org/0000-0002-5553-059X
Nataliia Tytova<sup>91</sup>
https://orcid.org/0000-0002-9415-4427
Tetiana Humeniuk<sup>92</sup>
https://orcid.org/0000-0003-2826-8079
Svetlana Ishchenko<sup>93</sup>
https://orcid.org/0000-0001-5791-803X
Svitlana Sheremetieva<sup>94</sup>
https://orcid.org/0000-0002-3179-5948

#### **Abstract**

The purpose of the research is to analyze the problem of document management in the sphere of higher education and to determine potential ways to solve them using the example of the Ukrainian experience. The content analysis of modern pedagogical literature showed the problems of the documentary support. On the basis of the system method, document management is considered as a dynamic system that changes according to modern conditions. Based on the prognostic method, possible prospects for the development of the latest documentation systems are highlighted. In results it is shown, that the modern documentary system completely deviates from the old principles of the formation of the administrative apparatus in several directions. Framework recommendations have been formed determining the development vectors document and communication support, and they can be extended to similar systems of formation,

#### Resumen

El objetivo de la investigación es analizar la problemática de la gestión documental en el ámbito de la enseñanza superior y determinar posibles vías de solución a partir del ejemplo de la experiencia ucraniana. El análisis del contenido de la literatura pedagógica moderna mostró los problemas del soporte documental. Sobre la base del método sistémico, la gestión de documentos se considera un sistema dinámico que cambia en función de las condiciones modernas. Sobre la base del método de pronóstico, se destacan las posibles perspectivas de desarrollo de los últimos sistemas de documentación. En los resultados se muestra, que el sistema documental moderno se desvía completamente de los antiguos principios de la formación del aparato administrativo en varias direcciones. Se han formado recomendaciones marco para determinar los vectores de desarrollo del soporte de documentos y comunicación, y pueden extenderse a sistemas similares de soporte y formación, almacenamiento

<sup>&</sup>lt;sup>94</sup> Candidate of Pedagogical Sciences 13.00.02 Theory and Methods of Technologies Teaching, Docent Department of Theory and Methods of Technological Education, Drawing and Computer Graphics, M.P. Drahomanov National Pedagogical University, St. Pyrogova, Kyiv, Ukraine.



<sup>&</sup>lt;sup>90</sup> Doctor of Pedagogical Sciences, Professor of Ecology, Professor Department for Adult Education, National Pedagogical Drahomanov University St. Pyrogova, 9, Kyiv, Ukraine.

<sup>&</sup>lt;sup>91</sup> Doctor of Pedagogical Sciences, Professor, Head of the Department of theory and methodology of vocational training Department of theory and methodology of vocational training National Pedagogical Drahomanov University St. Pyrogova, Kyiv, Ukraine.

<sup>&</sup>lt;sup>92</sup> Ph.D., specialty - Theory and teaching methods (technical disciplines), Associate Professor, Senior Specialist Accreditation Department National Agency for Higher Education Quality Assurance (NAQA), Ukraine, St.Borysa Hrinchenka, Ukraine.

<sup>93</sup> Ph.D., Doctor Philosophy 015 Professional education, Senior Lecturer Department of Industrial Engineering and Service National Pedagogical Drahomanov University, St. Pyrogova, Kyiv, Ukraine.



support, and storage of documents of the management (administrative) staff. conclusions established that the current system of organizing documentary support in the educational sphere of Ukraine actually contains archaisms. It is proposed to integrate Blockchain-technologies into the implemented educational SEMDs, which will potentially ensure inter-level communication channels of the participants in the document creation process of higher education of Ukraine.

Keywords: document management, higher education of Ukraine, Blockchain, problems, and prospects.

#### Introduction

The modern development of the information society dictates updated requirements for document management. Developed digital technologies make it possible to update the management of organizations, improve and optimize the process of document management. Education, as a separate branch of social activity, is no exception, and the focus on the use of digital orders, decrees, and other acts is inherent in it no less than in business structures or administrative and legal activities. These trends are also relevant to the Ukrainian reality because in the context of distance learning in higher education institutions there is a need for fast and rapid response and students communication with digitally. Accordingly, the COVID-19 pandemic acted as a certain catalyst for changes, including in the management of document flows in universities, the Ministry of Education and Science of Ukraine, other structural and managerial organizations that provide the educational process (Ministry of Education and Science of Ukraine, 2019).

At the same time, further development of management strategies, which are based on modern document management systems, require development and improvement. Consequently, the coverage of the main problems of document management and ways to overcome them is a relevant topic for research, especially given the large-scale digital innovations of the educational industry.

#### Research Problem

As of today, the system of Ukrainian document management in higher education aims to achieve transparency of record keeping (through the organization of manageable and accessible to wide masses of stakeholders process of creation,

personal documentos del de gestión (administrativo). Las conclusiones establecen que el sistema actual de organización del soporte documental en el ámbito educativo de Ucrania contiene arcaísmos. Se propone integrar las tecnologías Blockchain en los SEMD educativos implementados, lo que potencialmente garantizará los canales de comunicación entre niveles de los participantes en el proceso de creación de documentos de la educación superior de Ucrania.

Palabras clave: gestión de documentos, educación superior de Ucrania, Blockchain, problemas v perspectivas.

coordination, and approval in working order of documents of different levels of legal weight), avoidance of unnecessary links in instance support of document formation (by simplification of cumbersome systems of coordination and cross-checking of creation, maintenance and putting into effect The transition to electronic document management system remains a tangible problem for higher education (in accordance with the current world trends in the field under study, based on the achievements and development of relevant technologies).

#### Research Focus

The study focuses on modern methods of document management in the field of education and analysis of the main problems for their implementation. The proposed problems are investigated only partially because of the current challenges associated with distance learning during quarantine restrictions and, above all, the ongoing military operations. Important and no less pressing problems remain barriers to the development of digital documentation in the conditions of Ukrainian realities.

#### Research Aim

The study aims to analyze the problems of document management in education and to identify potential ways to solve them on the example of the Ukrainian experience.

#### Literature Review

Modern systems of document management, practiced in the world's well-known institutions, were called DMS (Document Management System) The study of DMS, as a holistic



system that determines multifactor the information and organizational influence on other components of the executive system in the general industry complex of apparatuses, contributed to relevant research and relevant publications of such author as Abaci & Tolga (2022). This researcher identified the specifics of organizational schemes and means of functioning of the SMD in the realities of modern working conditions, characterized the effectiveness of the use of innovative methods of document flow formation. At the same time, a team of authors led by Jordan et al., (2022) characterized the feasibility of introducing the DMS in all industries. without exception, requiring documentary support of work activities. Regla and Marquez (2020) identified the main types of SMD scheme interactions in organizational systems involving cloud services. Alimianovich (2022) characterized the EDO/EMD (Electronic document management) transformations of SMDs using modern software-digital tools), Jordan et al. (2022) described typical schemes and means of transition of SMDs to digital platforms of a document support organization. These researchers also point out that the educational sphere is one of the main reference points in the DMS system since it explores the established organizational patterns and forms the basic concepts of the case, not only in individual industries but also in the state as a whole. Therefore, in order to identify effective document management schemes directly in the educational field, targeted research is conducted, which is represented, in particular, by the works such authors as Chernyshenko & Chernyshenko (2022). These experts have highlighted the key principles of the optimization of organizational schemes of LSMS (and SEMD) on the example of a limited infrastructure of an educational institution. Also, Chernyshenko & Chernyshenko (2022) focused on organization and functional responsibilities of each of the participants in the educational process. The work of Arifin (2022) is devoted to the analysis of SMD functioning in a mediumlevel educational institution. The article by Lvovich et al. (2021) is also devoted to the study and formation of the main optimization solutions to the expedient organization of the system of institutional support of document management in education. Raza & Hussain (2022) examined the main problems on the way to digitalization of education. Such problems were investigated by Wojciech et al. (2021); Rakhimov Mukhamediev (2022).

The analysis of thematic works and publications indicates that the problem of document

management in the pedagogical sphere is not new. However, the use of modern innovative methods of document management requires further justification, primarily given the largescale digitalization of all social structures, which takes place not only in Western European countries but also in Ukraine.

A review of Ukrainian studies, in particular the works of Asanova (2020), Batareina & Korobchenko (2022), Bezliudnyi & Kirdan (2020) demonstrates the importance of the digital circulation of documents in Ukraine. Note that Asanova (2020) points out the practical problems occurring in document circulation in Ukraine in different areas. In particular, she notes the need to develop technological instructions and schemes, which should highlight the key aspects of the sequence of preparation of various document projects, the system, and the procedure for their approval, signing, or approval.

A content analysis of contemporary pedagogical literature, primarily the works of Chernyshenko Chernyshenko (2022); Arifin (2022); Alimjanovich (2022); Ayaz & Yanartaş, 2020; Ferilli et al., 2022; Istratova & Sin, 2022; generally, prove the effectiveness of digital innovative document management. However, these authors also note the practical problems of its implementation. Thematic analysis of the organization of DMSD (EDMS) in the target area under study (education), indicates the existence of the problem of organizing an effective system document management, excluding the outdated methods of instance approval. The focus of the Ukrainian educational sector is to change the archaic approach to the processes of creating and ordering documents, which were formed under the influence of the Soviet-Communist political foundations of the past and take into account the modern achievements and experiences of successful practices in the studied area. Consequently, we believe that the main debatable issues of document management are the practical aspects of correlation of the path of presentation and approval of the document, coverage of the functioning of the current educational CMD with the identification of factors that have a key impact on the efficiency of the functioning of the system of document management under study.

#### **Materials and Methods**

The methodological approach used in this study is based on the practice of analytical research and correlative determination of the most appropriate and effective solutions that have significant



potential for implementation, taking into account the local features of the functioning of the education system in Ukraine.

Also, the work is formed based on the use of general scientific methods of research: analysis and synthesis. On the basis of content analysis of modern pedagogical literature, the problems and key discussion issues of the study are identified. The work also used the prognostic, systemic, structural method. Of particular importance was the use of methods of concretization and same abstraction. At the time. methodological approach applied in this study is based on the practice of analytical search and correlative determination of the most acceptable and effective solutions that have significant potential for implementation, taking into account the local features of the educational system functioning in Ukraine.

This study is a qualitative study of existing best practices of document management system construction. The qualitative research approach is applied in the framework of retrospectivestructural analysis of existing sectoral norms of document management organization in the field of education, which accompanies the task of modeling optimization solutions. The research was conducted based on document management systems in higher education in Ukraine.

On the basis of the analysis, the main subject of the research (the problems of document management in the field of education) was divided into smaller elements (peculiarities of higher school document management in Ukraine, analysis of the instation document management system, digital aspects of university document management, analysis of main problems on the way of document management implementation). synthesis these elements were combined, and own conclusions were formed. On the basis of the system method, the phenomenon of document management was considered as a constant.

The study was implemented in several stages:

study of the currently functioning system of document management in the educational industry with the establishment characteristic participants, communication links. control vertical and instance conciliation with the definition of the actual and factors affecting organizational and managerial functionality of the investigated SMD;

determination of prospective vector of development of higher education in Ukraine by identifying positive and optimal world profile practices for the establishment of modern systems of document management, document support, execution of document orders, and archival storage as the final stage of document management.

The above tools of information-analytical search proposed for use in this study are the most appropriate to implement due to the potential opportunity in the process of studying the positive world-specific-industry experience to obtain data that can be recombined and adapted to local conditions and realities of production. educational industry in Ukraine.

The main empirical basis for this study is legislative material, in particular:

- 1. Orders of the Ministry of Justice of Ukraine on the procedure for working with electronic documents in record keeping and their preparation for transfer to the archival storage; Instructions on record keeping in institutions of general secondary education, etc. (Ministry of Education and Science of Ukraine, 2018).
- Resolutions of the Cabinet of Ministers of Ukraine, in particular, the Model Instruction on documenting management information in electronic form and organization of work with electronic documents in records management, electronic interdepartmental exchange. (Decree № 55, 2018).
- Strategies of the development of higher education in Ukraine. (Strategy for the Development of Higher Education in Ukraine for 2022-2023).
- Also, the study is based on the analysis of the National Standard of Ukraine (GOST) Ukrainian Research Institute of Archival Affairs and Records Management (UNIIASD), 2020).

#### Results

Document management of the educational sector in Ukraine is regulated by the relevant Department under the Ministry of Education of Ukraine, which is guided in its activities by the requirements of the relevant regulatory and legislative framework:

the general provisions of document organization are implemented in accordance with the Rules as of 2015;

- unitary systematized provisions and norms of document preparation of various levels of legal and administrative differentiation are applied in accordance with DSTU 4163:2020
- general provisions regarding the organization of document circulation in electronic form are carried out in accordance with Laws of Ukraine: No. 851-IV, 2022; No. 2155-VIII, 2022 (On electronic documents and electronic workflow, 2022; On electronic trust services, 2022) and standard instructions (Decree № 55, 2018).

It should be noted that the professional regulations on the document management organization in the field of education are applied in accordance with the provisions of the Instruction as of 2013, which is a general branch instruction, in particular, for use in the internal system of document support of the Ministry of Education and Culture of the Ministry of Education and Culture; Instructions as of 2018 for the use of existing accreditation levels in educational institutions. According to the documentation regulatory and governing described above - which essentially forms the DMS of the educational sector organizational and management procedure involves document creation. (See Fig. 1).

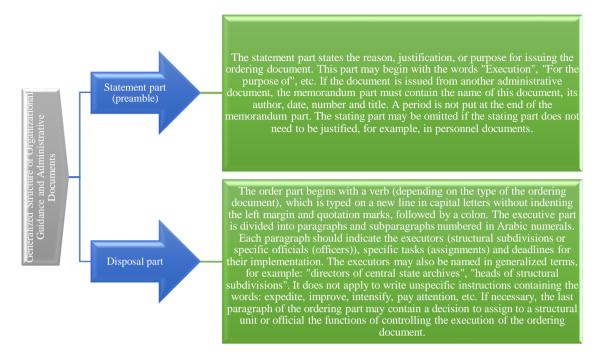


*Figure 1.* Documents of organizational and managerial nature generated in the DMS of the educational industry. Author's development

According to the provisions of DSTU 4163:2020 the structure of organizational and management, and administrative documents, including those

formed in the educational sector, is defined by the median generalized structure shown in Fig. 2.





*Figure 2.* Generalized structure of organizational and administrative documents under the provisions of DSTU 4163:2020

Adopted from Ukrainian Research Institute of Archival Affairs and Records Management. UNIIASD, 2020.

The system of instant approval and implementation of management documentation in the educational sector is formed based on the provisions of the Rules as of 2015 and provides for the implementation of an operational process from the creation of an organizational and management document (based on the emergence of aspects and factors that require managerial intervention and the corresponding document arrangement) before the implementation of the agreed project of the result of the document arrangement. According to the provisions of the Rules as of 2015, the scheme for creating guiding documents in the educational sector of Ukraine must go through the stages of formation, approval, approval, and implementation. The process of approval of organizational and management documents has an algorithm of external – in accordance with the provisions of the Standard Instructions as of 2018 - and internal organizational approval in accordance with the approved norms of the Rules as of 2015 (Law No. 2155-VIII, 2022). After the approval procedure, the document of an organizational and management nature (administrative document) is approved by the head of the organization (the relevant official or a group of officials depending on the management structure). Based on the analysis of the instance support, approval, and approval of the project of the organizational and management document, there is a significant

layering of intermediate links in this algorithmized scheme, which makes the latter extremely linear, inflexible and cumbersome (Asanova, 2020). The current document management system (in particular, in the educational sphere and in the state apparatus) is a product of the communist past and contains features characteristic of the former political system. The above signs include:

- strict centralization with a clear management vertical, which significantly politicizes the process of document creation, turning individual management orders into documents that contain more signs of political will than management decisions;
- inappropriate bureaucratization of the document creation process, which is accompanied by a significant layering of intermediate and advisory links, which increases the time for the administrative document to pass from the management apparatus to the executor and requires the involvement of communicative and intermediate documentary resources;
- an extensive administrative system containing strict centralized requirements for document organization (including the order of document circulation and archival storage of documents of an organizational

and management nature), which leads to significant expenditure of time and administrative resources to organize the document system in accordance with the requirements of a rather archaic systems (Batareina & Korobchenko, 2022). Thus, the key issue in the development of DMS is high diffusion in the current document management apparatus of the Ukrainian document circulation system. An additional complication is the archaic nature of the inherited Soviet DMS, which is a consequence of direct evolution in a closed information space and artificial restraint of development.

It should be noted that the Ministry of Education of Ukraine, in an effort to harmonize document with EU requirements, management conducting optimization measures to increase the efficiency of document circulation and document management. A vivid example is the implementation of the Instruction as of 2015, which regulates the procedure for document management in general secondary education institutions. Analysis of the specified document of an organizational and managerial nature showed its breakthrough nature. In particular, the above-mentioned document completely deviates from the communist principles of the formation of the administrative apparatus in several directions:

- decentralization: reliance on the local governing body (in this case - the pedagogical council headed by the director) of wider powers, which allows not only to approve its own algorithmized sequence of organization of document arrangement taking into account the local features of educational activities for each of the institutions (in the form of appropriate instructions), as well as on the basis of the list of necessary elements of the administrative procedure proposed by the Ministry of Education of Ukraine, to form and approve in the working order its own list of the necessary documentation, the creation of which is necessary in the management of each individual educational institution;
- 2. optimization of the paperwork system: the Ministry of Education of Ukraine reviewed and optimized the list of documentary support elements (which is currently becoming a recommendation), according to which the paperwork burden for each institution and education workers is reduced since the new document provides for a reduction in the number of documentary

- cases formed (the previous mandatory documentary the list was reduced by -20%, which will, as a result, reduce the amount of paperwork by 22% (Ministry of Education and Science of Ukraine, 2018).
- 3. individualization of educational methods and approaches that can be applied by teachers who are not burdened by the need to carry out strictly regulated documentary support, which allocates time and motivation for the formation of unique pedagogical approaches and concepts, which as a result contributes to the development of the educational field.

However, the process of transition from a strict regulatory policy to a more free one – taking into account local characteristics and the formation of individually unique educational programs and methods – is currently ongoing and incomplete. Currently, deep-diffusion elements of the past outdated system of centralized management organization dominate, requiring radical changes and the application of modern best practices and successful world experience.

A clear example is the current system of document creation and the cycle of approval and implementation of organizational and management documentation, which, along with the multi-element and multi-instance organizational scheme of the formation of orders, contains extremely confusing communication channels and disorganized connections.

Researchers (Ayaz and Yanartaş, 2020; Kilańska et al., 2022; Adam et al., 2022; Lappin, 2022) determine the main vector of the development of DMS both in the field of education and in other areas that require documentary support. In particular, in terms of the implementation of modern schemes of electronic management of the document arrangement of the Central Administrative Service, which is based on electronic access to databases and cloud services. The transformation of the DMS into DEMS in the educational sector began in 2018. Kilańska et al. (2022) are actively studying the issue of the transition of educators to an electronic document system. In particular, management expediency of the implementation of the DEMS and improving the productivity of the existing DEMS with integrated electronic elements of document management are noted.

In education since 2021, AICOM PAK is introduced, based on which the electronic E-journal is created document management system. The purpose of the introduction of these services



and DEMS is to debureaucratize, decentralize and individualize the system of educational document creation, document management, and document flow (Bezliudnyi&Kirdan, 2020). In particular, as noted by the Ministry of Education, currently in the educational sphere of Ukraine there are 48 types of paper documents, which require the appropriate organization of order and storage (Ministry of Education and Science of Ukraine, 2020). In addition, the Ministry of Education notes the presence of systemic errors in the implementation of DEMS:

In the field of education, in 2021 implemented the AICOM PAK, based on which, in particular, the E-Journal electronic document management system is being created. The purpose of the introduction of the mentioned services and DEMS is de-bureaucratization, decentralization. and individualization of the system of educational document creation, document circulation, and document arrangement. In particular, as noted by the Ministry of Education, there are currently 48 types of paper documents in storage in the educational sphere of Ukraine, which require the appropriate organization of arrangement and storage. In addition, the Ministry of Education emphasizes the presence of systemic errors in the implementation of the DEMS:

- paper duplication of electronic documentation (in particular, reports on educational activities);
- lack of an automated mechanism for entering information into the DEMS services (currently, all reporting information is entered manually by educators).

Implementation and integration into the educational documentation system of such services as PAK AIKOM and E-Journal (with appropriate ministerial and government support), as well as existing scientific and practical work of Ukrainian expert (Asanova, 2020) will in the long run solve the problems of developing and implementing a qualitatively new DMS of the educational sector of Ukraine.

Next to the determination of the prospective development of the implementation of the DEMS in the educational sector of Ukraine, there are risks of cyber-digital and information security. Among the key risks of this direction, researchers and experts (Ngoepe, Jacobs, and Mojapelo, 2022) highlight the vulnerability of EDO services, which lead to the loss confidential data and affects the quality of the educational process.

In the legislation of Ukraine provides for the use of an electronic digital signature. However, further technological development of means of criminal damage to cyber-digital services and schemes requires constant improvement. In particular, both the methods of authenticating digital documents and authorization in the relevant services of the DEMS.

Accordingly, there is a need to involve Blockchain technology in educational DEMS. It is noted that such a proposal is already being considered by a number of researchers in terms of the features of the introduction to EDO systems and services (Das et al., 2022). In particular, the advantage of security protocols with Blockchain against existing methods of authentication and authorization is emphasized. Security tools such as "smart-contact", the legend of the security system, IPFS make it possible to maximally secure the participants of the DEMS, since the cryptographic algorithms for the security and authentication of electronic documents are constantly updated, rejecting the possibility of stealing confidential data. Visualization of the processes of constant updating of cryptographic security algorithms and authentication of electronic documents with the use of Blockchain. At the same time, direct identification is significantly improved, and the uniqueness of electronic documents is increased. Visualization of the processes of identification of e-documents using Blockchain technology. Identification information is recorded in the document's Blockchain-legend and is part of the document's original data. In this context, the visualization of the functioning of Blockchain-legend tool

Thus, it is possible not only to protect the edocument from the loss of confidential data but also to increase productivity and optimize the resource costs of the implemented DEMS. Systems of electronic document organization with integrated tools of Blockchain technology have a clear algorithmization of functions and actions for each participant in the process of document creation and document organization.

Meanwhile, specialized researchers and experts (Zhao et al., 2022; Tella et al., 2022) also indicate the mechanism of an optimized and secure system of service communication between typical participants in the process of document arrangement, which is made possible by the use of internal tools of Blockchain technology, "smart-contract" and Blockchainnamelv legends. In accordance with the algorithmized concept scheme, the use of Blockchain

technology for authentication of participants in the e-documentation process allows to ensure the clear functional organization of each individual performer (with confirmation of his level of responsibility) and secure instant transfer of service information contained in the Blockchainlegend

Thus, a general concept of providing e-documentation is formed, in which characteristic levels of inter-agency official e-communication are formed. Note that the concept was developed on the example of the DEMS organization of the architectural and design direction. Let's describe the above-mentioned concept scheme of in more detail:

- creation of official documentation takes place between direct participants of the process by using a typical network environment;
- functioning DEMS involves the use of cloud services based on the technology of the global Internet (IPSF) or the use of local databases;
- commutation in the protected Blockchainnetwork, which is already used directly to create a working e-document, which must go through the visa and approval procedure in the future.

Within the developed solution, it is also necessary to provide a place for supplementing the system with the latest forms of documentation on educational technologies, such as educational cases. This is motivated by the significant role of educational cases in improving student learning outcomes. In particular, the researchers note that thanks to the use of the latest technology of educational cases students, after applying the case study method, they became more confident in their practical capabilities, namely they gained, experience in collecting information from the patient needed to plan an examination and treatment (Franks, 2020). Accordingly, the use of the latest technologies should also be provided for in the architecture of the proposed solution.

Therefore, the educational documentation arrangement system has significant potential for optimization, improvement, and productivity improvement, including using electronic systems and Blockchain technology. Such a complex solution not only ensures the reliable transfer of official information but also allows to fully build an effective organizational scheme of document creation, which should replace the deep-diffusion

remnants of archaic systems that were inherited from the Soviet system.

#### **Discussion**

This study synthetically examined the problem of document management in education by the example of Ukraine. Let us describe the obtained results more thoroughly.

The authors of the article point out the complexity of implementing professional document management, which should satisfy the interests of a wide group of stakeholders. The above opinion confirms Abaci & Tolga (2022), who defines the document management system as a holistic multifactorial system that affects other blocks of a broader system. The author also confirms the view that the use of innovative methods of document management is effective. Further support for this thesis is provided by a team of authors led by Jordan et al., (2022), who identified the role of the document distribution system in the context of a digital work organization model and noted the complexity of organizing a broad document management system in education. This result is also explored by Regla and Marquez (2020) through the lens of the use of current innovative technologies, albeit cloud-based services, as part of a rapidly changing document management system in today's environment that affects the livelihoods of many educational actors.

The next part of this study outlines the main current problems of document management transformation in education in Ukraine. First of all, noted the urgent need for its modernization on a substantially different (new, innovative) basis. This view is shared by many Ukrainian scientists who have researched this issue. In particular, the preliminary studies Chernyshenko and Chernyshenko determine the peculiarities of optimization of organizational schemes DMS and DEMS in conditions of the limited infrastructure of the educational institution. Also, according to Asanova (2020), the use of modern digital tools and schemes for organizing the functioning of DEMS in the university system of education is important.

However, in contrast to the previous abovementioned works, the results of this article focus on the system errors of the transformation of the document management system in education in Ukraine. These system errors indicate the dynamics and situationality of the transition of established forms of documentation support to



modern and effective solutions of management and service interdepartmental communication for all participants of the document ordering process.

Separately, the work also notes the weak process of elimination of obsolete schemes of management organization of the communist past of Ukraine, as well as the weak process of debureaucratization, decentralization, increasing the individuality and uniqueness of educational methods and programs.

Earlier works also insufficiently investigated the problem of optimizing the nomenclature of educational documentation during the transition from the old management paradigm. In particular, documentation in the field of education in Ukraine contains many archaic and inappropriate to maintain in the modern educational process. Emphasize the slow transition from the DMS into DEMS, which is accompanied by inexpedient resource expenditure on paper duplication of edocumentation. We emphasize the security and vulnerability of the implemented electronic document management systems that do not have reliable mechanisms of transferring official information.

In the previous papers, not enough attention has been paid to the successes of the Ministry of Education of Ukraine in improving document management. In particular, the following positive achievements of the Ministry of Education of Ukraine in transforming the system of documentation ordering are noted: decentralization of requirements for implementation of management activities on the order of document formation and document management in educational institutions: weakening the requirement for mandatory nomenclature of official documents to be held accountable; introduction of electronic device systems for educational documents, which will later constitute the main documentation management system; conducting critical insystem analyses and audits in order to find places of potential optimization and improve the efficiency of management processes (Ministry of Education and Science of Ukraine 2019).

In contrast to the existing works, this study proposes to solve the problem of cyber-digital and information security by integrating Blockchain technologies into the existing system. In particular, Blockchain tools for unique authentication, authorization (processes by participants of document circulation) and identification (processes by individualization of

documents created in e-document systems) allow fulfilling not only the direct purpose of the solution (namely, to reduce information vulnerability of EDO services) but also a conceptually new approach to the process of creation and preparation of managerial and official documents, which are used in the process of their professional activities by teachers and government bodies of educational.

### Conclusions

Consequently, Ukrainian document management in higher education is on the way of unification with the European document management system. In order to comply with the latter Ukrainian system, it is necessary to eliminate a number of problems that require the formation of urgent ways and methods to solve them. In particular, documentation in the field of higher education in Ukraine contains a lot of archaic and inappropriate to maintain in the modern educational process. There is also a slow transition from DMS to DEMS, which is accompanied by inexpedient costs of resources replication for paper of electronic documentation. In Europe, the document management system is subjected to many checks on the security and vulnerability of implemented electronic document management systems. However, in Ukraine, there is a lack of reliable mechanisms for the transfer of official information.

Given one of the strategic goals of the Ministry of Education and Science of Ukraine - full transition to digital documentary support of educational activities, there is a big problem on the way to achieve a certain goal - to ensure cyber and information security of interinstitutional and intra-organizational transfer of official information.

In contrast to previous studies, this paper proposes to solve the problem of cyber-digital and information security by integrating Blockchain technologies into the existing system. This will affect the solution of several problems at once: the digitalization of document management, the elimination of archaic systems of document organization, the formation of a secure environment for document exchange in the field of education.

So, this study proposes to integrate Blockchaintechnologies into the implemented educational SEMD, which will potentially allow to secure the inter-level communication channels between the participants of the document formation process

and to form an effective managerial and organizational structure of document ordering, which is produced in the process of setting up. We believe. That the results obtained in the current study correspond to the profile vectors of development, as well as the national interests of Ukraine.

# **Bibliographic references**

- Abaci, K., & Tolga, I. (2022). The efficiency of electronic document management systems: a case study. Science, Education, and Innovations in the context of modern problems, 5(3), 75–86. https://doi.org/10.56334/sei/5.3.7
- Adam, N. L., Akmal Hakim Che Mansor, M., Pauzi, M. F., & Cik Soh, S. (2022). Document and Event Record Management System: A Prototype. In 2022 IEEE 12th Symposium on Computer Applications & Industrial Electronics (ISCAIE). IEEE. https://doi.org/10.1109/iscaie54458.2022.97 94525
- Alimjanovich, D.T. (2022). EDO (Electronic document management). Galaxy International Interdisciplinary Research Journal, 10(4), 328–331.
- Arifin, N. Y. (2022). Document Management System in Ibnu Sina Middle School Administration. Engineering and Technology International Journal, 4(1), 38–44. https://doi.org/10.55642/eatij.v4i01.165
- Asanova, L. (2020). Organizational and structural support of document circulation in the national anti-corruption bureau of Ukraine. Knowledge, Education, Law, Management, 2(4), 3–8. https://doi.org/10.51647/kelm.2020.4.2.1
- Ayaz, A., & Yanartaş, M. (2020). An analysis on the unified theory of acceptance and use of technology theory (UTAUT): Acceptance of electronic document management system (EDMS). Computers in Human Behavior Reports, 2(100032), 100032. https://doi.org/10.1016/j.chbr.2020.100032
- Batareina, I., & Korobchenko, A. (2022). State policy of Ukraine in the field of education. Cuestiones Políticas, 40(73), 919–936. https://doi.org/10.46398/cuestpol.4073.53
- Bezliudnyi, O., &Kirdan, O. (2020). The state policy of ukraine in the field of continuous economic education. Society. Integration. Education. Proceedings of the International Scientific Conference, 6, 521. https://doi.org/10.17770/sie2020vol6.4965
- Chernyshenko, S., & Chernyshenko, V. (2022). University Digital Document Management and Optimal Strategy of Education Data

- Warehouses' Placement. 2022 2nd International Conference on Technology Enhanced Learning in Higher Education (TELE), IEEE, 237–243. doi: 10.1109/TELE55498.2022.9801018
- Das, M., Tao, X., Liu, Y., & Cheng, J. C. P. (2022). A blockchain-based integrated document management framework for construction applications. Automation in Construction, 133(104001), 104001. https://doi.org/10.1016/j.autcon.2021.10400
- Decree of the of 17.01.2018 № 55. Standard Instruction on documenting management information in electronic form organization of work with electronic documents records management, in electronic interdepartmental exchange. Cabinet of Ministers of Ukraine, 2018. (as amended 22.12.2020). on zakon.rada.gov.ua/laws/show/55-2018-%D0%BF#n771.
- Ferilli, S., Redavid, D., & Di Pierro, D. (2022).

  Holistic graph-based document representation and management for open science. International Journal on Digital Libraries. https://doi.org/10.1007/s00799-022-00328-z
- Franks, P. C. (2020). Implications of blockchain distributed ledger technology for records management and information governance programs. Records Management Journal, 30(3), 287–299. https://doi.org/10.1108/rmj-08-2019-0047
- Istratova, E., & Sin, D. (2022). Development of a data mining subsystem for the citeck electronic document management system. In Lecture Notes in Networks and Systems (pp. 344–353). Springer Nature Singapore.
- Jordan, S., Zabukovšek, S. S., & Klančnik, I. Š. (2022). Document management system A way to digital transformation. Our Economy, 68(2), 43–54. https://doi.org/10.2478/ngoe-2022-0010
- Kilańska, D., Ogonowska, A., Librowska, B., Kusiak, M., Marczak, M., & Kozlowski, R. (2022). The usability of IT systems in document management, using the example of the ADPIE Care Dorothea documentation and nurse support system. In Preprints. https://doi.org/10.20944/preprints202206.00 19.v1
- Lappin, J. (2022). Project cortex and the future of document management in office 365. IQ: The RIMPA Quarterly Magazine, 38(2), 35–41.
- Law of Ukraine No. 851-IV. On electronic documents and electronic workflow, (2022). https://zakon.rada.gov.ua/laws/show/851-15#Text% 20.





- Law of Ukraine No 2155-VIII. On electronic trust services, (2022). zakon.rada.gov.ua/laws/show/2155-19#Text.
- Lvovich, I., Lvovich, Y., Preobrazhenskiy, A., Preobrazhenskiy, Y., &Choporov, O. (2021). Optimization of the subsystem for the movement of electronic documents in educational organization. 2021 1st International Conference on Technology Enhanced Learning in Higher Education (TELE). (pp.328–332). https://doi.org/10.1109/TELE52840.2021.94 82612
- Ngoepe, M., Jacobs, L., & Mojapelo, M. (2022). Inclusion of digital records in the archives and records management curricula in a comprehensive open distance e-learning environment. Information Development, 026666692210818.
- https://doi.org/10.1177/02666669221081812
  Ministry of Education and Science of Ukraine.
  (2020). Automated information complex of educational management.
  https://cutt.ly/jXagToC
- Ministry of Education and Science of Ukraine (March 4, 2019). The Ministry of Education and Science of Ukraine has launched two electronic systems that have helped to make the department's work more transparent and efficient UTEMA project has been summarized. https://acortar.link/25rX9C
- Ministry of Education and Science of Ukraine (October 5, 2018). At least 22% less paperwork for schools a new instruction on paperwork for institutions of general secondary education came into force in time for the Day of Education Worker. https://mon.gov.ua/ua/news/shonajmenshena-22-skorotitsya-paperova-robota-dlya-shkoli-do-dnya-pracivnika-osviti-nabula-chinnosti-nova-instrukciya-z-dilovodstva-dlya-zakladiv-zagalnoyi-serednoyi-osviti
- Rakhimov, T., & Mukhamediev, M. (2022). Peculiarities of the implementation of the

- principles of the education of the future analysis of the main dilemmas. Futurity Education, 2(3), 4–13. https://doi.org/10.57125/FED/2022.10.11.29
- Raza, A., & Hussain, N. (2022). Problems and challenges of future medical education: current state and development prospects. Futurity Education, 2(3), 31–43. https://doi.org/10.57125/FED/2022.10.11.32
- Regla, A.I., & Marquez, P.S. (2020). Workplace
  Document Management System Employing
  Cloud Computing and Social Technology.
  Computational Science and Technology.
  Lecture Notes in Electrical Engineering, 603,
  415–423. https://doi.org/10.1007/978-981-15-0058-9
  40
- Tella, A., Amuda, H. O., & Ajani, Y. A. (2022). Relevance of blockchain technology and the management of libraries and archives in the 4IR. Digital Library Perspectives, 38(4), 460–475. https://doi.org/10.1108/dlp-08-2021-0065
- Ukrainian Research Institute of Archival Affairs and Records Management (UNIIASD) (2020). DSTU 4163:2020 State Unified System of Documentation. The unified system of organizational and administrative documentation. http://www.kdu.edu.ua/Documents/DSTU41
  - http://www.kdu.edu.ua/Documents/DSTU41632020v1.pdf
- Wojciech, W., Sobczyk, W., Waldemar, L., & Pochopień, J. (2021). Future educator's digital learning assets: global challenges of our time. Futurity Education, 1(2), 32–41. https://doi.org/10.57125/FED/2022.10.11.17
- Zhao, X., Zhang, Z., Hu, R., Liu, J., Yang, X., Zhang, R., & Gao, H. (2022). Blockchain Technology Based Digital Document Management System Design. In 2022 7th Asia Conference on Power and Electrical Engineering (ACPEE). IEEE. https://doi.org/10.1109/acpee53904.2022.97 83819

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# Organizing the germans' emotional world through the prism of the opposition ORDNUNG vs. CHAOS: Ambivalent emotion concepts

# Організація емоційного світу німців на основі протиставлення ORDNUNG vs. CHAOS: амбівалентні емоційні поняття

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Written by: **Kostiantyn Mizin**https://orcid.org/0000-0002-5216-6032 **Liudmyla Slavova**https://orcid.org/0000-0001-8035-1801 **Oleksandr Petrov**https://orcid.org/0000-0003-4641-3559 **Anastasiia Yumrukuz**https://orcid.org/0000-0001-8644-8655

#### **Abstract**

The authors prove the assumption that the linguo-cultural opposition ORDNUNG vs. CHAOS has a certain influence on the formation of such ethno-specific ambivalent emotion concepts (EC) SEHNSUCHT, FERNWEH AND HEIMWEH in the German linguo-culture. Due to the applied methodology (definitional and contextual analyses of EC names) it was established that the German chaos and metaphysical fear (ANGST) oppose a kind of "safety-cosiness quartet", which is represented by concepts SICHERHEIT, GEBORGENHEIT, GEMÜTLICHKEIT and ZUVERLÄSSIGKEIT. It was revealed that the universal principle of perception of the objective world ONE'S OWN vs. ALIEN serves as the basis for the opposition ORDNUNG vs. CHAOS and its derivative ANGST SICHERHEIT VS. GEBORGENHEIT & GEMÜTLICHKEIT & ZUVERLÄSSIGKEIT. This principle caused "disruption" of the inner world of the German linguo-culture representatives because, on the one hand, they strive for a sense of safety, security, comfort, and stability, which generates "their own" world, but, on the other hand, they

# Анотація

У статті аргументовано припущення, що в німецькій лінгвокультурі певний вплив на становлення етноспецифічних амбівалентних (EΠ) емоційних понять SEHNSUCHT, FERNWEH та HEIMWEH має лінгвокультурна **ORDNUNG** CHAOS. опозиція VS. допомогою застосованої методики (дефініційний і контекстний аналізи імен ЕП) установлено, що німецькому xaocy метафізичному страху (ANGST) протистоїть своєрідний "безпеково-затишковий квартет", який представлений поняттями SICHERHEIT, GEBORGENHEIT, **GEMÜTLICHKEIT** ZUVERLÄSSIGKEIT. Виявлено, що підгрунтям для опозиції ORDNUNG VS. CHAOS та похідної від неї ANGST **GEBORGENHEIT** SICHERHEIT & GEMÜTLICHKEIT & ZUVERLÄSSIGKEIT слугує універсальний принцип сприйняття об'єктивного світу СВІЙ vs. ЧУЖИЙ. Цей принцип зумовив "розривання" внутрішнього світу представників німецької лінгвокультури, бо, з одного боку, вони прагнуть до відчуття безпеки, захищеності, затишку та стабільності, що генерує їм "свій" світ, проте з другого боку,

<sup>&</sup>lt;sup>98</sup> PhD (Philology), Associate Professor of Western and Oriental Languages and Methods of Their Teaching Department, State Institution "South Ukrainian National Pedagogical University named after K. D. Ushynsky", Ukraine.



<sup>&</sup>lt;sup>95</sup> DrSc. (Philology), Full Professor of Foreign Philology, Translation and Teaching Methodology Department of Hryhorii Skovoroda University in Pereiaslav, Ukraine.

<sup>&</sup>lt;sup>96</sup> DrSc. (Philology), Professor of the Theory and Practice of Translation from English Department, Taras Shevchenko National University of Kyiv, Ukraine.

<sup>&</sup>lt;sup>97</sup> PhD (Philology), Associate Professor of Inter-Cultural Communication, World Literature and Translation Department, Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Ukraine.



constantly try to go beyond the latter, since the "alien" world is associated not only with chaos and danger but also with new sensations and experience. Such an emotional "disruption" of the German people between metaphysical fear and a "safety-cosiness quartet", to some extent, gave rise to the ambivalence of the EC SEHNSUCHT, FERNWEH and HEIMWEH.

Key words: ambivalent emotion concept, linguo-culture, order, chaos. Sehnsucht, Fernweh.

#### Introduction

In modern science, there is a growing tendency to understand the surrounding world as a highly complex configuration of open systems (Luhmann, 1995). These systems exhibit a certain structural isomorphism, which concerns, in particular, their organization according to the principle of dichotomies (cf. a person's perception of objective reality through the prism of "embodied" orientations (e.g., TOP vs. BOTTOM, RIGHT vs. LEFT), sociocultural oppositions (e.g., ONE'S OWN vs. ALIEN), intercultural oppositions (e.g., COLLECTIVISM INDIVIDUALISM), etc.). Such organization is one of the prerequisites for the development of a person's inner (mental) world, with its dynamics dependent on the permanent balancing between opposite entities. As a result of the interaction of individuals of a certain cultural group, there arise constant (ethno- and socio-cultural) features of this world. They serve to form a common world picture in this group. "pictures" contain well-established (traditional) ideas of different linguo-cultures representatives about the world around them, reflecting the features of the categorization and conceptualization of the latter.

The dichotomous world order, both objective and mental, is extrapolated to the processes of human development, where the strengthening of one tendency activates the opposite one. Today's globalisation, for example, has led to antiglobalisation processes. Among the latter, the spread of ethnocentric tendencies in the European linguistic and cultural space should be noted (Mizin & Letiucha, 2019, p. 237). These tendencies directly correlate with the problems of intercultural communication and intercultural barriers, actualising the study of various world pictures, which consist of cultural concepts, including EC.

вони постійно намагаються вийти за межі останнього, оскільки "чужий" світ асоціюється не лише з хаосом і небезпекою, але й новими відчуттями та новим досвідом. Саме це "розривання" емоційне німців між метафізичним страхом "безпековозатишковим квартетом" спричинило деякою мірою амбівалентність ЕП SEHNSUCHT, FERNWEH TA HEIMWEH.

Ключові слова: амбівалентне емоційне лінгвокультура, поняття, порядок, xaoc, Sehnsucht, Fernweh.

Cultural specificity is inherent not only in those ECs that convey the meanings of social or moral emotions, but also in those that represent basic emotions, since modern empirical studies prove that both the expression of basic (universal) emotions and their perception (recognition, decoding) can have cultural tagging among representatives of different linguistic communities (Chen et al., 2018; Doyle, Gendron, & Lindquist, 2021; Gendron et al., 2014; Jack et al., 2012). Considering this, the search for equivalents in the target linguo-cultures for the ECs of the original linguo-culture is a big problem, especially in the case of ethno-specific ECs (Goddard, 2018; Lomas, 2017; Mizin & Ovsiienko, 2020; Mizin et al., 2021; Mizin, Slavova. & Khmara, 2021; Ogarkova, Lewandowska-Tomaszczyk, Panasenko, & 2013; Oster, 2012).

The presence of ethno-cultural meanings in ECs allows us to assert that each world picture is characterized by a complex emotional "mosaic", in which numerous dichotomies can be traced. This is because the very nature of this mosaic is based on two opposite processes - universalism and ethnocentrism (Mizin & Kolesnyk, 2021, p. 19). Therefore, even those ECs that convey the universal meanings of basic emotions can form specific configurations in accordance with those social norms and/or values (rules of conduct, code of ethics, moral norms, etc.) that function in a particular linguo-culture.

For instance, in the Germans' world picture the emotional "mosaic" is largely determined by the concept ORDNUNG 'Order' and the associated concept CHAOS 'Chaos', which divided the inner world of the Germans into two poles, contributing to the emergence of a number of specific cultural concepts, including emotional ones (Cramer, 2015; Mizin & Kolesnyk, 2021; Wierzbicka, 1999). ORDER represents the

positive pole where those ECs representing the emotions of security and comfort are grouped. CHAOS is closely correlated with the existential fear of the Germans, which represents the concept of ANGST 'anxiety; fear' (Wierzbicka, 1999, pp. 159-166).

Since a person constantly strives to harmonise one's own inner world, which also implies a search for emotional balance in the form of emotional release or emotional balance, this leads to the formation of such ECs, which negative meaning structure can be levelled by the positive meanings contained in it, and vice versa. Similar ECs can be both negative and positive, which depends on the individual's subjective perception of the emotional situation. This phenomenon is called ambivalence (see more in Lomas, 2017, p. 6). It can be assumed that the emergence of ambivalent ECs among the Germans may be associated with the search for a balance between positive order and negative chaos. Considering this, the purpose of the research is to determine the influence of the linguo-cultural opposition ORDNUNG vs. CHAOS on the formation of ambivalent ethnospecific ECs in the German linguo-culture.

#### Theoretical Framework

The concept ORDNUNG occupies a key position in the hierarchy of values of German linguoculture, which is emphasised by adherents of the ethnopragmatic direction of cognitive linguistics (Cramer, 2015; Wierzbicka, 1999). The relevance of this concept is associated with the fact, that metaphysical (existential) fear (ANGST), which activates the opposite of ORDNUNG concept CHAOS, has a special meaning for the Germans. It is the fear of the chaos that causes them to permanently gravitate toward order. The frequency graph of the lemmas, which are the names of these concepts, clearly demonstrates the following pattern: lowering the role of order and safety actualises chaos (Fig. 1). However, since the beginning of the 20th century, existential fear has been especially sharply actualised, which is obviously connected with the challenges that German society has faced in recent decades, i.e. globalisation, emigration, terrorist attacks, the growing influence of right-wing radicals, coronavirus, inflation, etc. All these factors make Germans uncertain about their future, which confirms the linguo-cultural relevance of the concept ZUKUNFTSANGST 'fear of the future' (Cramer, 2015, p. 274).

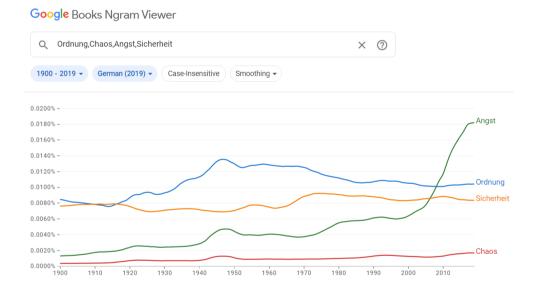


Fig. 1. Frequency graph of the lemmas Angst, Ordnung, Sicherheit, Chaos according to Google Books Ngram Viewer; German; 1900–2019; smoothing 3 (GBNV, 2023).

Insecurity about the future, as well as uncertainty cause Germans even more fear than the real danger. This is fully consistent with the conclusion of the sociologist G. Hofstede (2006, pp. 228-289) that such a criterion for comparing cultures as UNSICHERHEITSVERMEIDUNG (approximate translation: *uncertainty avoidance*)

plays a special role in Germany. Representatives of cultures with a high level of uncertainty avoidance, in particular the Germans, are characterized by a desire to comply with rules, norms of behaviour, and laws, a negative attitude towards ambiguity, clear and long-term planning for the future, the need for clear and detailed



written instructions, frankness in expressing criticism, lack of risk appetite.

Obviously, this was the reason why the idea of the founder of the philosophical current of existentialism S. Kierkegaard (2020) that metaphysical fear has an existential significance for the existence of the individual was picked up by German thinkers, primarily M. Heidegger (1979, p. 135). The latter defined ANGST as the basic state (Grundbefindlichkeit) of being. In addition, the close attention to this problem by the philosophers who belong to Germanic linguo-cultures can also be explained by the influence of world pictures, because physical and metaphysical fears in Germanic languages, unlike, e.g., East Slavic, have separate linguistic designations (cf. also French angoisse, Czech uzkost, Polish lek). If we compare the names of fear in some Germanic languages (on the left there is a lexeme for the designation of physical fear, and on the right – the one of metaphysical), we find that the latter can be rendered not even in one word, but in two lexical units that are very close in meaning: German Furcht - Angst, English fear - angst/anxiety, Danish frygt angest, Swedish fruktan - ångest/rädsla, Norwegian frykt – angst/redsel. Such synonymy is one of the criteria that may indicate the relevance of metaphysical fear for Germanic linguo-cultures (Mizin & Kolesnyk, 2021, p. 19).

A. Wierzbicka (1999, pp. 123–168) considers the EC ANGST in close connection not only with the concept ORDNUNG, but also SICHERHEIT 'security generated by confidence' GEBORGENHEIT 'existential security; shelter; staying in a place where you can feel safe'. The last two concepts contain specific emotional meanings, forming together with **GEMÜTLICHKEIT** 'cosiness: sincerity; comfort; security' and ZUVERLÄSSIGKEIT 'reliability; confidence', a kind of 'safety-cosiness quartet' that opposes chaos and metaphysical fear in the German cultural space (Mizin & Petrov, 2021, p. 50). The concepts belonging to this "quartet" contribute to the emergence of a certain balance in the emotional world of the Germans since chaos and fear create here a discrepancy between the harmony of the inner world and external disharmony, in which various historical and sociocultural factors give rise to that fear of the future that oppresses the "German spirit".

It is noteworthy that the basis for the opposition ORDNUNG vs. CHAOS and its derivative ANGST **SICHERHEIT** VS. GEBORGENHEIT & GEMÜTLICHKEIT & ZUVERLÄSSIGKEIT serves as a universal

principle of perception of the objective world ONE'S OWN vs. ALIEN. This principle causes a permanent balancing of the individual between the positive "one's own" world and the negative "alien" one: on the one hand, a person strives for a sense of safety, security, comfort, and stability, which generates "one's own" world, but, on the other hand, one constantly tries to go beyond the latter, since the "alien" world is associated not only with chaos and danger but also with new sensations and experience, which is the basis for the evolution of mankind as a whole. Such a "disruption" of the person's inner world gives rise to ambivalent emotions when an individual simultaneously experiences positive negative feelings. With this in mind, it can be assumed that the emotional balancing of representatives of the German linguo-culture between existential fear and the "safety-cosiness quartet" is closely related to the formation of ethno-specific ambivalent ECs SEHNSUCHT 'longing; need; passion; nostalgia', FERNWEH 'wanderlust; itchy feet' and HEIMWEH 'homesickness'.

## Methodology

The methodology of the research involves the implementation of three research stages:

- 1) identifying specific meanings of the concepts of the "safety-cosiness quartet" with the help of definitional (dictionaries and reference books) and contextual analyses of their names. The latter procedure is carried out on the basis of a selection of concordance lines from the concordances of the corresponding words of the German DWDS corpus;
- determining the actual meanings of the EC ambivalent SEHNSUCHT establishing its close correlation with the concepts of the "safety-cosiness quartet", as well as with the ECs FERNWEH and HEIMWEH;
- establishing the origins of the ambivalence of the ECs SEHNSUCHT, FERNWEH, and HEIMWEH, taking into account the inner world division of German linguo-culture representatives into oppositions ONE'S OWN vs. ALIEN  $\rightarrow$  ORDNUNG vs.  $CHAOS \rightarrow ANGST vs. SICHERHEIT &$ GEBORGENHEIT & GEMÜTLICHKEIT & ZUVERLÄSSIGKEIT.

Methodologically, these analytical procedures are based on theoretical provisions regarding (1) the cultural tagging of emotional concepts and their expression of evaluation and (2) the



objectivity of language corpora for linguistic studies:

- evaluation (valence), as known, is a key component of the majority of theories that address the problem of the nature of emotions. This also applies to the theoretical and practical understanding of such a phenomenon as ambivalent emotions (Carrera & Oceja, 2007; Hershfield et al., 2013; Holm, Greaker, & Strömberg, 2002; Larsen et al., 2003; Lomas, 2017; Moss & Couchman, 2012; Moss & Wilson, 2014; Rees et al., 2013). The phenomenon of such emotions is that they combine, or rather mix positive and negative assessments. One of the most striking examples of ambivalent ECs is the Anglo-Saxon LONGING, in which the meanings of the basic emotions of happiness and sadness are "mixed" (Holm, Greaker, & Strömberg, 2002, p. 608). It is this concept that can act in certain situations as the equivalent of the German ethnospecific EC SEHNSUCHT;
- corpus-based methodology is increasingly being involved in the study of cultural concepts (Mizin et al., 2021, p. 100). Among the adherents of corpus linguistics, a position has been formed that texts are not only manifestations of the language system but also of those cultural conditions and situations in which they are generated. This allows a corpus-based methodology to be applied in revealing the characteristics of a particular culture. There is, e.g., the possibility of studying the distribution of those lexical units that represent culturally marked concepts in language distribution corpora in order to identify their cultural meanings (Mizin, Slavova, & Khmara, 2021, p. 75). However, corpus data provide a more objective view of language than intuition (Krieger, 2003; McEnery & Wilson, 2001) because it is empirical, inductive, and quantitative. Therefore, data from corpus linguistics greatly reinforces the results and conclusions of linguistic research (Tissari, Vanhatalo, & Siiroinen, 2019, p. 322). This is especially true for those studies that determine the actual content of words that are the names of cultural concepts since nowadays language corpora provide ample opportunities for this. For this purpose, it is possible, in particular, to analyse the typical combination of such words in representative corpora based on the study of their contextual environment in concordance lines and statistical data of their occurrent forms.

#### Results and Discussion

1. Specific meanings of the "safety-cosiness quartet" concepts and their connection with the EC SEHNSUCHT.

As reported above, the "quartet" is formed in German linguo-culture by four concepts, each of them containing emotional meanings — SICHERHEIT, ZUVERLÄSSIGKEIT, GEBORGENHEIT i GEMÜTLICHKEIT. In the latter two, emotional meanings dominate, so they belong to the ECs.

SICHERHEIT is the most relevant among these concepts, which has almost as much linguistic and cultural significance for Germans as ORDNUNG. It expresses meanings of full confidence that nothing bad can happen. A greater sense of security distinguishes it, e.g., from the Anglo-Saxon concepts of SAFETY and SECURITY, since the former contains the meaning 'nothing bad will happen', and the latter – 'nothing bad can happen' (Shmelev, 2005, pp. 445-446).

Unlike SICHERHEIT, EC GEBORGENHEIT conveys the meaning of not only protection, but also closeness, warmth, calmness, peace, trust, and acceptance by other people (Chesnokova, 2013, p. 66). From the mother's womb the Germans feel protected in various life situations: in their family, with friends, etc. The safety and security need requires predictability and stability, which has contributed to the foregrounding of the concept ZUVERLÄSSIGKEIT in German linguoculture. The latter contains a whole range of meanings related to reliability (stability, security, certainty, in the future in particular, trust in established things or acquaintances), a conscious attitude to duty, thoroughness, truthfulness, etc. ZUVERLÄSSIGKEIT closely correlates with SICHERHEIT, complementing it, since German native speakers only feel safe when they are sure of the stability and reliability of everything around them, as well as being sure of the future. If there is no such confidence, then it causes metaphysical fear.

Therefore, an atmosphere of safety is created by the feeling of reliability, confidence and security. In such an atmosphere there arises a specific German cosiness, which is represented by EC GEMÜTLICHKEIT. The latter was formed on German lands in the 18th century in the environment of the middle class — the bourgeoisie. This EC gained a special sociocultural significance in Germany during the



Biedermeier period, when the bourgeoisie found a kind of protection from constant political, social and economic changes in returning to their family, loved ones and native home. It was at this time when EC GEMÜTLICHKEIT began to be embodied in relevant forms (style of residential premises, design of clubs by interest, etc.) and social practices (various clubs by interest, joint organization of rest, coffee or tea rituals, joint lunches, etc.) (Schmidt-Lauber, 2004, p. 32). The Germans use the words Gemütlichkeit and gemütlich to denote an evening, a room, a pleasant walk, but gloomy weather is characterised as *ungemütlich* 'uncomfortable'.

Not only a person's socialisation, but also their physical nature, in particular the body (embodiment as a basic cognitive mechanism). serves as the basis to formulate the meanings of existential security and comfort. Bodily experience and feelings formed the basis of many ECs, including "security and cosiness" ones, since psychologists explain the desire to find a replacement for the already familiar prenatal experience of safety in the mother's body by the increased need in safety, in a small, closed, clearly defined space where one could hide from danger and chaos. In particular, GEBORGENHEIT (Intelmann, 2004, p. 200) is associated with the prenatal experience of the individual, which emphasizes the depth of the Germans' irrational desire to seek protection in a kind of shelter.

The idea of finding a safe, protected place is contained in the very content of the noun Geborgenheit, which originates from the verb bergen - '1) to deliver to a safe place, to save, to hide, to protect; 2) contain something in oneself; 3) to feel safe (protected, calm)' (Wahrig, 2001, p. 257). Germans associate such a safe and protected place primarily with their native home and hearth (dwelling, home, house, room, native area, native horizons, homeland, etc.). This is evidenced by the data of the language corpus, where one of the most frequent collocates of the Geborgenheit lemma are Zuhause 'native home', Elternhaus 'parents' house', Hort 'shelter', Halt 'halt'; parking lot', *Heim* '(native, parental) home; hearth', Haus 'house', Heimat 'homeland' (DWDS, 2023).

The origins of the world division into "own" and "alien" can be traced back to the distant past, when the organization of the ancient Germans' settlements was a scaled copy of the "middle earth" (Old Icelandic Midgaðr, Old English middangearb) as a discrete, protected and safe space. The middle here has a symbolic, sacred

meaning, since in Germanic mythology the people's world – MIDGARD – is the locus of the intersection of several worlds, which are ordered in at least two dimensions. The vertical dimension is MIDGARD (world of people), ASGARD (world of gods), MUSPELHEIM (world of fire giants), NIFLHEIM (world of moisture and darkness). On the horizontal plane, MIDGARD is surrounded by UTGARD (the world of monsters and giants). This means that MIDGARD for the ancient Germans is "their own" (ordered, safe, protected, cosy) world, which is reliably "fenced" from the fears and dangers of the outside world by various real and imaginary "fences" (the boundaries of one's dwelling, the walls of the house, a fence, a river, mountains, forest, etc.). Even the ancient Germans saw paradise not in an open space (cf. the Fortunate islands, Gardens of the Hesperidia, Elvsian fields, the top of Olympus from Greek mythology), but in the huge palace of fallen warriors, WALHALLE (Gachev, 2008, p. 218). The world division into MIDGARD and UTGARD was imprinted in the modern descendants of the ancient Germanic, in particular the Germans, at the level of the collective unconscious, so in their imagination there is something terrible, scary, i.e., everything that causes ANGST, beyond "their own" ordered - world. These are the origins of the emotional need of representatives of the German language culture in a closed, limited space and their special longing for their home, for a cosy home hearth, where you can feel geborgen 'protected; cosily'.

Hence, for Germans the native home serves as the centre of the human universe that resists threats from the outside world. Therefore, the native home is always filled with positivity and is associated with family, relatives (ancestral home hearth. In German and consciousness, "their own" is clear, order reigns here, and "alien" is incomprehensible, chaotic. Chaos is the threat that requires creation of an existential shelter for an individual – their cosy, safe, orderly, small space where they will not feel alien, homeless and existentially alone.

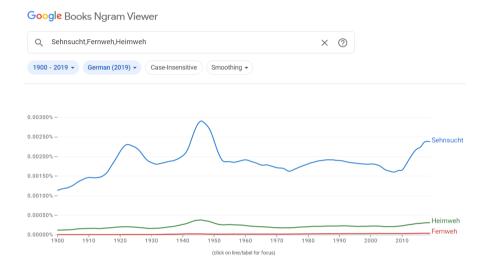
It is noteworthy that the need of the German linguo-culture representatives for security and cosiness can cause opposite feelings of unrestrained thirst and longing, which indicates a close connection of the concepts SICHERHEIT, GEBORGENHEIT, GEMÜTLICHKEIT and ZUVERLÄSSIGKEIT with EC SEHNSUCHT. Since the period of romanticism longing for security (Sehnsucht nach der Geborgenheit) has contributed to the formation of the specifically

German concept of KULTUR DER INNERLICHKEIT (approximate translation: *the culture of the soul or the culture of the inner life*), because the Germans at the turning points in the development of the nation were nostalgic for the cultural inner world more than for freedom and democracy (Gelfert, 2019).

# 2. Actual meanings of EC SEHNSUCHT and its close correlation with EC FERNWEH.

EC SEHNSUCHT demonstrates a noticeable relevance for the modern German-speaking

community, which is evidenced by the high frequency of its name in various types of discourse (Fig. 2), as well as the fact that the name of this EC – the lexeme *Sehnsucht* – took the third place (after *Liebe* 'love' and *Gemütlichkeit* 'cosiness') in the nomination "the most beautiful German word" (Spiegel Online, 2004). Despite this, researchers have only recently turned their attention to it (Kotter-Grühn et al., 2009; Mayer, Scheibe, & Riediger, 2008; Scheibe et al., 2011).



*Fig. 2.* Frequency graph of the lemmas *Sehnsucht*, *Heimweh*, *Fernweh* according to Google Books Ngram Viewer data; German; 1900–2019; smoothing 3 (GBNV, 2023).

The psychologist T. Lomas (2016) defined the noun Sehnsucht as untranslatable. This means that even the universal emotional meanings it possesses show a unique configuration typical of the German linguo-culture. The definitional analysis made it possible to establish that the noun Sehnsucht conveys a wide emotional palette, which includes the following main shades of meaning: 'passionate desire for something'; 'craving for someone'; 'rush to something'; 'longing for someone. something'; 'internal, painful thirst' (Mizin & Ovsiienko, 2020, p. 114). The results of this analysis are consistent with the conclusion of psychologists regarding the multifaceted nature of the emotion represented by EC SEHNSUCHT. The latter is much more positive than, e.g., the Anglo-Saxon EC NOSTALGIA, however, expressing passionate desires and aspirations, it contains an element of utopianism (Scheibe, Freund, & Baltes, 2007, p. 778).

By establishing the actual semantic structure of the EC SEHNSUCHT on the basis of language corpora data, it was found that this concept contains deep meanings (Mizin & Ovsiienko, 2020, p. 118), e.g.:

 Blaue Blumen stehen für sehr tiefe Gefühle und die Sehnsucht nach Unendlichkeit (DWDS, 2023)

[Blue flowers stand for very deep feelings and desire stands for infinity].

Deep emotions and feelings are secret, intimate, i.e., they always contain a part of the inner world of a specific individual, e.g.:

2) In dieser Komposition mischen sich Sehnsucht, Demut und Vertrauen, und wurden verwoben von der Sopranistin (DWDS, 2023)

[In this composition desire, humility and trust are mixed and they were interwoven by a soprano]. Depending on the emotional situation that prepares a person to experience a certain





emotional state, EC SEHNSUCHT activates either positive or negative meanings in the individual consciousness. The depth of emotions expressed by this EC, their secrecy, can even lull an individual into a manic state, when one of their passions turns into mania, causing manicsuicidal depression (Bloch, 1967). psychopathological condition received the designation Todessehnsucht in German.

For representatives of an "alien" linguo-culture, the case when one specific EC is determined through another is extremely difficult, especially when it comes to ambivalent ECs. An example here is the fact that one of the facets of EC SEHNSUCHT is the ambivalent concept of FERNWEH:

3) Die Sehnsucht hat viele Facetten, Fernweh gehört auch dazu (DWDS, 2023)

[Desire has many facets, wanderlust belongs here, too].

3. Oppositions ONE'S OWN vs.  $ALIEN \rightarrow$ ORDNUNG vs.  $CHAOS \rightarrow ANGST$  vs. SICHERHEIT & GEBORGENHEIT & **GEMÜTLICHKEIT** ZUVERLÄSSIGKEIT as origins of ambivalence of EC SEHNSUCHT, FERNWEH and HEIMWEH.

The ambivalent EC FERNWEH, the main meanings of which are 'passion for travel', 'lust for travel' and 'longing for distant worlds', is gradually gaining relevance in German linguoculture: if in 1946 the frequency of the lemma Fernweh was 0.18 (Freq.=0.18) per 1 million tokens, then by 2022 its frequency is already 1.22 (Freq.=1.22) (DWDS, 2023). This EC has its roots in the era of "traveling" romanticism, when of concepts that number convey passion/wanderlust including WANDERLUST and REISELUST appeared. Since the time of romanticism, the passion for travel has become one of the most important features of modern German life.

EC FERNWEH contains mainly positive meanings, but the Weh component of its name denotes pain and sadness that give rise to depressive longing, e.g.:

4) Er seufzt wieder und schaut über den See, als habe er Fernweh (DWDS, 2023)

[He sighs again and looks far beyond the sea, as if he longs for distance].

The negativity of such experiences can even transform into a disease, e.g.:

5) Fernweh ist die beste Krankheit in der Welt (DWDS, 2023)

[Wanderlust is the best disease in the world].

However, the positive meanings of irresistible desire, passions and cravings neutralize the negativity of this disease, e.g.:

6) Über Fernweh zum Beispiel kommt man ohne therapeutische Hilfe hinweg (DWDS,

[Wanderlust, for example, is overcome without therapeutic help].

In this way FERNWEH differs from EC FERNSUCHT, which conveys the meaning of a person's greater dependence (obsession) on travel.

It is noteworthy that among the three ECs STORCHGEFÜHL WANDERLUST, feeling of a stork' and KRANICHGEFÜHL 'the feeling of a crane', which are considered to be the predecessors of FERNWEH (Kluge, 1901, p. 40), only the first one has gained use in the conveying German-speaking community, positive meanings, since in the days of romanticism Germans perceived passion to travel completely naturally, considering that it is provoked by an instinct similar to that which makes migratory birds go to flock. Instead, FERNWEH balances the positive and the negative, and one of its dominant meanings is 'depressive longing', e.g.:

7) Von Fernweh gepeinigt, hockten wir also nun auf meinem Ostberliner Sofa (DWDS, 2023)

[So, exhausted by wanderlust, we sat on my couch in East Berlin].

This yearning for distance, for an "alien" world, is obviously a consequence of the socially depressed periods that the German language linguo-society experienced during the last centuries (wars, political upheavals, economic downturns, etc.). In such periods, the inner, and in particular the emotional world of Germans, organized around order, security, stability and cosiness, was disturbed, became uncomfortable, which forced individuals to seek inner comfort outside this world. At that time, a change of locus (moving to another country, traveling, journey)

often remained an unfulfilled dream, which caused depressive longing. Nowadays, it is on the contrary, globalisation pushes people to change places (professional mobility, educational mobility, tourism, etc.), which contributes to a change of meanings configuration in the EC FERNWEH – less longing and more passionate desire, e.g.:

8) Das ist super, um sich einen ersten Eindruck zu verschaffen und das Fernweh zu wecken (DWDS, 2023)

[It's great for getting a first impression and awakening the wanderlust].

The organisation of the inner world of German linguo-culture according to such universal and ethno-specific contrasts as ONE'S OWN vs. ALIEN, ORDNUNG vs. CHAOS and ANGST vs. SICHERHEIT & GEBORGENHEIT & GEMÜTLICHKEIT & ZUVERLÄSSIGKEIT has determined that FERNWEH also has its "opponent" - EC HEIMWEH 'longing for home/motherland'. The latter is not distinguished by such ethno-cultural specificity as FERNWEH, since in other Germanic cultures there are ECs that can be considered equivalent to HEIMWEH, particular the Anglo-Saxon HOMESICKNESS. Α common semantic element for FERNWEH and HEIMWEH is longing mixed with sadness and depression, and they differ primarily in the different vectors of those loci that activate such longing - "external ("alien") world" vs. "inner ("own") world (home, homeland, etc.)". And if the longing generated by the opposition of "one's own" is clear, then the longing (sadness/sorrow/pain/depression) for "alien" is, at least, incomprehensible for representatives of other linguo-cultures.

On the example of FERNWEH and HEIMWEH, a similar "tear" of the emotional world of Germans between passion (craving) and longing can be traced, as in the case of SEHNSUCHT, which proves the close connection of these ECs, e.g.:

9) Sehnsucht, Heimweh, Fernweh, das steckt einfach in mir drin (DWDS, 2023)

[Longing, homesickness, wanderlust are all within me];

10) Das Gefühl von damals, als dieser Film eine existenzielle Form der Sehnsucht in mir ausgelöst hat, wie Heimweh und Fernweh zugleich (DWDS, 2023) [The feeling of those times when this movie evoked in me an existential form of deep nostalgia – like homesickness and nostalgia for traveling together].

It can be assumed that EC FERNWEH and HEIMWEH are only elements of the whole fragment of this world, which is represented by SEHNSUCHT, since the relevance of the latter for modern representatives of the German linguo-society is much higher compared to the former (Fig. 2). This fragment is filled with emotions that give an individual hope (urges, desire, longing) and at the same time take it away (sadness, longing, depression). Such ambivalence of these three ECs may indicate the desire of Germans to balance the positive and the negative in their emotional experiences.

#### **Conclusions**

The proposed article is devoted to the search of arguments in favour of the assumption that in German linguo-culture the emergence of some ambivalent emotion concepts may be related to finding a balance between positive order and negative chaos, therefore the linguistic and cultural opposition ORDNUNG vs. CHAOS produces a certain influence on the formation of such notions. With the help of the applied methodology, which relies primarily on the procedure of identifying the specific meanings of studied ECs based on definitional (dictionaries and reference books) and contextual (a sample of concordance series of the DWDS corpus of the German language) analyses of their names, it has been established that:

- in the German cultural space a kind of "safety-cosiness quartet" which is represented the concepts of by SICHERHEIT, GEBORGENHEIT, **GEMÜTLICHKEIT** ZUVERLÄSSIGKEIT is opposed to chaos and metaphysical fear (EC ANGST). The linguistic opposition **ANGST** SICHERHEIT & GEBORGENHEIT & **GEMÜTLICHKEIT** & ZUVERLÄSSIGKEIT is a consequence of the inner world division of the Germans on the axis of ORDNUNG vs. CHAOS;
- 2) the universal principle of perception of the objective world ONE'S OWN vs. ALIEN serves the basis for the opposition ORDNUNG vs. CHAOS and its derivative ANGST vs. SICHERHEIT & GEBORGENHEIT & GEMÜTLICHKEIT & ZUVERLÄSSIGKEIT. This principle causes a permanent balancing of the



- individual between the positive "one's own" world and the negative "alien";
- the principle ONE'S OWN vs. ALIEN has led to the "disruption" of the inner world of the representatives of German linguoculture, because, on the one hand, they strive for a sense of safety, security, comfort and stability that "their own" world generates for them, but on the other hand, they constantly try to go beyond the latter, since the "alien" world is associated not only with chaos and danger, but also with new sensations and new experiences. Such an emotional "disruption", or rather emotional balancing, can contribute to the emergence of ambivalent emotions, when a certain emotional experience causes an individual both positive and negative feelings at the same time:
- balancing of the Germans hetween metaphysical fear and the "safety-cosiness quartet" is closely related to the formation of ambivalent ethno-specific SEHNSUCHT, **FERNWEH** and HEIMWEH. At the same time, EC SEHNSUCHT forms a whole fragment of world of emotional representatives of German linguo-society, and EC FERNWEH and HEIMWEH are only its elements. In this fragment, there is a permanent conflict between positive emotions (urges, desire, thirst) and negative ones (sadness, longing, depression), as a result of which a balance of positivity and negativity is achieved in the emotional experiences of Germans.

# **Bibliographic references**

- Bloch, R. (1967). On the significance of the death wish for psychogenic disorders of the food instinct. Journal of Psychosomatic Medicine and Psychoanalysis, 13(1), 63-69. https://www.jstor.org/stable/23995482
- Carrera, P., & Oceja, L. (2007). Drawing mixed emotions: Sequential or simultaneous experiences? Cognition and Emotion, 21(2), 422-441.
- https://doi.org/10.1080/02699930600557904
  Chen, C., Crivelli, C., Garrod, O.G.B., Schyns, P.G., Fernández-Dols, J.-M., & Jack, R.E. (2018). Distinct facial expressions represent pain and pleasure across cultures. PNAS Proceedings of the National Academy of Sciences of the United States of America, 115(43), E10013-E10021. https://doi.org/10.1073/pnas.1807862115
- Chesnokova, L.V. (2013). Concepts of existential fear (Angst) and safety

- (Geborgenheit) in the German phiolosophy of culture. Context and Reflection: Philosophy of the World and Human Being, 1-2, 58-71. http://publishing-vak.ru/file/archive-philosophy-2013-1/3-chesnokova-lesya-vladimirovna.pdf
- Cramer, R. (2015). German Ordnung: A semantic and ethnopragmatic analysis of a core cultural value. International Journal of Language and Culture, 2(2), 269-293. https://doi.org/10.1075/ijolc.2.2.06cra
- Doyle, C.M., Gendron, M., & Lindquist, K.A. (2021). Language is a unique context for emotion perception. Affective Science, 2(2), 171-177. https://doi.org/10.1007/s42761-020-00025-7
- DWDS. (2023). Digital dictionary of the German language. Retrieved from http://www.dwds.de/ressourcen/korpora/
- Gachev, G.D. (2008). National images of the world. Hellas, Germany, France: The experience of existential cultural studies. Moscow: Logos. (In Russian)
- GBNV. (2023). Google Books Ngram Viewer. Retrieved from https://books.google.com/ngrams
- Gendron, M., Roberson, D., van der Vyver, J.M., & Barrett, L.F. (2014). Perceptions of emotion from facial expressions are not culturally universal: Evidence from a remote culture. Emotion, 14(2), 251-262. https://doi.org/10.1037/a0036052
- Gelfert, H.-D. (2019). From inwardness to sobriety. German culture today. PoliTeknik, 11, 3-6. Retrieved from: http://politeknik.de/wp-content/uploads/2019/11/DOSSIER\_TYPIS CH.pdf
- Goddard, C. (2018). Vocabulary of emotions and its development in English, German and other languages. In G.L. Schiewer, J. Altarriba, B. Chin Ng. (Eds.), Handbook of Language and Emotion. HSK Handbooks series: Mouton de Gruyter.
- Heidegger, M. (1979). Being And Time. Tubingen: Max Niemeyer Verlag.
- Hershfield, H.E., Scheibe, S., Sims, T.L., & Carstensen, L.L. (2013). When feeling bad can be good. Social Psychological and Personality Science, 4(1), 54-61. https://doi.org/10.1177/1948550612444616
- Hofstede, G. (2006). Local thinking, global action. Intercultural cooperation and global management. Munich: C.H. Beck Verlag. (In German)
- Holm, O., Greaker, E., & Strömberg, A. (2002).Experiences of longing in Norwegian and Swedish 4- and 5-year-old children. The



- Journal of Psychology, 136(6), 608-612. https://doi.org/10.1080/00223980209604822
- Intelmann, C. (2004). The space in psychoanalysis. The effect of space on the psychoanalytic process. (Inaugural dissertation to obtain a doctorate in philosophy). Ludwig Maximilian University, Munich. (In German)
- Jack, R.E., Garrod, O.G., Yu, H., Caldara, R., & Schyns, P.G. (2012). Facial expressions of emotion are not culturally universal. Proceedings of the National Academy of Sciences, 109(19), 7241-7244. https://doi.org/10.1073/pnas.1200155109
- Kierkegaard, S. (2020). The concept of anxiety: The concept of anxiety. Copenhagen: Dansk Litteratur Forlag. (In danish)
- Kluge, F. (1901). Heimweh: Ein wortgeschichtlicher Versuch. Freiburg: Univ.-Buchdr. v. C. Lehmann's Nachf. U. Hochreuther.
- Kotter-Grühn, D., Scheibe, S., Blanchard-Fields, F., & Baltes, P. B. (2009). Developmental emergence and functionality of "Sehnsucht" (life longings): The sample case of involuntary childlessness in middleaged women. Psychology and Aging, 24(3), 634-644. https://doi.org/10.1037/a0016359
- Krieger, D. (2003). Corpus linguistics: What it is and how it can be applied to teaching. In The internet TESL Journal, 9(3). https://www.aijcr.org/\_files/ugd/c51627\_bd7 38f10144146449ab4e8c0a2e2f803.pdf#page =285
- Larsen, J.T., Hemenover, S.H., Norris, C.J., & Cacioppo, J.T. (2003). Turning adversity to advantage: On the virtues of the coactivation of positive and negative emotions. In L.G. Aspinwall & U.M. Staudinger (Eds.), A Psychology of Human Strengths: Perspectives on an Emerging Field (pp. 211-226). Washington, DC: American Psychological Association.
- Lomas, T. (2016). Towards a Positive Crosscultural Lexicography: Enriching Our Emotional Landscape through 216 "Untranslatable" Words Pertaining to Wellbeing. The Journal of Positive Psychology, 11(5), 546-558. https://doi.org/10.1080/17439760.2015.1127 993
- Lomas, T. (2017). The value of ambivalent emotions: a cross-cultural lexical analysis. Qualitative Research in Psychology, 1-25. https://doi.org/10.1080/14780887.2017.1400 143
- Luhmann, N. (1995). Social Systems. Stanford: Stanford University Press.

- Mayer, S., Scheibe, S., & Riediger, M. (2008). (Un)Reachable? An empirical differentiation of goals and life longings. European Psychologist, 13(2), 126-140. https://doi.org/10.1027/1016-9040.13.2.126
- McEnery, T., & Wilson, A. (2001). Corpus linguistics. Edinburgh: Edinburgh University Press.
- Mizin, K., & Kolesnyk, O. (2021). German Emotional Concepts of Safety, Protection and Comfort through the Prism of the Linguo-Cultural Opposition of ORDNUNG 'Order' CHAOS 'Chaos'. Studia philologica, 1(16), 18-29. https://doi.org/10.28925/2311-2425.2021.163
- Mizin, K., & Letiucha, L. (2019). The Linguocultural Concept TORSCHLUSSPANIK as the Representative of Ethno-specific Psychoemotional State of Germans. Psycholinguistics, 25(2), 234-249. https://doi.org/10.31470/2309-1797-2019-25-2-234-249
- Mizin, K., & Ovsiienko, L. (2020). The German Linguo-cultural Concept SCHADENFREUDE in Cross-cultural Perspective: A Corpus-based Approach. Lege artis, 5(1), 143-184. https://lartis.sk/wp-content/uploads/2020/06/MizinOvsiienko\_Is sue-1\_2020.pdf
- Mizin, K., & Petrov, O. (2021). Emotional State GEMÜTLICHKEIT in Cross-cultural Perspective: Corpus-based Approach. Studies about Languages / Kalbų studijos, 38, 43-60.
  - http://doi.org/10.5755/j01.sal.1.38.26581
- Mizin, K., Slavova, L., & Khmara, V. (2021). The equivalence of terms denoting the emotion concepts of Ger. ANGST and A.-S. FEAR: A corpusbased method. Lege artis, 6(2), 69-104. https://lartis.sk/wp-content/uploads/2021/12/Mizin\_et\_al.pdf
- Mizin, K., Slavova, L., Lyashuk, A., & Hromovenko, V. (2021). The emotion concept of SHAME as one of the markers of social infantilism: Cross-cultural analysis based on language corpora data. Amazonia Investiga, 10(48), 97-106. https://doi.org/10.34069/AI/2021.48.12.11
- Moss, S.A., & Couchman, G. (2012). The conflict between the interventions that prevent burnout and the culture of modern capitalism: The benefits of ambivalent emotions. The Australian and New Zealand Journal of Organisational Psychology, 5, 13-24. https://doi.org/10.1017/orp.2012.2
- Moss, S.A., & Wilson, S.G. (2014). Ambivalent emotional states: The underlying source of all creativity? The International Journal of Creativity and Problem Solving, 24(2),





- 75-100. https://psycnet.apa.org/record/2014-48681-006
- Ogarkova, A., Panasenko, N., Lewandowska-Tomaszczyk, B. (2013).Language family similarity effect: Emotion term semantics in Russian, Ukrainian, Czech, Slovak, and Polish. In J.J.R. Fontaine, K.R. Scherer, C. Soriano (Eds.), Components of emotional meaning: A sourcebook (pp. 502-506). Oxford University Press. https://doi.org/10.1093/acprof:oso/97801995 92746.003.0042
- Oster, U. (2012). "Angst" and "Fear" in Contrast: A Corpus-based Analysis of Emotion Concepts. Cognitive Linguistics between Universality and Variation (pp. 327-355). Newcastle upon Tyne: Cambridge Scholars Publishing.
- Rees, L., Rothman, N.B., Lehavy, R., & Sanchez-Burks, J. (2013). The ambivalent mind can be a wise mind: Emotional ambivalence increases judgment accuracy. Journal of Experimental Social Psychology, 49(3), 360-367. https://doi.org/10.1016/j.jesp.2012.12.017
- Schmidt-Lauber, B. (2004). European ethnology and coziness. Questions of an everyday cultural science. Austrian Journal for Historical Studies, 15(4), 27-49. https://doi.org/10.25365/oezg-2004-15-4-3
- Shmelev, A.D. (2005). Some trends in the semantic development of Russian discursive words (na vsiakii sluchai, esli chto, vdrug). Key ideas of the Russian language picture of

- the world (445-446). Moscow: Languages of Slavic Culture. (In Russian)
- Scheibe, S., Blanchard-Fields, F., Wiest, M., & Freund, A.M. (2011). Is longing only for Germans? A cross-cultural comparison of Sehnsucht in Germany and the United States. Developmental Psychology, 47(3), 603-618. https://doi.org/10.1037/a0021807
- Scheibe, S., Freund, A. M., & Baltes, P. B. (2007). Toward a developmental psychology of Sehnsucht (life longings): The optimal (utopian) life. Developmental Psychology, 43(3), 778–795. https://doi.org/10.1037/0012-1649.43.3.778
- Spiegel Online. (2004, October 25). "Habseligkeiten" ist schönstes deutsches Wort ["Belongings" is the most beautiful German word]. Retrieved from
  - German word]. Retrieved from http://www.spiegel.de/kultur/gesellschaft/0,1 518,324670,00.html
- Tissari, H., Vanhatalo, U., & Siiroinen, M. (2019). From corpus-assisted to corpus-driven NSM explications: The case of Finnish viha (anger, hate). Lege artis, 4(1), 290-334. https://lartis.sk/wp-cortect/wplosed/2010/06/Tissari-et-al-Jasus-cortect/wplosed/2010/06/Tissari-et-al-Jasus
  - content/uploads/2019/06/Tissari\_et\_al\_Issue -1\_2019.pdf
- Wahrig. (2001). True German Dictionary. Gutersloh: Bertelsmann. (In German)
- Wierzbicka, A. (1999). Emotions Across Languages and Cultures: Diversity and Universals. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511521256

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# Means of gamification of learning during martial law

# Ефективність використання забів гейміфікації навчання в умовах військового стану

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Written by:
Nataliia Malaniuk<sup>99</sup>
https://orcid.org/0000-0002-4321-0900
Daria Hubarieva<sup>100</sup>
https://orcid.org/0000-0002-4513-8586
Tetiana Sviatenko<sup>101</sup>
https://orcid.org/0000-0003-4303-2937
Inna Gogunskaya<sup>102</sup>
https://orcid.org/0000-0001-6952-5057
Ivanna Parfanovich<sup>103</sup>
https://orcid.org/0000-0002-5300-7092

#### **Abstract**

The aim of the research was to investigate the impact of gamification on learning during martial law. An analysis of learning results and academic motivation of students who studied using gamification elements and the traditional "lecture-seminar" model was carried out. Academic motivation was assessed using the standard AMS-C questionnaire. It was found that the gamification of education contributed to the increase in the number of students who obtained Level B and reduction in the number of students who had Levels E and D. The use of gamification in general contributed to the strengthening of the motivation for learning, achievement and selfdevelopment. Feedback from students revealed that not all students liked the lack of correct action algorithms and the use of leader boards. It was established that the use of gamification during martial law contributed to an increase in the number of positive scores for the test exam and an enhanced intrinsic motivation. Learning motivation decreased among students who were trained with the use of gamification. Students'

### Анотація

Метою дослідження стало дослідити вплив гейміфікації на навчання в умовах військового стану. Проведено аналіз результатів навчання та академічної мотивації студентів, що застосуванням навчалися iз елементів гейміфікації та за традиційною моделлю «лекція-семінар». Академічну мотивацію оцінювали за стандартним опитувальником AMS-C. З'ясовано, що гейміфікація навчання дозволила збільшити кількість студентів, які отримали рівень знань В та зменшити кількість студентів, що мають рівень Е та D. Застосування гейміфікації вцілому сприяло посиленню мотивації пізнання, досягнення та саморозвитку. Зворотній зв'язок від студентів дозволив виявити, що не всім студентам сподобалося відсутність правильних алгоритмів дії та застосування таблиць лідерів. Встановлено, що зовнішня мотивація студентів не зазнала змін під впливом гейміфікації навчання.

<sup>&</sup>lt;sup>102</sup> Doctor of Medical Sciences, Senior Researcher at the Center for Allergic Diseases of the Upper Respiratory Tract, State University "Institute of Otolaryngology Named after Prof. O.S. Kolomiichenko of the National Academy of Sciences of Ukraine," Kyiv, Ukraine.
<sup>103</sup> Doctor of Pedagogical Sciences, Professor at the Department of Social Work and Management of Socio-Cultural Activity of Ternopil Volodymyr Hnatyuk National Pedagogical University, Ternopil, Ukraine.



<sup>&</sup>lt;sup>99</sup> Doctor of Pedagogical Science, Associate Professor at the Department of Higher Mathematics, Mathematical Modeling and Physics of the Educational and Scientific Institute of Information Technologies of the State University of Telecommunications, Kyiv, Ukraine.
<sup>100</sup> Doctor in Philosophy, Senior Lecturer at the Department of Pedagogy and methods of primary education, National Pedagogical Dragomanov University, Kyiv, Ukraine.

<sup>&</sup>lt;sup>101</sup> Doctor of Medical Sciences, Head of the Department of Skin and Venereal Diseases, Dnipro State Medical University, Dnipro, Ukraine.



external motivation did not change under the influence of gamification of learning.

Keywords: academic motivation, gamification, learning outcomes, martial law.

### Introduction

Pedagogical science is constantly developing: new tools, methodologies, and technologies The introduction of information appear. technologies into all areas of people's lives has significantly changed the way people find and use new information (Lakhani & Wiedlitzka, 2022). The current generation of students have significant differences in learning style and requirements for it (Luke, 2020). This leads to the need to change the paradigm of the education system. The introduction of martial law as a result of Russia's military aggression against Ukraine and the transition to distance education created additional challenges in the education system.

Since February 24, 2022, Ukrainian higher educational institutions (HEIs) had to switch to distance and blended learning because of Russia's war against Ukraine. Distance learning is often asynchronous because of constant threats of shelling, communication and power outages. Studying the impact of armed conflicts on the education system and recovery after them is relevant and attracts the attention of many researchers and international organizations (for example, UNICEF, Global Coalition to Protect Education from Attack, etc.). These studies were used to develop recommendations for the implementation of the educational process in the context of armed conflicts were developed (Akresh, 2016; Leclercq et al., 2020). The recommendations emphasize that education should be continuous to prevent the worsening of the crisis in society.

During martial law, participants in the educational process may be in a depressed emotional state because of the lack of a sense of security or may not have the technical ability to join training synchronously (Akresh, 2016). Therefore, there is a need to change the traditional lecture-seminar approach to planning the educational process, since such an educational process reduces the learning motivation among students.

One of the newest pedagogical technologies is gamification in the educational process. Gamification is the use of game elements in nongame situations (Lo & Hew, 2020). Luke (2020) Keywords: гейміфікація, академічна мотивація, результати навчання, військовий стан

notes that gamification design elements are used to enhance motivation. They came to us from the world of games and are familiar to us in everyday

Ukraine has been implementing a number of education reforms in order to change the methodological principles of education. This is why the issue of studying the impact of gamification on education is relevant for Ukraine. Although researchers noted the overall positive impact of gamification on the educational process, the impact of gamification elements on the effectiveness of education under martial law is insufficiently studied. During the martial law, the participants of the educational process are under stressful influence, which can reflect on their performance, learning motivation and amotivation. We assume that the application of gamification elements to education can have a positive effect on academic performance, motivation and amotivation for students when studying the subject.

The aim our research is to study the impact of gamification elements on academic performance, learning motivation and amotivation of students during the educational process. The aim involved the following research objectives:

- Analyse the learning outcomes of students who studied using gamification and those who studied according to the traditional lecture-seminar model
- Study the impact of gamification of learning on students' intrinsic learning motivation.
- Identify the role of gamification of learning in building students' external learning motivation and the development of amotivation.

# Literature review

Learning outcomes and motivation are highly dependent on the teacher and teaching methods. The students' psychological condition is difficult in the wartime, they may not have the physical ability to complete the assignment on time. In such conditions, there is a need to use methods that enhance learning motivation and enable asynchronous distance learning. Students often



note that learning is difficult and simple memorization is boring, uninteresting and tiring. Learning outcomes can be influenced by several factors: abilities, motivation, level of anxiety and attitude towards the subject (Jati et al., 2020).

According to Shkuropat et al., (2021), the use of gamification elements in the educational process is intended to become a good monitoring tool and enhance students' learning motivation. The use of game elements in non-game situations is called gamification (Xu & Hamari, 2022). Elements of gamification are widely used in all spheres of human activity. Marketers widely use gamification, for example, "collect five stickers in a coffee shop to get the sixth coffee for free".

Modern children and teenagers are used to computer games, which have their own reward system, lack of negative attitude towards defeats, leader boards, communication through social networks, etc. (Lo & Hew, 2020). The attitude towards mistakes in games is somewhat different than in educational institutions. The educational institutions discourage mistakes, while they very rarely praise a correctly completed assignment. This is why pupils or students concentrate not on knowledge, but on obtaining grades. In computer games, a mistake is just one of the tools for achieving success. Gamification in education aims to use these elements to stimulate the desire to learn. It is very different from traditional forms of evaluation of learning outcomes. The academic literature provides data proving that the use of gamification eliminates the fear of failure and getting a bad grade (Shkuropat, 2018).

The introduction of gamification in education is related to the creation of entertainment elements and their transfer to building knowledge and skills that are components of professional training. Dalmina et al. (2019) and Matthew et al., (2022) note that gamification design elements are used to enhance motivation. They came to us from the world of games and are familiar to us in everyday life. The term "gamification" is often used to apply game elements to non-game situations to create a motivating environment and a fun learning experience (Leclercq et al., 2020). Gamification in education provides for the application of game mechanics and game elements in education in order to intensify learning and develop critical thinking, manage student behaviour and guide it in a certain direction (Toorn et al., 2022).

The term "serious games" was introduced by Abt back in 1970 to denote games that enable focusing on learning rather than entertainment.

These games should appeal to students' everyday experiences (Toorn et al., 2022). According to Cruaud (2018), educational games are aimed at stimulating interest in the academic subject. Educational content in these games is presented in different ways: it can be implicit in serious games, while it is necessarily presented in educational games (Kulhanek et al., 2021). According to Schöbel et al., (2020), gamification of learning differs, as it uses elements of the game to advance towards the goal of acquiring new knowledge. For example, a student receives a badge for a correctly completed task. Although earning a badge is an element of the game, it is not tied to other elements of the game, such as levelling up. Piaget wrote in 1962 that game is a necessary prerequisite for different stages of a child's cognitive development. The child seems to go beyond the reality to an abstract level, manipulating such concepts as "acting as if". The game promotes the development of abstract thinking (Dehghanzadeh et al., 2021).

According to Suh et al., (2018), gamification is the best method to enhance learning motivation and encourage learning new material. Buckley and Doyle (2016) provide grounded evidence of greater effectiveness of a gamified educational environment compared to a nongamified one. The author assumes that this is connected with greater interest of students in learning, satisfaction with learning. The forms of control offered by gamification are interesting for students. These are, for example, points, badges, rankings or leader boards, virtual gifts, bonuses, etc. (Bateman, 2018). This promotes self-expression, satisfaction, and competition among students during their studies (Jati et al., 2020).

According to Dehghanzadeh et al., (2021), gamification elements such as points, leader boards, rewards, feedback, challenges are most often used in the educational process. Avatar, warning signals, virtual credits, medals, etc. are used less frequently. The elements of gamification can be divided into individual and social. Individual elements are points, virtual goods, time limit, etc. Social include interaction with other players, leader boards, rating tables, etc. (Ruggiu et al., 2022).

A study of the impact of gamification on the results of learning the basics of the taxation system, conducted by Buckley and Doyle (2016), showed a significant improvement in learning outcomes. Besides, they demonstrated that gamification of the learning process enhanced intrinsic motivation for the subject and self-



esteem motivation. In their opinion, such elements of gamification as leader boards and ratings stimulated interest in learning by stimulating gaming (Shkuropat et al., 2021).

Most researchers note that students attribute the following adjectives to the elements of gamification as "fun", "joyful", "pleasant", "interactive", "attractive", "interesting", etc. Research also shows that the use of gamification elements evoked interest, contributed to students' satisfaction and motivation. Rivera and Garden (2021) relate it to the psychological inclusion of students in the learning process, as well as having control over actions and the learning process.

Like any method, gamification in the educational process has its positive and negative features. The positive features of gamification include a web interface and asynchronous interaction of participants in the educational process. The negative ones include, for example, disconnection of the Internet and power outages during martial law.

Most researchers used surveys, focus group discussions, and student interviews to study the impact of gamification on learning. This suggests that most studies of the impact of gamification on learning are based on students' perception of the learning process. However, students' perception of learning and actual learning may not match. This necessitates a study of the impact of gamification on the effectiveness of learning, its outcomes and motivation.

# Methods

# Research design

We conducted an experimental study that included studying learning outcomes (academic performance of students) and students' intrinsic and extrinsic motivation, as well as amotivation to measure the impact of gamification on learning during martial law. The research covered the second semester (February 2022 -June 2022) of the 2021-2022 academic year under martial law in Ukraine. Mathematical Methods in Biology and Medicine was selected as an academic subject for the research. The students studied this subject during the second semester, once a week. This academic subject is usually difficult for students and has a low success rate.

The experimental group studied Mathematical Methods in Biology and Medicine with the involvement of gamification elements. Students were engaged in synchronous and asynchronous distance learning. Lectures were held for those students who had the opportunity to join online classes synchronously. Lecture materials were provided asynchronously for the rest of students. They could work with the leacture materials when they considered convenient. The Moodle platform was used for seminars which integrated gamification elements: digital points, badges for certain achievements, leader boards, levels with a progress indicator. All students could access the lecture material at any time. They planned their activities independently. Students could access all the lecture materials and then complete all the assignments. Another option was doing it gradually, topic by topic.

The control group studied Mathematical Methods in Biology and Medicine. The students were also engaged in distance learning synchronously and asynchronously. They studied according to the traditional lectureseminar model. The difference was that no gamification elements were used for them on the Moodle platform, and they learned the test results from the teacher, who informed them of the results in alphabetical order.

None of the students had experience with gamified learning. Data were collected from two sources in order to assess the effect from using gamification. The first source is academic performance of students for Mathematical Methods in Biology and Medicine. Another data source was the determination of intrinsic and extrinsic learning motivation, amotivation before intervention and and after the intervention.

# Methods

The analysis of academic performance of students for Mathematical Methods in Biology and Medicine, the study of academic motivation, amotivation and feedback in the form of questionnaires were used to identify the impact of gamification on learning during martial law. The students' academic performance for Mathematical Methods in Biology and Medicine were used to study the impact of the use of gamification elements on the academic performance of students for the subject. The academic performance of student were assessed in the following way. After completing the course, the students of the experimental and control groups had to pass a semester exam in the form of testing. The number of points for the test exam was summed up automatically, which



eliminated the subjectivity of assessing the impact of gamification on learning outcomes.

A student questionnaire (AMS-C) for determining intrinsic and external motivation and amotivation was used to determine students' academic motivation. This questionnaire proved itself reliable and has been used in about 1,000 studies of students' learning motivation. The questionnaire consists of 28 items divided into 7 subscales: three scales for intrinsic motivation, three scales for external motivation, and. one amotivation scale.

The learning motivation scale is related to the willingness to learn something new, interesting, and the satisfaction with learning something new. The achievement motivation scale reflects the desire to achieve success, to get satisfaction from problems. solving complex The development motivation scale reflects the desire to develop one's abilities as a result of educational activities, acquiring knowledge and competences. The self-esteem motivation scale is related to the desire to learn for the sake of selfrespect and recognition, increased self-esteem, and a sense of self-importance. The motivation scale measures the willingness to learn, which is associated with a sense of shame and a sense of duty to others and oneself in case of poor learning. The external motivation scale measures the compulsion to study because of social pressure on the student. They learn because society makes certain demands on them, while their own autonomy turns out to be frustrated. This is learning for getting a good job in the future. The amotivation scale measures lack of interest in learning and understanding of the importance of learning. The survey was conducted on the same Moodle platform as learning. Surveys were conducted before and after learning.

Upon the completion of the experimental study, we additionally conducted a survey of students learning with the use of gamification in order for them to share their impressions of the learning process to get their feedback. The questionnaire included an open-ended questions: "Did you like the scoring system?", "Did you like the leader board?", "What are your general impressions of the use of gamification in education?" etc.

The experimental and control group were used for validating the results of studying the points obtained for the test exam and the points of the motivation scale. We calculated the average statistical values of the levels of motivation and amotivation within the group. The relationship between variables was found through the Student's t-test. The indicators were compared within one group before and after the study. Group mean values between the studied groups were also compared. Two pairs of dependent samples and two independent samples were formed in connection with the set goal. There were two dependent samples. The first pair is an experimental group of students before and after the introduction of gamification elements. The second pair of dependent samples is a control group of students before and after the studies. Independent samples — comparison of the indicators of the experimental and control groups after the experiment. The Student's t-test for dependent samples was used to identify statistical significance when comparing indicators between dependent samples. The Student's t-test for independent samples was used to find out statistical significance when comparing indicators between independent samples.

The  $\chi^2$  criterion was used to study academic performance and to measure the statistical reliability of the distribution of knowledge levels in the studied groups of students. It enables determining the level of reliability of variables measured on a nominal scale (obtained scores) without taking into account the data distribution law.

#### Instruments

To find out the impact of gamification elements on students' academic performance, the final score obtained by students for the test exam in Mathematical Methods in Biology and Medicine. A student questionnaire (AMS-C) to determine students' motivation and amotivation was used in order to determine intrinsic and extrinsic motivation. The survey was conducted on the same Moodle platform as learning. Surveys were conducted before and after learning.

# Sample

The study involved 60 second-year students majoring in 222: Medicine. They made up 2 academic groups. One group was experimental (n = 30), the other was control (n=30). The academic performance of students were evaluated based on the final grade they obtained for the exam. Students received a survey on academic motivation and amotivation on the Moodle platform asynchronously. The results were processed and summarized after the survey.



A study of the impact of gamification on the educational process during martial law was

conducted. Table 1 presents the academic

performance of students of the experimental and

control groups for Mathematical Methods in



#### Ethical criteria

All students were informed about the study and gave their consent before starting the analysis of learning outcomes and academic motivation. Students' personal data were not disclosed, only summarized data were subject to discussion.

# Table 1. Learning outcomes of the surveyed students in the academic subject Mathematical Methods in Biology and Medicine

Results

Biology and Medicine.

ECTS level	Experimental group	Control group	
FX (35-59 points)	0	0	
E (60-63 points)	6.67%*	16.67%	
D (64-73 points)	10% *	30%	
C (74-81 points)	36.67%	26.67%	
B (82-89 points)	30% *	16.67%	
A (90-100 points)	16.67%	10%	

Note: \*-statistically significant difference between experimental and control indicators at P≤0.05

There were no students among the surveyed ones who failed the test exam (FX). That is, all students scored the required minimum of 60 points. The number of students in the experimental group who received Level E was 6.67% of the surveyed students, while the number of such students in the control group was 16.67%. That is, the number of students who received Level E in the experimental group was significantly less than the number in the control group ( $P \le 0.05$ ). The number of students in the experimental group with Level D for the test exam was also less than the number of students with the same level in the control group. It amounted to 10% and 30%, respectively  $(P \le 0.05)$ .

Comparison of the number of students of the experimental group who received Level C revealed that it was higher than the similar number of students of the control group. There were 36.67% of the surveyed students in the experimental group, and 26.67% in the control group. However, this difference did not reach statistical significance.

The number of students of the experimental group who received Level B significantly exceeded the number of students of the control group who received Level B on the test exam (P≤0.05). In the experimental group, 30% received Level B for the test exam, in the control group — 16.67%.

The number of students of the experimental group who received Level A for the test exam was 16.67%. The number of students with Level

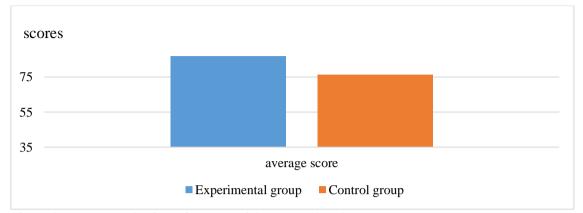
A in the control group was 10% of the surveyed students. Although the number of students in the experimental group who received Level A exceeded the number of students of the control group with the same level, this difference did not reach statistical significance.

The average score of the surveyed students (Figure 1) was calculated and showed that the surveyed students received an average of 86.87 points for the test exam. Students of the control group received 76.2 points for the test exam. We found out that students who studied with the use of gamification elements demonstrated higher average scores compared to the indicators of students in the control group ( $P \le 0.05$ ).

So, among the students engaged in distance learning with the application of gamification, there was a greater number of students who received Level B and a smaller number of students who received Levels D and E compared to students engaged in distance learning without the use of gamification elements.

The AMS-C questionnaire was used to determine motivation to study. Four data sets were obtained as a result of the research (Tables 2, 3). The results of the survey of the experimental and control groups before the start of the experimental study (input testing; two data sets) and the results of the survey of the experimental and control groups after the end of studies and passing the test exam (exit testing; two data sets). The questionnaire of the academic motivation scale enables evaluating the components of intrinsic and extrinsic motivation separately to

clarify the overall picture of what a student is guided by during learning, and the impact of the application of gamification of learning on individual components of academic motivation.



*Figure 1.* Average academic performance of the surveyed students
Note: \*- statistically significant difference between experimental and control indicators at P≤0.05

**Table 2.** *An input study of the motivation of students who studied with and without the use of gamification* 

			t-test	
Academic motivation scales	Experimental group, scores	Control group	when comparing experimental and control groups	р
Learning motivation	17.98	18.23	0.21	insignificant
Achievement motivation	19.01	18.96	0.1	insignificant
Self-development motivation	18.47	18.02	0.15	insignificant
Self-esteem motivation	16.47	17.11	0.43	insignificant
Introjected motivation	15.94	15.89	0.1	insignificant
Extrinsic motivation	18.23	18.41	0.17	insignificant
Amotivation	6.94	6.78	0.1	insignificant

Note: \*-statistically significant difference between experimental and control indicators at P≤0.05

**Table 3.** *Output study of motivation of students who studied with and without gamification* 

Academic motivation scales	Experimental group, scores	Control group	t-test when comparing experimental and control groups	p
Learning motivation	20.67*	18.2	2.52	< 0.05
Achievement motivation	22.41*	19.17	2.87	< 0.05
Self-development motivation	21.84*	19.11	2.49	< 0.05
Self-esteem motivation	17.48	17.21	0.2	insignificant
Introjected motivation	16.28	15.97	0.37	insignificant
Extrinsic motivation Amotivation	19.58 4.42*	18.67 7.83	1.41 2.37	insignificant < 0.05

Note: \*- statistically significant difference between experimental and control indicators at P≤0.05





Intrinsic motivation includes learning motivation, achievement motivation, and selfdevelopment motivation. There was almost no difference in the number of points scored by students of experimental and control groups on the learning motivation scale before the beginning of the experimental study. After completing the study of the academic subject Mathematical Methods in Biology and Medicine, students who studied with the use of gamification elements demonstrated an increase in learning motivation compared to the indicators before the start of the experimental study (P<0.05). Indicators of learning motivation of students of the control group almost did not change during the study. When comparing the scores on the learning motivation scale after the experimental study of the students of the experimental and control groups, the indicators of the students of the experimental group turned out to be significantly higher than the similar indicators of the control group.

The number of points on the achievement motivation scale scored by the students of the experimental and control groups before the study did not have statistical reliability. The survey, which was conducted after the completion of the experimental study, demonstrated a statistically significant increase in the number of scores on the achievement motivation scale of the students of the experimental group. The achievement motivation of the students of the control group after the completion of the experimental study almost did not change. When comparing the indicators of achievement motivation of the two surveyed groups after completing their studies, we found a statistically significant increase in students who studied with the use of gamification elements ( $P \le 0.05$ ).

Studying the indicators of self-development motivation, we found out that both surveyed groups before the study of the academic subject Mathematical Methods in Biology and Medicine did not have a statistically significant difference in the scores of the relevant scale. After completing the studies, students who studied with the use of gamification demonstrated statistically significant increase in motivation for self-development, while the students of the control group only tended to increase selfdevelopment motivation. When comparing the indicators of self-development motivation between students of both groups after the experimental study, we found a statistically significant increase ( $P \le 0.05$ ) in the scores of the self-development motivation scale in the students

of the experimental group compared to similar indicators of students of the control group.

Extrinsic motivation includes self-esteem motivation, introjected and external motivation. The number of points scored by the experimental group students on the self-esteem motivation scale did not have a statistically significant difference with the number of points scored by the control group on this scale. The output survey showed that the self-esteem motivation of students who studied with the use of gamification elements tended to increase, but did not reach statistical reliability. Indicators of self-esteem motivation of students in the control group did not change after the study was completed. The comparison of the scores of the self-esteem motivation scale of the students of the experimental and control groups after conducting the experimental study did not found a statistically significant difference. That is, the use of gamification had practically no effect on the motivation of self-esteem. The study of introjected motivation established that the experimental and control groups of students did not have significant differences in the indicators of this scale before the study. The survey conducted at the end of the study showed that the use of gamification in education in the wartime did not affect introjected motivation. The experimental group students showed almost the same result of the scale of introjected motivation as before the study. The indicators of the control group on this scale also did not undergo significant changes during the studies. No differences between the surveyed groups were found after the study.

The students of the experimental group did not have a statistically significant difference with the students of the control group in terms of external motivation before the experimental study. The use of gamification in the educational process among students of the experimental group led to an insignificant increase in external motivation. Students of the control group did not change the level of external motivation during the study period. Among themselves, the studied groups did not have a statistically significant difference in the number of points of the scale of external motivation, although the students of the experimental group tended to increase the indicators compared to similar indicators of the control group.

So, students' extrinsic academic motivation was almost unchanged under the influence of gamification of learning during martial law,

although self-esteem motivation and extrinsic motivation tended to increase.

The number of points for amotivation scale scored by the experimental group students before the study did not exceed the similar indicators of the control group students before the experimental study. The use of gamification in the educational process in the experimental group students significantly decreased the number of points on the motivation scale during the input test. The control group students showed, on the contrary, a tendency to increase motivation indicators after the study period. This difference between the indicators of the input and output tests did not reach statistical significance. The amotivation indicators of the two surveyed groups after the study period had a statistically significant difference (P≤0.05): the indicators of the experimental group were lower than those of the control group.

So, students' amotivation decreased under the influence of gamification of the educational process. The survey conducted with the aim of getting feedback showed that the majority of students (67.4% of the surveyed students) were quite satisfied with the inclusion of gamification in the educational process. They noted that the accumulation of points for the assignment, the progress scale stimulated the desire to complete the task, and the leader board helped to improve the process of learning the subject.

Among the positive reviews, it was often found that studies with the use of gamification can take place completely asynchronously, which is relevant during the wartime because of frequent air-raid warnings, lack of stable communication and lack of power supply.

Students who were dissatisfied with the learning process noted that they lacked clear correct algorithms of action, in their opinion, there were too many learning vectors that students could create for themselves. In particular, when studying the academic subject Mathematical Methods in Biology and Medicine, it was not strictly regulated whether the video lecture should be watched first, and then the test, or whether it can be done simultaneously. The student could first watch all the proposed video lectures, and then complete all the assignments. Some students did not like the leader board, they noted that they were dispirited by the fact that their results were compared with others.

#### Discussion

Learning during martial law is significantly different from learning under normal conditions. Students are often in a depressed emotional state, have increased anxiety, neuroses and even panic attacks. Learning in such conditions requires more effort from the student than in peacetime. In addition to the mental state, the students are affected by obstacles in the technical support of educational process: lack of stable electricity communication, supply, being constantly on the road trying to leave because of the war. In such conditions, the educational process should contribute to the relief of emotional tension, make students interested, and motivate them for further professional activity.

We established that the gamification of the educational process during martial law contributed to an increase in the number of students who had Level B, a decrease in the number of students who had Levels E and D. Gamification of the educational process had an impact on the students' academic motivation. Students' intrinsic motivation (motivation to learn, achieve, and self-develop) increased in students who studied with the use of gamification. Extrinsic motivation (self-esteem motivation, introjected and external motivation) almost did not change under the influence of gamification. The students' amotivation decreased under the influence of gamification.

Buckley and Doyle (2016) found an increased motivation, namely intrinsic motivation and selfesteem motivation, which is a type of external self-esteem. In our study, only students' intrinsic motivation increased under the influence of gamification, while the extrinsic one almost did not change. All types of internal motivation are related to the desire to learn something new, satisfaction from solving complex problems, and desire to build one's knowledge (Sotos-Martínez et al., 2022). The use of gamification stimulated such motives. This is confirmed by the study of Fernandez-Rio et al., (2020), who found that gamification caused positive emotions, the desire to learn, related to the educational process. The self-esteem motivation is related to the desire for recognition and a sense of self-importance (Shvets et al., 2020). Although studies have shown the positive influence of gamification on motivation in general and self-esteem motivation in particular (Yang et al., 2021). It is obvious that the said motives are not leading of students in the context of martial law. Besides, some students noted that they did not like the leader boards and



comparison of their results to the results of other students. This is probably caused by the increased anxiety during martial law. It increases even more because of the failure to comply with the requirements for oneself and own educational activities.

The studies on the impact of gamification often note that it has a positive effect on learning, increases student interest, thereby improving performance (Hassan et al., 2021). Our study is fully consistent with these results. In our study, students who learned with the use of gamification noted that they liked the system of accumulating points for completed assignments and the progress scale. In our opinion, this gave students an opportunity to plan their own activities and understand to the accents to increase the number of points.

According to Domínguez et al., (2013), the educational process is associated with increased students' anxiety and, as a result, decreased interest, indifference to the educational process. The state of war intensifies these phenomena in Ukrainian students, therefore the use of methods that can improve the emotional state (Chapman & Rich, 2018), enhance the interest in learning, encourage the study of new material (Cruaud, 2018) is a necessity. As our study showed, students who studied with the use of gamification really showed decreased motivation on the academic motivation scale, while students who were engaged in distance learning using traditional lectures and seminars showed increased learning motivation.

Jati et al., (2020) noted that the improved performance during learning with the use of gamification is associated with a decreased fear of receiving an unsatisfactory grade, since the learning process is evaluated in points, which excludes such a concept as "unsatisfactory grade". Our study confirms this opinion, the majority of students in our study positively noted the absence of unsatisfactory grades, and the points and progress scales. In our opinion, the absence of unsatisfactory grades reduced students' anxiety, and the progress scale encouraged them to complete the assignment.

Most researchers of the application of gamification in the educational process note an exclusively positive impact on learning outcomes (for example, Dehghanzadeh et al., (2021)). Our study showed that it is necessary to clearly plan process when educational applying gamification methods The reason is that a part of the students noted that it was difficult for them to

choose a learning vector for themselves in the absence of a correct algorithm of educational activities. When studying the academic subject Mathematical Methods in Biology and Medicine, it was not strictly regulated whether the video lecture should be watched first and then complete the test, or it could be done simultaneously, the student could first watch all the offered video lectures and then complete all the assignment. This caused difficulties for some students. In the context of the ongoing war, these students obviously experienced difficulties in selforganization, therefore, planning their own learning vector caused them difficulties.

So, we showed that the use of gamification of the educational process during martial law had a positive effect on learning outcomes, which is consistent with other studies on gamification of the educational process. However, students' learning motivation under the influence of gamification increased only with intrinsic motivation and the use of gamification had no effect on extrinsic motivation.

#### **Conclusions**

The educational process during martial law has its specifics: depressed emotional state of the participants in the educational process, technical difficulties for timely completion of assignments and participation in traditional seminar classes. This creates the need to introduce methods that will stimulate the educational activity of students, in particular, learning motivation.

Based on the study of learning outcomes and the academic motivation scale, we established that the use of gamification in the educational process had a significant impact on intrinsic motivation, in particular, learning, achievement, and selfdevelopment motivation. Learning amotivation of students who studied with the use of gamification decreased, that is, their interest in educational activities increased. Gamification contributed to the increased number of high scores among students for the test exam. We found students who had difficulties in learning with the use of gamification. Numerous studies found that gamification enhances students' motivation and interest in learning. However, these studies do not take into account students who have problems with self-organization and time planning, who need a clear, uniform algorithm for studying and time regulations.

The obtained results of the impact of gamification on learning during martial law are intended to strengthen the teacher's arsenal with methods that enhance intrinsic learning motivation and interest in educational material. We found out that not all students could act in the absence of a clear correct action algorithm. The obtained results will help to improve studies of such students by clearly planning the educational process with the involvement of gamification.

### Research limitations

This study is aimed at contributing knowledge to the growing volume of information on the creation of educational environments, increasing the effectiveness of learning and motivation for it. However, it has a number of limitations. These include a short research period, a small sample, and the lack of division into individual elements of gamification and the study of their impact on learning outcomes and motivation.

# Prospects for further research

We plan to further expand the sample size, study the impact of individual elements of gamification on learning outcomes and academic motivation. Different strategies for the application of gamification for students with different selforganization abilities and time management require further studies.

# **Bibliographic references**

- Akresh, R. (2016). Climate change, conflict, and children. The Future of Children, 26(1), 51-71. Retrieved from https://files.eric.ed.gov/fulltext/EJ1101428.p df
- Bateman, C. (2018). Playing work, or gamification as stultification. Information, Communication & Society, 21(9), 1193-1203. https://doi.org/10.1080/1369118X.2018.145 0435
- Buckley, P., & Doyle, E. (2016). Gamification and student motivation. Interactive Learning Environments, 24(6), 1162-1175. https://doi.org/10.1080/10494820.2014.9642
- Chapman, J. R., & Rich, P. J. (2018). Does educational gamification improve students' motivation? If so, which game elements work best?. Journal of Education for Business, 93(7), 315-322. https://doi.org/10.1080/08832323.2018.1490 687
- Cruaud, C. (2018). The playful frame: Gamification in a French-as-a-foreignlanguage class. Innovation in Language Learning and Teaching, 12(4), 330-343.

- https://doi.org/10.1080/17501229.2016.1213 268
- Dalmina, L., Barbosa, J.L. V., & Vianna, H. D. (2019). A systematic mapping study of gamification models oriented to motivational characteristics. Behaviour & Information Technology, 38(11), 1167-1184. http://dx.doi.org/10.1080/0144929X.2019.15 76768
- Dehghanzadeh, H., Fardanesh, H., Hatami, J., Talaee, E., & Noroozi, O. (2021). Using gamification to support learning English as a second language: A systematic review. Computer Assisted Language Learning, 34(7), 934-957. http://dx.doi.org/10.1080/09588221.2019.16 48298
- Domínguez, A., Saenz-de-Navarrete, J., de-Marcos, L., Fernández-Sanz, L., Pagés, C., & Martínez-Herráiz, J.-J. (2013). Gamifying learning experiences: Practical implications and outcomes. Computers & Education, 63, 380–392. https://doi.org/10.1016/j.compedu.2012.12.0 20
- Fernandez-Rio, J., de las Heras, E., González, T., Trillo, V., & Palomares, J. (2020). Gamification and physical education. Viability and preliminary views from students and teachers. Physical Education and Sport Pedagogy, 25(5), 509-524, https://doi.org/10.1080/17408989.2020.1743 253
- Hassan, M. A., Habiba, U., Majeed, F., & Shoaib, M. (2021). Adaptive gamification in e-learning based on students' learning styles. Interactive Learning Environments, 29(4), 545-565, https://doi.org/10.1080/10404820.2010.1588
  - https://doi.org/10.1080/10494820.2019.1588 745
- Jati, S. S. P., Subekti, A., & Sulistyo, W. D. (2020). Development of 'Video Bank' based on prehistoric community life at the sangiran site as an independent Learning media. International Journal of Emerging Technologies in Learning, 15(7), 86–97. https://doi.org/10.3991/ijet.v15i07.13257
- Kulhanek, A., Butler, B., & Bodnar, C. A (2021).

  Motivating first-year engineering students through gamified homework. Educational Action Research, 29(5), 681-706. https://doi.org/10.1080/09650792.2019.1635 511
- Lakhani, S., & Wiedlitzka, S. (2022). "Press F to Pay Respects": An empirical exploration of the mechanics of gamification in relation to the christchurch attack. Terrorism and Political Violence, Latest Articles.





- https://doi.org/10.1080/09546553.2022.2064 746
- Leclercq, T., Poncin, I., Hammedi, W., Kullak, A., & Hollebeek, L. D. (2020). When gamification backfires: The impact of perceived justice on online community contributions. Journal of Marketing Management, 36(5-6), 550-577. http://dx.doi.org/10.1080/0267257X.2020.17 36604
- Lo, C. K., & Hew, K. F. (2020). A comparison of flipped learning with gamification, traditional learning, and online independent study: The effects on students' mathematics achievement and cognitive engagement. Interactive Learning Environments, 28(4), 464-481.
  - http://dx.doi.org/10.1080/10494820.2018.15 41910
- Luke, K. (2020). The pause/play button actornetwork: Lecture capture recordings and (re)configuring multi-spatial learning practices. Interactive Learning Environments, 30(6), 1011-1027. https://doi.org/10.1080/10494820.2019.1706 052
- Matthew, L. J., Ryan, T. W., Durcikova, A., & Karumbaiah, S. (2022). Improving phishing reporting using security gamification. Journal of Management Information Systems, 39(3), 793-823.
  - https://doi.org/10.1080/07421222.2022.2096 551
- Rivera, E. S., & Garden, C. L. P. (2021). Gamification for student engagement: A framework. Journal of Further and Higher Education, 45(7), 999-1012. http://dx.doi.org/10.1080/0309877X.2021.18 75201
- Ruggiu D., Blok, V., Coenen, C., Kalloniatis, C., Kitsiou, A., Mavroeidi, A.-G., Milani, S., & Sitzia, A. (2022). Responsible innovation at work: Gamification, public engagement, and privacy by design. Journal of Responsible Innovation, 9(3), 315-343. http://dx.doi.org/10.1080/23299460.2022.20 76985
- Schöbel, S. M., Janson, A., & Söllner, M. (2020). Capturing the complexity of gamification elements: A holistic approach for analysing existing and deriving novel gamification designs. European Journal of Information Systems, 29(6), 641-668, https://doi.org/10.1080/0960085X.2020.179 6531

- Shkuropat, A., Golovchenko, I., & Rudyshyn, S. (2021). The structure of educational motivation of high school students. Pedagogical Sciences: Theory and Practice, 3, 19-26. Retrieved from http://ekhsuir.kspu.edu/123456789/16009
- Shkuropat, A.V. (2018). Coherent relations in EEGs of adolescents with partial hearing loss under conditions of an orthostatic test. Neurophysiology, 50(5), 365–371. Retrieved from
  - https://link.springer.com/article/10.1007/s11 062-019-09763-2
- Shvets, V., Shkuropat, A., Prosiannikova, Y., & Golovchenko, I. (2020). Effect of interleukin-2 on the humoral link of immunity during physical activity. Journal of Physical Education and Sport, 20(6), 3153–3159. http://dx.doi.org/10.7752/jpes.2020.s6427
- Sotos-Martínez, V. J., Ferriz-Valero, A., García-Martínez, S., & Tortosa-Martínez, J. (2022). The effects of gamification on the motivation and basic psychological needs of secondary school physical education students. Physical Education and Sport Pedagogy, Latest Articles. https://doi.org/10.1080/17408989.2022.2039 611
- Suh, A., Wagner, C., & Liu, L. (2018). Enhancing user engagement through gamification. Journal of Computer Information Systems, 58(3), 204-213. http://dx.doi.org/10.1080/08874417.2016.12 29143
- Toorn, C. V., Kirshner, S. N., & Gabb, J. (2022). Gamification of query-driven knowledge sharing systems. Behaviour & Information Technology, 41(5), 959-980. http://dx.doi.org/10.1080/0144929X.2020.18 49401
- Xu, H., & Hamari, J. (2022). How to improve creativity: A study of gamification, money, and punishment. Behaviour & Information Technology, Latest Articles. https://doi.org/10.1080/0144929X.2022.213 3634
- Yang, C., Ye, H. J., & Feng, Y. (2021) Using gamification elements for competitive crowdsourcing: Exploring the underlying mechanism. Behaviour & Information Technology, 40(9), 837-854. http://dx.doi.org/10.1080/0144929X.2020.17 33088

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# Criminological dimension of counteracting corruption crime in Ukraine

# Кримінологічний вимір протидії корупційній злочинності в Україні

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Written by:
Odnolko Inna<sup>104</sup>
https://orcid.org/0000-0002-4896-4728
Niebytov Andrii<sup>105</sup>
https://orcid.org/0000-0002-8493-3064
Pohoretskyi Mykola<sup>106</sup>
https://orcid.org/0000-0003-0936-0929
Denysenko Grygorii<sup>107</sup>
https://orcid.org/0000-0003-4132-8195
Serbyna Nataliia<sup>108</sup>
https://orcid.org/0000-0002-1199-5491

#### **Abstract**

The purpose of the article is to analyze the content and essence of combating corruption crime in Ukraine through the lens of criminology. Research results. It is proven that corruption crime both in Ukraine and in the world in general is an extremely destructive factor. This phenomenon tries to penetrate all spheres of social life and make democratic and legal procedures, which are a guarantee of a high level and quality of life, impossible. Practical meaning. Attention is drawn to the fact that the existing indicators of corruption crime in Ukraine, the improvement of its qualitative characteristics, as well as the possibility of rapid growth under martial law require an appropriate response from scientists, legal researchers, and law enforcement officers. legislator Value/originality. The perspective of further research is the need to analyze the mechanisms of combating corruption crime in the top democracies of the world, which will allow to generalize such practice and form a wide range of proposals and recommendations to optimize the functioning of the relevant mechanism in our country.

#### Анотація

Метою статті  $\epsilon$  аналіз змісту і сутності протидії корупційній злочинності в Україні крізь науки кримінології. Результати дослідження. Доводиться, що корупційна злочинність як в Україні так і світі загалом є надзвичайно деструктивним фактором. Це явище намагається пронизати всі сфери суспільного буття та унеможливити функціонування демократичних і правових процедур, котрі є гарантією високого рівня та якості життя. Практичне значення. Звертається увага на те, що наявні показники злочинності в Україні, підвищення її якісних характеристик, а також уможливлення стрімкого зростання під час дії воєнного стану потребують відповідної науковців, реакції з боку дослідниківправників, законодавця та правоохоронців. Цінність/оригінальність. Перспектива подальшого дослідження попягає механізмів необхідності аналізу протидії корупційній злочинності в топ-демократіях світу, що дозволить узагальнити таку практику та сформувати широке коло пропозицій і рекомендацій оптимізації щодо

<sup>&</sup>lt;sup>108</sup> Candidate of Legal Sciences, Chief Specialist of the Department of Ensuring the Activities of the Training Center of the Training Center for the Prosecutors of Ukraine, Ukraine.



<sup>104</sup> Candidate of Pedagogical Sciences, Associate Professor of Chernobyl Heroes Fire Safety Institute of the National University of Civil Defense of Ukraine, Ukraine

<sup>105</sup> Doctor of Law, Associate Professor, Head of the Main Department of the National Police in the Kiev region, Ukraine.

<sup>&</sup>lt;sup>106</sup> Doctor of Science in Law, Professor, Vice-rector for scientific and pedagogical work of Taras Shevchenko National University of Kyiv, Kyiv, Ukraine.

<sup>107</sup> PhD in Law, Senior Scientific Associate of the National Academy of the Security Service of Ukraine, Ukraine.



Key words: corruption, criminology, crime, counteraction, prevention, Ukraine.

функціонування відповідного механізму в нашій державі.

Ключові слова: корупція, кримінологія, правопорушення, протидія, запобігання, Україна.

#### Introduction

Corruption in Ukraine and the world is one of the most dangerous social factors. It negatively affects the formation of modern democracies, complicates the process of guaranteeing the rights and freedoms of a person and a citizen, and does not allow any state of law to form such a level of State policy regarding the provision of all benefits to its own citizens, which will allow them not only to possess, but also to realize all rights and freedoms.

The fight against corruption in Ukraine is one of the main tasks of law enforcement agencies (Shcherbakovskyi et al., 2020, p. 117). At the same time, it should be noted that under modern conditions, a significant share of legal relations and the possible successful provision of human and civil rights and liberties in a certain sector of socio-legal relations can be realized only through criminological measures and Criminology as a science studying crime trends in general and corruption in particular, allows forming an essential idea about such a social phenomenon and ensuring the establishment of to prevent its further effective policy development and entrenchment in the legal tradition of the respective society.

It is these interconnected factors, given the active hostilities on the territory of Ukraine and considering European integration intentions of our country, that necessitate effective and indepth scientific study of relevant problematic issues with the need for further elaboration of proposals and recommendations to address them.

Thus, the purpose of our study is to analyze the fight against corruption in Ukraine through the prism of criminology.

# **Literature Review**

It should be noted that the relevant topic has been repeatedly explored by many authoritative researchers. In science even formed a number of scientific schools, the profile of which is the analysis of problematic issues related to the fight against corruption and its manifestations. This is what creates the circumstances under which the

respective positions and views must be taken into account in this work.

The first scientist, whose was devoted to the problem of political corruption, is Ford (1904), who, comparing the situation in the USA and Great Britain raised the issue of political corruption, which is most evident when new elites face practices unacceptable to them.

Later, Brooks considered the issue of bribery of officials in the US government in the scientific publications "The Nature of Political Corruption" (1909), and then in monograph "Corruption in American politics and life" (1910), which were favorably received by the scientific community.

The issue of combating corruption in further scientific developments has been considered through the lens of political science, state and municipal law for a long time, until Nye in his publication "Corruption and development – analysis of costs and benefits" did not justify their economic aspect (1967). In turn, the publication of the work "Crime and punishment: an economic approach" by Gary Stanley Becker (1968) marked the formation of a new direction of neo-institutionalizalism of the crime economy, as well as significant interest of the scientific community in the researched issues.

Heidenheimer (1988) states that corruption is deviant behavior combined with private motivation and means that private (individual, group) goals are achieved at public expense.

Clearly, when formulating the definition of corruption, it is necessary to take into account that criminology is primarily a complex science of crime, its content and forms of manifestation, determinants, state, structure and dynamics, the identity of the perpetrator and victim, as well as means of combating crime. As Shakun (2019, p. 352) notes, "criminology investigates the issue of legal, socio-economic, and managerial provision of crime prevention, develops criteria indicators of the effectiveness precautinory activities".

Based on this statement, Melnyk (2004, p. 137) believes that criminological study of corruption should focus on corruption itself, as "a relatively massive socio-legal phenomenon including the entire set of corruption crimes and the persons who committed them".

Besides, corruption crime cannot be considered separately from corruption as a phenomenon and separately from other legal branches of science that study it. Therefore, when investigating corruption crime, it is impossible not to dwell on corruption in all its manifestations, which are not part of the subject matter of criminology, but complement and enrich criminological investigations in this direction (Busol, 2014, p. 31).

Corruption crime prevention, according to Shevchenko (2011, p. 126), is related as a whole and a part, and therefore the latter is understood as a separate direction of anti-corruption to eliminate and neutralize the determinants of corruption crime with the help of a complex of special means of influencing social relations with the aim of bringing them into line with the current legislation.

The researchers have repeatedly pointed out that, taking into account the rapid progress of society and new spheres of relations, which are the main object for corruption, the legislative framework establishing the basis for prevention and countering this phenomenon should be analyzed and improved every year, as well as new methods assisting in revealing the facts of corruption in various spheres of society should be created (Romanov, 2020, p. 217). This, in particular, necessitates additional elaboration of the main legal provisions establishing the institution of combating corruption crime in Ukraine.

Besides, the researchers state that the content of corruption determines its crisis nature, which means the existence of crisis conditions for its occurrence: 1) crisis of socio-economic development of the state (the GDP level is insufficient for economic development, and therefore, the relatively low level of wages and social guarantees in the system of public service) and 2) crisis manifestations in the management of public affairs (situational nature of organizational transformations, failure to take into account the professional and personal abilities of an employee, deficiencies in personnel work, etc.) (Masliy 2013, p. 360).

The complexity of corruption research is also caused by the fact that it is a phenomenon that

does not have an unambiguous solution. It does not depend on the form of government or the democratic or undemocratic nature of the political regime. Therefore, in some cases, scientists' attempts to avoid over-criminalization of research on corruption in order to increase the effectiveness of their scientific work seem justified. However, on the other hand, there are cases of transformation of research into free philosophizing, usually based on subjective assessments and emotional impressions of surrounding events. As it is known, criminology is a complex science by its nature, it covers legal, sociological, and psychological theoretical positions. But the sociological and empirical material is described and analyzed from the standpoint of law. By transferring sociological and psychological knowledge to the field of law, criminology expands its opportunities in the field of studying the crime system and the problems of its prevention.

# Methodology

Monographic method was applied in the examination of scientific works by foreign and domestic scholars, who studied the phenomenon of corruption in general ans through the prism of criminology in particular.

With the help of the phenomenological method, the phenomenon of corruption, the reasons for its growth, rooting and maintenance at a high level of prevalence and social danger were investigated.

System and structural method helped to identify key features of corruption crime in criminological aspect.

Statistical method was used in identifying the areas of social life in Ukraine, in which corruption is most widespread.

The method of abstraction and generalization made it possible to analyze corruption as a systemic phenomenon, its evolution and impact on society, as well as the connections and dependencies between corruptionogenic factors. These methods also helped to conclude that prevention is the strategic direction of the fight against corruption.

Analyzes method was applied in the determination of the main anti-corruption measures in Ukraine.

Application of modelling method enabled to draw the conclusions related to the research.





#### Results and Discussion

In the criminological aspect, corruption crimes are characterized by a number of key features:

Deliberate use of authority and related facilities in the public and private spheres of public administration, local self-government, individuals and legal entities;

with the special purpose of obtaining an undue benefit in form of money or other property, advantages, benefits, services, intangible assets, any other benefits, whether non-material or not; acceptance or acceptance of a promise/offer to obtain an unlawful benefit for oneself or other persons:

promise/offer or providing undue benefit to the person, authorized to perform the functions of the State or local self-government and who is a subject of corruption:

promise/offer or provision of an unlawful benefit at the request of the person authorized to perform the functions of the State or local selfgovernment to other natural or legal persons with a view to inducing that person to misuse the service provided to him or the opportunities related to them;

the subject, which is only persons authorized to perform the functions of the state or local selfgovernment, as well as persons who are equated with them (National Academy of Internal Affairs, (n.d)).

Accordingly, this characterization of corruption, through the prism of the opinions of researchers, as well as the norms of Ukrainian legislation, indicates not only its high social danger, but also the need for a polyvariate and large-scale such manifestations. response to development of state strategies and concepts aimed at meeting social needs in the specified

The problems of corruption crimes and fighting them are important in the field of combating crime in general, since this process involves a comprehensive study of this legal phenomenon not only from the perspective of criminal law, but also criminology. Anti-corruption is a complex concept including not only bodies authorized to fight corruption, but also the interaction of such agencies in achieving a common task, constant improvement of their qualifications and the existence of public control. Thus, the concept of criminological characteristics of corruption crime from the standpoint of an integrated approach includes quantitative and qualitative indicators of the state of crime, information on the identity of the offender and the circumstances relevant to organizing of preventive work (Mezentseva, 2014, p. 110). That is, considering this phenomenon as a destructive social factor in the criminological dimension, attention should be paid not only to its qualitative indicators, but also to the effectiveness of the work of the relevant bodies in the indicated direction; it is necessary to realize (contribute to) the potential of the State in this segment of political, legal and social administration.

Thus, according to the results of one of the sociological studies conducted by the Ilko Kucheriv «Democratic Initiatives» foundation (2017), corruption is most common in the such bodies of State power and certain areas: medicine; police; judiciary; State power as a whole; the political sphere in general – more than 80%; higher education; prosecutor's office; tax authorities; political parties; customs service; local self-government as a whole; economic sphere, enterprise activity – about 70%; secondary education; Armed Forces of Ukraine; professional unions – about 50%. The presented statistical indicators have a direct impact on the formation of the scientific foundations of understanding the criminological dimension of countering corruption crime, since it is the understanding of the subject of corruption and its sphere that allows us to provide an effective response to relevant manifestations, as well as to plan further measures to counter and prevent it.

In addition, it should be noted that criminological science, by summarizing the set of quantitative and qualitative indicators regarding a certain type of crime (in this case - corruption), provides the possibility of deepening and expanding the scientific understanding of individual features of the corresponding phenomenon, depending on the sphere of its existence, as well as the stage of detection (or actual appearance).

Accordingly, corruption activities require not only broad public condemnation from a social point of view, but also a proper response of state institutions in the method of determining a clear list of lawful and unlawful acts.

According to Harashchuk & Mukhataiev (2010, p. 128), although preventive measures are important because of objective and subjective circumstances, they do not always achieve their goal. Therefore, the problem of optimizing ways of detecting and investigating specific facts of crimes in the area of official activity and bringing to justice those responsible provided for by law remains particularly acute, that, through the lens science of criminology, clearly

demonstrates the need to standardize a number of effective legislative steps to counter and prevent corruption crimes in Ukraine, which is possible only by using criminological tools.

Busol (2014, p. 4) repeatedly drew attention to the fact that the strategic direction of the fight against corruption is its prevention. Integrated precautions are a way that can reduce the volume of corruption manifestations and their negative impact on society. The main anti-corruption measures in Ukraine are: 1) determination of the strategy of socio-economic development and implementation of administrative reform. Building the rule of law and civil society is the basis for corruption prevention. Cosmetic changes in public administration, even if they are externally attractive, cannot improve the situation in the fight against this negative phenomenon. Prevention this crime requires the study of the conditions, in which the anticorruption strategy is formed and implemented in Ukraine in the modern period, the evaluation of the State policy in this direction, as well as the identification of criminologically significant problems in the application of specific prevention mechanisms. The key to the development of strategic approaches to the corruption prevention is the establishment of a circle of subjects who should play a leading role in this process - specialized anti-corruption bodies, law enforcement agencies, and other institutions of civil society or individual citizens.

The given factors, through the prism of the science of criminology, make it possible to form a range of requirements that, under the conditions of their effective implementation and constructive, sometimes global and sometimes situational influences processes of corruption counteraction and prevention, will allow achieving high results.

So, for example, a number of official websites of the State authorities of Ukraine claim that the most corrupt spheres of activity are the following: public procurement; extrabudgetary accounts established for legitimate purposes (pension, travel funds, etc.), the income of which accumulates in the pockets of officials; tax relations (tax benefits, etc.); sale of raw materials at below-market prices; unification of territories (zoning) and decentralization, as they affect the value of land; extraction of natural resources; sale of state assets, especially privatization of state enterprises; land relations (organization of the land market with its subsequent sale); granting monopoly access to a certain type of commercial (especially export-import) activity;

control over the shadow economy and illegal (extortion, protection business against persecution, destruction of competitors, etc.); appointment to positions of responsibility in government; licensing and registration of business (including banking) activities; issuance of permits for the placement of securities and conducting banking operations with budget funds; obtaining loans (including government loans); customs clearance of imported goods; obtaining export quotas; construction and repair at the expense of budget funds; initiation and termination of criminal proceedings (Southern interregional administration of the State Labor Service, (n.d)).

Such qualitative indicators allow to conclude that depending on the specific type of crime in the field of corruption, as well as the segment of legal relations to which it belongs, the perspective of risk assessment and the development of appropriate response plans becomes possible on the specified destructive factors. Compared to Western democracies, a separate problematic issue of clarifying the essence of the criminological dimension of combating corruption crime is the possibility of measuring the damage caused by the influence of corruption on all legal relations arising in risky spheres.

For example, the USA, Great Britain and other countries have been conducting research on determining the "price" of crime for the past few decades. In addition, the amount of human and material losses, which were avoided thanks to the effective activity of all law enforcement, including anti-corruption, agencies, is being studied. Only in this case it is possible to draw a conclusion about the ratio of material resources spent on maintaining the law enforcement system of Ukraine and the funds saved as a result of taking measures of criminological prevention and cessation of crimes, including corruption. If crime prevention savings are larger than the amount of public finances spent by criminal justice bodies, then it is possible to talk about the effectiveness of law enforcement agencies, the professionalism of their management, and the feasibility of continuing the chosen law enforcement strategy (Marshuba, 2016, p. 126).

In our opinion, the specified approach, reflecting international experience in developing an attitude to anti-corruption, should be applied in Ukraine, since this destructive phenomenon affects not only the course of social relations, but also causes some damage to the standards of resource management protected by the State, which has a specific the intended use is social security, the



medical industry, as well as others. Accordingly, if the countermeasures and the actual fight against it do not compensate the caused harm and mostly exceed the costs incurred – this is the main criterion for revision of the relevant forms and methods of this activity.

### **Conclusions**

The article analyzes the content and essence of combating corruption crime in Ukraine through the prism of the science of criminology, which in turn, should contribute to the highest possible quality and fundamental provision of human and citizen rights and freedoms in the State.

It is proved that corruption crime both in Ukraine and in the world in general is an extremely destructive factor, which should be balanced by appropriate countermeasures and prevention measures. Corruption tries to penetrate all spheres of social life and make democratic and legal procedures, which are a guarantee of a high level and quality of life, impossible.

Attention is drawn to the fact that combating crime in general, and corruption crime in particular, is one of the most important priorities of the State apparatus, because it is the relevant entity, as the main socio-legal regulator, that is responsible for ensuring law and order and observing the rights and freedoms of man and citizen both on the territory of Ukraine and abroad.

It is stressed that the existing indicators of crime in Ukraine, improving its quality and potential for rapid growth in the number of committed criminal offenses of a certain type in connection with Russia's armed aggression against the territorial sovereignty and independence of Ukraine require an appropriate response from scientists, legal researchers, legislator and law enforcement officers. And because, through the lens of criminology, action must be taken long before the actual intent to commit a crime, strategic and operational planning should play a significant role.

The perspective of further research lies in the need to analyze the mechanisms of combating corruption crime in the top democracies of the world, which will allow, by summarizing such practice, to form a wide range of proposals and recommendations to optimize the functioning of the relevant mechanism in our country.

## **Bibliographic references**

- Brooks, R. C. (1909). The nature of political corruption. Political Science Quarterly, 24(1), pp. 1–22. https://www.jstor.org/stable/pdf/2141078.pd
- Brooks, R. C. (1910). Corruption in American politics and life. New York: Dodd, Mead & Co. https://catalog.hathitrust.org/Record/000345
- Busol, O. Yu. (2014). Anti-corruption crime in Ukraine in the modern period: monograph. Kyiv: In Yure. https://www.nas.gov.ua/UA/Book/Pages/def ault.aspx?BookID=0000008758
- Ford, H. J. (1904). Municipal corruption. Political Science Quarterly, 19(4), pp. 673–686. https://www.jstor.org/stable/2140327
- Gary, S. B. (1968). Crime and Punishment: An Economic Approach. Journal of Political Economy, 76, pp. 169–217. https://www.jstor.org/stable/1830482
- Harashchuk, V. M., & Mukhataiev, A. O. (2010). Actual problems of fighting corruption in Ukraine: monograph. Kharkiv: Pravo.
- Heidenheimer, A.J., ed. (1988). Political Corruption: A Handbook. London: Routledge. https://www.amazon.com/Political-Corruption-Handbook-Arnold-Heidenheimer/dp/0887381634
- Ilko Kucheriv «Democratic Initiatives» foundation (2017). Corruption in the everyday life of Ukrainians: What are we bribed for? To whom and why? https://dif.org.ua/article/koruptsiya-u-povsyakdennomu-zhitti-ukraintsiv-za-shchodaemo-khabari-komu-i-chomu345654
- Marshuba, M. O. (2016). Corrupt crime in Ukraine: contemporary state and the main strategies of its prevention. Crime Issues, 31, pp. 123-134. http://pbz.nlu.edu.ua/article/view/77368
- Masliy, I. V. (2013). "orruptions' criminality and its criminology characteristic". Current Problems of State and Law, 70, pp. 356-364. http://dspace.onua.edu.ua/bitstream/handle/1 1300/4672/53.pdf?sequence=1&isAllowed= y
- Melnyk, M. I. (2004). Corruption corrosion of power (social essence, trends and consequences, countermeasures): monograph. Kyiv: Juridychna dumka, 2004. https://ccu.gov.ua/sites/default/files/melnyk\_m.i.\_perelik\_naukovyh\_publikaciy.pdf



- Mezentseva, I. (2014). Criminological characteristics of corruption crime. Scientific journal of the National Academy of the Prosecutor's Office of Ukraine, 4, pp. 106–113. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.chasopysnapu.gp.gov.ua/ua/pdf/4-2015/mezenceva.pdf
- National Academy of Internal Affairs (n.d.).
  Criminological characterization and prevention of corruption crime in Ukraine: a multimedia guide.
  https://arm.naiau.kiev.ua/books/prevention\_of\_corruption/info/lec2.html
- Nye, J. S. (1967). Corruption and political development: a cost-benefit analysis. American Political Science Review, 61(2), pp. 417–427. https://www.jstor.org/stable/1953254
- Romanov, M. (2020). Development of the rule of law in Ukraine under corruption risks// In the collection: implementation of the state anti-corruption policy in the international dimension of the international scientific and

- practical conference (pp. 217 218). National Academy of Internal Affairs. Kyiv, Ukraine. http://elar.naiau.kiev.ua/jspui/handle/123456 789/19426
- Shakun, V. I. (2019). Great Ukrainian legal encyclopedia. Vol. 18: Criminology. Criminal law. Kharkiv: Pravo. https://pravoizdat.com.ua/image/data/Files/848/2\_VUYE\_18\_tom\_vnutri.pdf
- Shcherbakovskyi, M., Stepaniuk, R., Kikinchuk, V., Oderiy, O., & Svyrydova, L. (2020). Evidentiary problems in the investigation of corruption crimes in Ukraine. Amazonia Investiga, 9(32), pp. 117-124. https://doi.org/10.34069/AI/2020.32.08.12
- Shevchenko, O. V. (2011). Causes and conditions of corruption crime. Bulletin of the High Council of Justice, 3, pp. 122–132. https://acortar.link/4OiLM5
- Southern interregional administration of the State Labor Service (n.d.). Corruption crime in society and its consequences. http://mk.dsp.gov.ua/koruptsiina-zlochynnist-v-suspilstv/



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# State policy in the sphere of environmental protection: the regulatory aspect

## Державна політика в сфері захисту довкілля: нормативно-правовий аспект

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Written by:

Kryzhevskyi Vitalii<sup>109</sup>
https://orcid.org/0000-0003-3747-7833

Ripenko Artem<sup>110</sup>
https://orcid.org/0000-0003-4197-4840

Nikitin Volodymyr<sup>111</sup>
https://orcid.org/0000-0001-6915-6319

Kozin Serhii<sup>112</sup>
https://orcid.org/0000-0001-7640-4579

Kuzmenko Dmytro<sup>113</sup>
https://orcid.org/0000-0002-7437-0122

### **Abstract**

The purpose of the article is to analyze the normative and legal aspect of public policy in the field of environmental protection and generalize the relevant legislative basis. Research results. The understanding of the concept of "sphere of the environment" and the content of its legal regulation are generalized. It is substantiated that under the European integration, adaptation of international experience to domestic legal realities, as well as harmonization of national and international legislation the development of the latest forms and methods of environmental protection is an urgent issue. Practical meaning. It is noted that there is a critical need to develop new and improve existing legal acts, taking into account modern trends, since the war unleashed by Russia on the territory of Ukraine causes critical damage to the environment and ecology of Ukraine, and accordingly, such actions must be properly qualified. Value/originality. The perspective of further research is the need to analyze the methods of protection in the field of environmental protection, which are defined as effective tools for the protection of nature from

## Анотація

Метою статті є аналіз нормативно-правового аспекту державної політики в сфері захисту довкілля та vзагальнення відповідного законодавчого підгрунтя. Результати дослідження. Узагальнено розуміння поняття «сфери довкілля» й зміст його нормативноправового регулювання. Обгрунтовано, що в умовах Європейської інтеграції, адаптації міжнародного досвіду до вітчизняних правових реалій, а також гармонізації національного та міжнародного законодавства, актуальним питанням є розроблення новітніх форм і методів природоохорони. Практичне значення. Зауважується на критичній необхідності розроблення нових й удосконалення нормативно-правових чинних актів. урахуванням сучасних тенденцій, оскільки розпочата росією війна на території України завдає критичної шкоди довкіллю та екології України, а відповідно, такі діяння мають бути кваліфіковані. належно Цінність/оригінальність. Перспектива подальшого дослідження поляга€ В необхідності аналізу способів захисту

<sup>&</sup>lt;sup>113</sup> Candidate of Legal Sciences, Senior Research Fellow of the Scientific Institute of Public Law, Ukraine.



<sup>&</sup>lt;sup>109</sup> Candidate of Sciences in Public Administration, Doctoral Student of the Department of Public Management and Administration of the National Academy of Internal Affairs, Ukraine.

<sup>&</sup>lt;sup>110</sup> Doctor of Legal Sciences, Head of the Department of Topical Issues of Philosophy of Law, Legal Linguistics, Postgraduate and Doctoral studies of the Scientific Institute of Public Law, Ukraine.

<sup>111</sup> Doctor of Legal Sciences, Acting Dean of the Law Faculty of the National Aviation University, Ukraine.

<sup>&</sup>lt;sup>112</sup> Doctor of Law, Senior Lecturer at the Department of Theory and History of State and Law of the National University of Life and Environmental Sciences of Ukraine, Ukraine.

harmful effects. Informative and complementary to research is the question of using international experience in improving the relevant national mechanism.

**Keywords:** environment, European integration, legal aspect, legal status, law enforcement.

природоохоронній сфері, що визначені законодавством України як дієві інструменти захисту й охорони природи від шкідливих впливів. Інформативним і комплементарним для дослідження, може бути також питання використання міжнародного досвіду в удосконаленні відповідного національного механізму.

**Ключові слова:** довкілля, євроінтеграція, правовий аспект, правовий статус, правоохорона.

### Introduction

The issue of environmental protection is the most acute problem of the 21<sup>st</sup> century – both for the entire international community and for each country in particular. The global ecological crisis as a result of many centuries of diverse processes on a planetary scale has loomed over humanity. Nowadays, there is not a single sphere important for the life of mankind that has not been affected by the destructive influence of the spontaneous development of civilization – from climate change and the reduction of the number of animal and plant species, to the destruction of the ozone layer and irreversible mutations of the genome – as a result of environmental pollution.

Modern States are making significant efforts to solve the global environmental crisis, which in necessitates the development improvement of the efficiency of environmental protection activities, enhacement of institutional and regulatory support. The issue of environmental protection activities for modern Ukraine, on the one hand, in terms of its importance, is on the same level as the problems of ensuring peace and security, unity, territorial integrity of the country, recovery from political and economic crises, and on the other hand, it is covered by the spheres of cooperation with the European Union within performance of the concluded Association Agreement.

The State strategy for the protection of the natural environment, in the general legal sense, is a set of rules of the legislation of Ukraine, which, in a systemic interrelation, forms a mechanism for counteraction and prevention of offenses related to encroachment on the environment. At the same time, issues related to the definition of the content and essence of the term «environment», still remain are still debatable.

The ongoing armed aggression of Russia against Ukrainian independence and sovereignty, which is accompanied by causing critical environmental harm to the environment and the surrounding natural environment on the territory of Ukraine, actualizes the need for research into state policy in the field of environmental protection. In addition, the harmonization of national legislation in the context of becoming a candidate for membership of the European Union by Ukraine has a positive impact on strengthening the institutional capacity of State authorities to protect the environment in any legal way.

In our opinion, taking into account the previously stated positions, as well as destructive factors and the latest trends, the issue of elgal regulation of the sphere of environmental protection in Ukraine requires additional coordination and analysis, since this branch of legal relations remains unprotected.

The purpose of the article is theoretical and legal characteristics of the legal and regulatory aspect of public policy in the field of environmental protection.

## Literature Review

As Harari (2015) correctly pointed out, "the industrial revolution revealed new ways of converting energy and producing goods largely liberating mankind from its dependence on the surrounding ecosystem. People massively cut down forests, drained swamps, blocked rivers with dams, flooded plains, laid tens of thousands of kilometers of railway tracks and built skyscrapers of business centers. The whole world was rebuilt to meet the needs of homo sapiens, while the usual habitats of plants and animals were destroyed, causing the extinction of many species. Our once green and blue planet gradually began to turn into one huge trading center made of concrete and plastic".

That is why nature protection activity as a complex, multifaceted social phenomenon has





been the subject of reflection by scientists, State and political actors from ancient times to the present. At the same time, the views on the essence, principles and forms of environmental protection activities changed, evolved and differentiated under the influence of a number of objective and subjective, rational and irrational factors. At the current stage of development of humanitarian (social) sciences, environmental protection activities are in view of the representatives of philosophy, history, economics, pedagogy, psychology, management, political science, military science and, of course, jurisprudence.

The formation and development of a sovereign Ukrainian state is also impossible without the development and implementation of a multifaceted and purposeful system for the protection of its national security and the component of the - environmental security (Tatsii, Petryshyn, & Barabash, 2011, p. 115). After all, according to the Basic Law of Ukraine, ensuring environmental safety and maintaining ecological balance on the territory of Ukraine, overcoming the consequences of the Chernobyl disaster – a catastrophe of a planetary scale, and preserving the gene pool of the Ukrainian people is the duty of the State.

According to Bilozorov and Vyshkovska (2015, p. 22), the set of sources related to the subject of scientific research can be conditionally differentiated into two groups: 1) scientific research and doctrinal views in the field of theoretical and legal foundations environmental protection activities; 2) forms (sources) of law regulating relations in the sphere of protection of the environment, including international law.

The feature of modern studies of the nature protection (ecological) function of the state is that it is currently becoming the subject of attention both the representatives of the legal community (first of all, those working in the field of environmental law) (Karpovich, 2012), and those scientists who study the problems of the administration system development (Volynets, 2013). The nature protection function is attributed to the "newest" functions of the modern State. Therefore, nowadays, along with the so-called "classical functions of the state", latest functions" are increasingly highlighted, the role and importance of which have significantly grown in recent decades and which have acquired special importance among other socially significant areas of public activity.

In turn, specialists from the block of management sciences consider the main theoretical provisions of nature protection management, legal foundations and the system of public management of nature protection activities in Ukraine and in the world (Shmatko & Nikitin, 2005). In the field of public administration, Tishkova (2018) carried out theoretical and methodological substantiation and developed practical recommendations for reforming the State management of environmental protection in the context of the European integration of Ukraine.

The work by Kovalska (2013), devoted to the study of theoretical and methodological issues of the formation and improvement of the system of principles of environmental legislation in the context of the development of the legislative system of Ukraine, is also a valuable achievement in the studied area.

## Methodology

The methodological toolkit of scientific work includes a set of philosophical and other foundations, methodological principles, research approaches, general methods of thinking, philosophical, general scientific and specific scientific (legal) methods, the application of which ensured the reliability and validity of the results of the study of the theoretical and legal foundations of environmental protection activities.

Taking into account the peculiarities of the subject, the purpose and tasks of the research, the following main research approaches were applied:

Activity-based approach was used during the theoretical and legal characterization of environmental protection activity as a type of human activity.

Systemic approach helped in the course of determining the place of environmental protection activity in the legal system, signs and elements of the mechanism of environmental protection activity.

Anthropological approach was helpful in establishing the role of man in the development and functioning of nature protection activities, the relationship between person environment.

In turn, the dialectical method made it possible to understand the essence of environmental protection activities in the dynamics of its development and interaction with other social and state-legal phenomena.

Synergistic method made it possible to present environmental protection activity as a selforganizing phenomenon, the emergence and change of which is based on certain processes and legal reality.

Formal and legal method contributed to the research of the theoretical and legal foundations of environmental protection activities with the help of legal constructions and legal terminology.

### Results and Discussion

Already Aristotle (n.d.) noted that public policy, like any social process, needs constant explanation of the genesis of its content and comprehensive research as an object of scientific knowledge. Its categorical apparatus requires special attention, since it has a wide range of scientific interpretation of its content and fragmentary justification in the scientific literature by foreign and domestic scientists. Besides, repeatedly in the positions of researchers there is a statement by Friedrich (1968), who characterized policy as a course of action proposed by a person, group or government within the environment, including obstacles and opportunities that a specific policy should use or overcome in pursuit of a goal or objectives or intentions. These views allow to substantiate that any State policy, being an expression of the sovereign will of the people and implemented by the tools of representative democracy, must be properly established and formulated. That is, to be one that has specific limits (i.e. defines the influencing segment), a clearly formulated goal and task, as well as the subject matter and the object, which in the future will allow to pass to the essential characteristic more detailed, step-by-step implementation elements.

It should be noted that state authorities and their officials are obliged to act exclusively within the limits and in the manner determined by the legislation of Ukraine, and accordingly, the issue of normative and legal regulation of the sphere of environmental protection in Ukraine is critically important in the context of the analysis of the specified legislative provision.

First, let's consider, what environment is. The latter is the totality of all external conditions that affect organisms, populations or more complex biological groups, causing a corresponding

reaction. The environment is always a complex set of different elements, and they, in turn, interact with organisms, called environmental factors. They are divided into two main groups – abiotic and biotic ones. The first refers to all elements of non-wildlife affecting the organism; the most important are light, temperature, humidity and other climate components, as well as the composition of water, air and soil environments (Yesyrkenov, 2008). Thus, it is necessary to justify the position that all factors that can be included in the category of the environment are in one or another way related to the ecology and level of "ecology" of a particular activity, which acquire great importance in close connection with the processes of ensuring rights and freedoms of a person and a citizen in Ukraine.

The right of citizens to an environment that is safe for life and health is enshrined in the Basic Law of Ukraine (Law of Ukraine No. 254k/96-VR, 1996) and the ability of the subject, ensured by the State, to live in an environment that is not harmful to health, use safe natural resources to meet their vital needs, to demand from the state, as well as other individuals and legal entities compliance with environmental safety rules, and apply for the protection of the violated right to the competent authorities in case of their breach. Accordingly, it should be noted that the strategic state guarantee, first of all, should take into account such two integral elements as protection and security, because being interconnected, they nevertheless act and function differently.

Thus, being a component of public policy, the environment protection is embodied in many forms, since some provisions (formally established norms of a certain vector and direction of development) determine principles of nature protection and ecological safety, while the other side of this process (protection of the right to a safe environment) determines the list of acts for which there may be legal responsibility. Environmental liability lies in the obligation of a business entity to compensate the environmental damage. It differs from administrative or moral one and is usually identified as a type of civil liability. It is aimed to provide the following: rescue the environment by compensating harm; guarantees of reimbursement to those affected for economic damage; encouraging the use of preventive measures (risk analysis, environmental management system, auditing, etc.) (Kapto et al., 2019, p. 89).



justifies Slipchenko (2013)that the interdependence of the categories "security" and "protection" creates a number of discussions in the legal circle, but one cannot speak of the identity of these definitions. In her opinion, legal protection includes a variety of legal measures aimed at protecting the right from possible infringement. Thus, the possibility of protection of subjective law and concrete exercise of protection is one of the means of legal protection. The essence of legal protection is that it is the application of the state coercion measure chosen by a law enforcement body. By concrete incorporation, coercive measures end the violation of subjective right, provide the necessary conditions for its implementation, restore it or eliminate the consequences of its breach in one or another way. The stated view fully confirms our previous comment on the protective content of any public policy, as well as the need for procedural formalization of relevant efforts, since all State authorities and their officials must act exclusively within the limits and in the manner determined by the legislation of Ukraine.

The ecological, or nature protection, function of the State is a vital activity of any modern country, the world community as a whole. In progressive States, significant environmental protection legislation, which clearly regulates the activities of people and various organizations in the field of using the natural environment, has been adopted. In many countries, national environmental protection programs, which provide for the application of active measures of impact on violators of its integrity, up to the complete elimination of sources or pollution of harmful production waste, have been developed and operated. Nature protection is one of the most acute social problems and is one of the most important national tasks. All links of the State mechanism carry out nature protection activities within their competence. The implementation of these principles ensures the focus of environmental protection functions on solving the tasks facing the State in the field of protection and rational use of natural resources.

Environmental protection in Ukraine and the European Union is based on a whole system of legal instruments. In Ukraine, environmental protection measures are carried out on the basis of a number of resource codes, laws, by-laws, while the main source of environmental law of Ukraine is the Constitution. Ukrainian legislation in the field of environmental protection activities can be conditionally divided into two groups. The first one includes regulatory

determining the principles of environmental protection activities, and the second one - legal instruments establishing the system of protection environmental agencies organizations and determining their legal status.

The irreversibility of Ukraine's European and Euro-Atlantic course necessitates development of European requirements for environmental protection activities, first of all. the EU – the integration formation of developed European states. At present, the EU plays a leading role in the coordination of policies for solving global environmental problems. The example of the environmental policy of the EU, which in recent decades has achieved significant success in regulating the environmental protection activities of Member developing the legal framework of ecopolitics, and establishing new approaches environmental protection, is a model of transparency for the countries that have achieved significantly lower results in this area, including Ukraine (Holovko, 2021, p. 157).

It is worth emphasizing that by the end of the 60s of the 20th century none of the European countries had clear legal requirements for the organization and implementation environmental protection activities. Currently, the EU has adopted more than 300 regulatory acts aimed at solving environmental problems at the level of the entire Community. Ecology is the business of the Union and Member States, economic operators and citizens. The European approach to the formation of the legal foundations of environmental policy has a preventive nature and is oriented not only to the solution of already existing environmental problems, but, first of all, to the prevention of ones. Environmental priorities embedded in almost all components and areas of the EU activity; in addition to the legal measures of environmental policy, legislative prescriptions for the preservation of the environment are implemented in the regional, scientific and technical, agrarian, transport and trade policies of the EU. In the 1990s, orientation towards the joint solution of complex and promising tasks of the interaction of an individual and the environment began to be traced in the environmental programs of the Community. Therefore, the legal foundations of the EU's environmental strategy can serve as a tool for solving global problems for other countries (Lozo, 2010, p. 1).

Presented above directly indicate that all instruments that can be included in any public policy must have a source – a specific regulatory basis that has already been implemented according to the needs of society. It is these complex chains of conception of public strategic planning in a certain area that allow correctly and accurately to form the need, based on the norms of the acting legislation and planning the production of additional provisions.

For example, international legal obligations of the States to protect the environment during an armed conflict are enshrined in both ordinary environmental treaties and special agreements, subject to the existence of an armed conflict. To understand the specifics of the effect of treaties of the first group, one should dwell on the general principles of the influence of war on international treaties. Termination of an international treaty with the outbreak of war is not the rule, but the exception. From the interpretations of the provisions of the Vienna Convention on the Law of Treaties (United Nations, 1969) on impossibility of performance and fundamental change of circumstances follows that war is not a ground for the automatic termination of treaties, to which the participants of the armed conflict became parties in peacetime (International Law Commission, 2011). The relevant provisions, with reference to the norms and principles of international law and relevant legislation, are quite timely in the context of Russia's armed aggression against Ukraine, since the natural environment is suffering very actively right now, as a result of active hostilities, as well as systematic massive missile attacks by the enemy of the territory of Ukraine - the environment, which in turn necessitates both the prosecution of guilty persons and the development, at the state strategic level, of plans and concepts for the further restoration of the environmental protection regime and environmental safety in general.

That is why it is necessary to pay significant scientific and legislative attention to the issue and importance of regulatory and legal support of the State policy in the area of environmental protection, which in the future can be converted into the strengthening of the institution of human and citizen rights and freedoms not only in Ukraine and the European space, but also in planetary scale in general.

## Conclusion

The article analyzes the regulatory and legal aspect of the public policy in the field of environmental protection and summarizes the relevant legislative basis that ensures the

functioning of this circle of legal relations. It has been established that the legal instruments governing State policy in the field of environmental protection is quite wide and their source is not only the Constitution of Ukraine, but also international legislation defining the standards in nature and environmental protection.

The authors summarize the approaches to the concept of the sphere of the environment and the content of its legal regulation, which lies in the establishment of the series of systematized legal acts governing the relevant sphere and ensuring compliance with a certain range of human and citizen rights and freedoms in the field of environmental protection, since all State resources are the property of the Ukrainian people, and the state, as their main administrator, is obliged to regulate the issue of their protection from the harm that could be done.

Besides, it is substantiated that in the conditions of European integration, adaptation of international experience to domestic legal realities, as well as harmonization of national and international legislation, the development of the latest forms and methods of environmental protection, among which strategic planning in the field of environmental protection takes the leading place, is an urgent issue.

It is noted that there is a critical need to develop new and improve existing legal acts, taking into account modern trends, since the war unleashed by Russia on the territory of Ukraine causes critical damage to the environment and ecology of Ukraine, and accordingly, such actions should be properly qualified and all those guilty brought to legal responsibility, which can be implemented only after approving a strategic document in the field of environmental protection.

The perspective of further research is the need to analyze the methods of protection in the area of nature protection, which are defined by the legislation of Ukraine as effective tools for the defense of the environment from harmful effects. The question of using international experience in improving the relevant national mechanism may also be informative and complementary to the study.

## Bibliographic references

Aristotle (n.d.). Politics. Translated by Benjamin Jowett.

http://classics.mit.edu/Aristotle/politics.html



- Bilozorov, Ye. V., & Vyshkovska, V. I. (2015). The human rights function of the State: the essence and mechanism of implementation in Ukraine: monograph. Kyiv: FOP Kandyba.
- Friedrich, C. J. (1968). Man and His Government. Toronto: University of Toronto Press.
  - https://www.degruyter.com/document/doi/10 .3138/9781487599560-014/html
- Harari, Yu. N. (2015). Sapiens: A Brief History of Humankind. UK: Harper. ISBN-10: 9780062316097
- Holovko, A. (2021). Theoretical and legal bases of environmental activities. PhD Dissertation. National Academy of Internal Affairs. Kyiv, Ukraine. http://elar.naiau.kiev.ua/bitstream/12345678 9/19384/1/dyser\_holovko.pdf
- International Law Commission (2011). Draft articles on the effects of armed conflicts on treaties, with commentaries. Yearbook of the International Law Commission, Vol. II, Part Two
  - http://legal.un.org/ilc/texts/instruments/english/commentaries/1\_10\_2011.pdf
- Kapto, A., Uvarova, G., Mamychev, A., Ponedelkov, A., & Vorontsov, S. (2019). Ecological culture of political perception of global environmental problems. Amazonia Investiga, 8(20), pp. 80-90. https://amazoniainvestiga.info/index.php/amazonia/article/view/66
- Karpovich, N. A. (2012). Theoretical problems of implementation of the ecological function of the state. (Doctoral Dissertation). National center of legislation and legal research of the Republic of Belarus. Minsk, Belarus. http://w-ww.disser.com.ua/teoretycheskye-problemy-realyzatsyy-ehkolohycheskoj-funktsyy-hosudarstva.html
- Kovalska, M. (2013). The system of principles of environmental legislation of Ukraine: theoretical and legal study. (PhD Dissertation Abstract). Institute of Legislation of the Verkhovna Rada of Ukraine. Kyiv: Ukraine.

- Lozo, V. I. (2010). Legal basis of environmental policy of the European Union. (Doctoral Dissertation). Yaroslav Mudryi National Law Academy. Kharkiv, Ukraine. http://www.disslib.org/pravovi-osnovy-ekolohichnoyi-polityky-yevropejskohosojuzu.html
- Shmatko, V., & Nikitin, Yu. (2005). Ecology and organization of environmental protection activities: a study guide. Kyiv: National Management Academy. https://nam.kiev.ua/files/publications/966-8406-14-1.pdf
- Slipchenko, S. O. (2013). Personal non-property rights in relation to tradable objects: monography. Kharkiv: Pravo. https://library.nlu.edu.ua/POLN\_TEXT/POS IBNIKI 2020/Slipchenko 2013.pdf
- Tatsii, V. Ya., Petryshyn, O. V., & Barabash, Yu. H. (2011). Constitution of Ukraine. Scientific and Practical Commentary. Kharkiv: Pravo. https://library.nlu.edu.ua/POLN\_TEXT/KNI GI-2012/Konst\_Ukr\_2011.pdf
- Tishkova, N. L. (2018). Reforming the State management of environmental protection in the context of the European integration of Ukraine. (PhD Dissertation Abstract). Dnipropetrovsk regional institute of public administration of the national academy of public administration under the President of Ukraine. Dnipro, Ukraine. https://acortar.link/gOBfOY
- United Nations (1969). Vienna Convention on the Law of Treaties. Treaty Series, 1155, p. 331. https://legal.un.org/ilc/texts/instruments/english/conventions/1\_1\_1969.pdf
- Volynets, V. V. (2013). Constitutional forms of consolidation of the main functions of the modern state: Ukraine and European experience. Legal state, 24, pp. 194-201. http://nbuv.gov.ua/UJRN/PrDe\_2013\_24\_29
- Yesyrkenov, Ye. (2008). Encyclopedia of modern Ukraine. Environment. Kyiv: Institute of Encyclopedic Research NAS of Ukraine. https://esu.com.ua/article-20479

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# The challenges of taxation in the digital economy: analysis of the Ecuadorian tax system

## Los retos de la fiscalidad en la economía digital: análisis de sistema tributario de Ecuador

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Written by:
Luisa León-Vega<sup>114</sup>
https://orcid.org/0000-0002-2253-3890
Eduardo Ron-Amores<sup>115</sup>
https://orcid.org/0000-0003-1483-2994
Arnaldo Vergara-Romero<sup>116</sup>
https://orcid.org/0000-0001-8503-3685

### **Abstract**

The purpose of this research is to evaluate the current state of taxation of the digital economy and project its contribution to the tax system in Ecuador. A methodology of qualitative approach and exploratory scope was used, through a comparative matrix of Latin American countries, their BEPS regulations and an analysis of the effectiveness of the actions taken on taxes on the digital economy. Statistical data was taken from Administrations, the Economic Commission for Latin America and the Caribbean, the Inter-American Center of Tax Administrations and the KPMG Tax News Digital Economy Report. For the projection of fiscal income, the Financial Statements of multinational companies that do not have headquarters in Ecuador were considered and through simple regression the future collection was estimated. The results showed that the projection of digital taxes in Ecuador would be 200.27 million dollars for the period 2022-2025, with 80% corresponding to VAT. In addition, it was revealed that there is a derivative collection not considered as a product of the information provided by digital companies, causing additional potential collection. In the diagnosis of advances in international tax matters in the Region, it is concluded that tax regulations in Latin America respond to the tax challenges of the digital economy on a global scale.

**Keywords:** Digital economy, collection, tax system, streaming, Ecuador.

### Resumen

La finalidad de esta investigación es evaluar el estado actual de la fiscalidad de la economía digital y proyectar su contribución al sistema tributario en Ecuador. Se utilizó una metodología de enfoque cualitativo y alcance exploratorio, mediante una matriz comparativa de países de América Latina, sus normativas BEPS y un análisis de efectividad de las acciones tomadas sobre impuestos a la economía digital. Se tomaron datos estadísticos Administraciones Tributarias, Comisión Económica para América Latina y el Caribe, Centro Interamericano de Administraciones Tributarias y el Informe Tax News Digital Economy de KPMG. Para la proyección de ingresos fiscales, se consideraron los Estados Financieros de empresas multinacionales que no tienen sede en Ecuador y mediante regresión simple se estimó la recaudación futura. Los resultados mostraron que la proyección de impuestos digitales en Ecuador sería de 200,27 millones de dólares para el periodo 2022-2025, siendo el 80% correspondiente al IVA. Además, se reveló que existe una recaudación derivada no considerada producto de la información que brindan las empresas digitales, provocando un potencial recaudatorio adicional. En el diagnóstico de avances en materia tributaria internacional en la Región, se concluve que la normativa tributaria en América Latina responde a los desafíos tributarios de la economía digital a escala global.

**Palabras clave**: Economía digital, recaudación, sistema tributario, streaming, Ecuador.

<sup>&</sup>lt;sup>116</sup> Magister en Economía, Docente-Investigador de tiempo completo, Universidad Ecotec, Samborondón, Ecuador. (Autor de correspondencia)



<sup>114</sup> Magister en Administración de Empresas, Docente de medio tiempo, Universidad Ecotec, Samborondón, Ecuador.

<sup>115</sup> Magister en Administración de Empresas, Docente de tiempo completo, Universidad Ecotec, Samborondón, Ecuador.



## Introduction

The analysis of the tax planning strategy called Base Erosion and Profit Shifting (BEPS) presumes a reduction of the income from the States that could be used for the benefit of the taxpayers in the form of medical attention, retirement pension payments, and improvements of the tourist infrastructure, among others. For this reason, the first BEPS action on the challenges of the digital economy for the taxation of digital companies carried out an in-depth analysis of the tax aspect of multinational companies whose line of business is digital and is of relevant attention from the point of view of business income as it is related to the principle of income taxation in the place of residence, as well as the application of additional indirect taxes on digital services (Kristel et al., 2020).

The most valuable and highly digitized multinational companies, such as Google, Amazon, and Facebook, consistently pay the lowest effective corporate tax rates, facilitating the concentration of wealth in a small number of companies and the people who control them (OECD, 2018; Kling & Cordero, 1999). However, there is resistance from countries that see raising taxes on multinationals as risky for fear that mobile factors of production will move to lower-tax jurisdictions, leading to loss of jobs, investment, and other economic benefits (Abdul Wahab et al., 2021; Gelepithis & Hearson, 2021).

In an increasingly borderless world, national tax laws cannot do the job alone, global companies, especially digital multinationals, can easily bypass higher tax jurisdictions, so capital moves with fluidity and breakneck speed, but these dramatic efficiencies of the digital economy vastly disrupt tax patterns (Bukht & Heeks, 2018;

**Table 1.** *VAT Collection (millions of dollars)* 

Mpofu, 2022). National economies are forced to cooperate, shore up revenue leakage, and seek common ground and global parity between tax systems (Pylypenko et al., 2022).

Based on the above, the following research questions are formulated: Do the current tax regulations in Latin America respond to the tax challenges of advancing the digital economy on a global scale? What is Ecuador doing regarding taxation to face the challenges the digital economy brings? Moreover, what would be the estimated amounts of collection to the tax system if the collection of Income Tax to non-resident MNEs in the country is implemented in Ecuador?

This research aims to evaluate the current state of taxation of the digital economy and its future contribution to the tax system in Ecuador.

### Literature Review

Regarding Latin America and the Caribbean, some countries have implemented specific guidelines concerning multinationals that do not have a physical presence in their territory and are their resident citizens who make the purchases, as is the case of VAT on digital services. The first to implement this tax were Argentina, Colombia, and Uruguay in 2018, with an average rate of 21% VAT. For the year 2019, Costa Rica and Paraguay are also executing it, and in the following year, Chile, Ecuador, and Mexico put it into operation.

Adopting this tax in the Region shows collection figures that border on an average contribution of 0.03% to GDP, as seen in Table 1, with Chile having the highest assistance.

Country	Period	Collection	%GDP
Amantina	2018	53	0,01
Argentina	2019	79	0,02
Chile	Jun-Dec 2020	119,6	0,04
Cille	2021	203,2	0,05
0.11.	Jul-Dec 2018	12,2	0,004
Colombia	2019	77	0,02
Costa Rica	Oct 2020	1,7	0,003
Б 1	Sep-Dec 2020	7,4	0,01
Ecuador	2021	21,6	0,02
Paraguay	2021	11,43	0,03
I Impanor	2018	2,7	0,004
Uruguay	2019	18,4	0,03

Note: Taken from Jiménez y Podestá (2021) based on CIAT (2022).



It should be noted that each State proposed different nuances for the form of collection, prioritizing the withholding mechanism. In the case of Uruguay, it opted to collect the tax directly from non-resident suppliers. However, the taxation of income derived from these transactions remains limited and will require global solutions, such as those proposed in the BEPS Inclusive Framework (CEPAL, 2020).

Ecuadorian regulations applied to digital services

It is worth mentioning that Ecuador is not a member of the Inclusive Framework of the OECD, but it is committed to the tax changes that are being presented. Since 2017 it has been part of the Global Forum on Transparency and Exchange of information for tax purposes; following the same line, it is also part of the Multilateral Convention on Mutual Administrative Assistance (CAAM) in Tax Matters, allowing Ecuador to combat tax evasion and avoidance more efficiently.

Considering the BEPS actions and, to some extent, trying to adhere to the guidelines, for the year 2020 voluntarily, it puts VAT on digital services into operation, applying the same national VAT rate of 12% VAT for the use of platforms. Digital, such as Netflix, Amazon Prime, Uber, Play Station Network, Linkedin, HBO, Flickr, Zoom, Facebook, and Twitter, do not have tax residence in the country (Durdu, 2020).

For this, the Internal Tax Regime Law is reformed, where the import of digital services is included as taxable services. The generating event will be verified at the time of payment by the resident in favor of the non-resident provider of the digital services.

It also mentions that payments for digital services will be charged on the commission received in the cases of delivery services such as Uber Eats; that is, it will be set only for the intermediation of the service.

According to the Regulation of the Tax Simplification and Progressivity Law, VAT payment is made through withholding Financial Institutions from consumers and cataloging non-resident companies as VAT collection agents, provided they register with the cadaster. Still, at the same time, it allows local companies to issue a purchase statement to support their expenses in importing digital services; non-resident MNEs

would not be obliged to issue invoices, so there is no mandatory registration for these companies.

To request registration in the RUC, the process is not automatic; the application must be sent by email and attach the requested requirements; for taxpayers' information, although there is information in Spanish and English, the process is done through email, and support is not online.

Being our economic reality, having a high rate of informality that borders 50% according to the National Institute of Statistics and Censuses (INEC), the mechanism that works best in our environment, according to the KIT of digital VAT tools for Latin America and the Caribbean (VAT KIT), is that of withholding at source. However, it specifies that there are problems if it is the only means of collection and recommends establishing a regime for VAT collection from non-resident suppliers, possibly in combination with withholdings.

The problems that have been detected according to the VAT KIT in this collection mechanism are a critical lack of data, the difficulty in correcting errors in VAT returns, and the risks of evasion or avoidance, these difficulties being a reality for Ecuador, for example, there are complaints about improper VAT charges to users who acquired a movable asset and not a digital service, since when canceling with a credit card the Bank does not identify if the payment abroad to companies such as Apple, was for goods or digital services. Alternatively, if the purchase has been subject to a refund or cancellation, the bank has already proceeded to collect it and not the MNE; therefore, the difficulty of returning the VAT paid is excellent.

Another problem arises when the service user is abroad and cancels a service consumed outside Ecuador, as with transport service platforms. When withdrawing with a credit card., the Financial Institution withholds the VAT, even when the consumption does not occur in the country.

Lastly, these described problems derive from evasion or avoidance because payments can be made with foreign credit cards, and residents of Ecuador can use the service, and there would be no way to collect VAT.

Regarding the companies that must pay the tax, it maintains a list updated until April with a total of 640 providers with different denominations to be able to link them at the time of payment with the credit card, for example, Uber, register trip,



eat, cash, credits, Paypal, pass, conference, lime, that is, the list is extensive because being the same company, it places the specification for the collection in detail.

Of the total number of suppliers, 20 of them are domiciled in Ecuador or have a PE, among which are online food delivery platforms such as Glovo, Rappi, and Pedidos Ya; those of electronic commerce such as free market and OLX; and subscription television such as GolTV, the tax base being its commission income. As of April 15, 2022, the company Xsolla and Mo Technologies have registered in the SRI cadaster

to act as VAT collection agents, according to the list available on the AT website (SRI, 2022).

These figures show the lack of effectiveness in registering foreign companies without residence in the country, and the payment of VAT falls on the final consumer. Now, regarding the collection for the year 2020 from September to December of 7 million dollars and 2021, 22 million dollars, which for collection purposes has positively impacted its application.

Table 2 below summarizes the advances in taxation for businesses in the digital economy in Latin America concerning VAT up to June 2022.

**Table 2.**Summary of Advances in Taxation in Terms of the Digital Economy in Latin America.

		Taxpayer	
			It does not comply with the provisions of
			the preparatory phase. Non-resident
2018	21%	B2C Transactions	suppliers are not required to register as
			VAT payers. The VAT taxpayer is the
			buyer.
	2% - 5%		Fails. There is a tax in certain States, and
2018	Municipalities	B2C & B2B Transactions	it is managed with various policies and parameters.
			If it complies, Digital platforms must
			register with the SII, whether or not they
			reside in the country. There are 199
			digital platforms registered until 2021
2020	19%	B2C & B2B Transactions	(Netflix, Google, and Apple, among
			others). It has a digital platform in two
			languages and assists non-resident MNEs
			so that they can comply with their tax
			obligations.
			It partially complies since the registration
2019	19% standard	DAC & DAD Tropped tions	of suppliers was initially mandatory, but later the measures were made more
2018	5% reduced	B2C & B2B Transactions	flexible and allowed VAT withholding
			without registration.
			It does not comply with the provisions of
	13% Standard		the preparatory phase. Non-resident
2019		B2C Transactions	suppliers are not required to register as
	Reduced fates		VAT payers.
			It does not comply with the provisions of
			the preparatory phase.
2020	12%	B2C Transactions	Non-resident suppliers are not required to
			register as VAT payers. The VAT
			taxpayer is the buyer.
			Complies. Digital platforms must register
			for the SAT, whether or not they reside in
			the country. There are 154 digital
2020	16%	B2C & B2B Transactions	platforms registered until 2022. It has a
			digital platform and assists non-resident
			MNEs so that they can comply with their
			tax obligations.
2010	100/	DOC Transact	It does not comply with the provisions of
2019	10%	B2C Transactions	the preparatory phase. The VAT taxpayer
			is the buyer.
			Complies. Digital platforms must register
2018	22%	B2C & B2B Transactions	with the DGI, whether or not they reside in the country. Post checks are already
			in the country. Post checks are already
	2018 2020 2018 2019 2020 2020	2018	2018 2% - 5% Municipalities B2C & B2B Transactions  2020 19% B2C & B2B Transactions  2018 19% standard 5% reduced B2C & B2B Transactions  2019 13% Standard Reduced rates B2C Transactions  2020 12% B2C Transactions  2020 16% B2C & B2B Transactions  2020 16% B2C Transactions

Note: Taken from CEPAL (2019) & KPMG (2022). Information of each Tax Administration.



There are similarities in the application of VAT in the Latin American countries under analysis, among which it can be highlighted that they have not created new taxes on the digital economy, but rather, have channeled the existing one and that it has a more significant impact on the collection, as is the case of VAT.

Most have opted to collect via withholding through Financial Institutions, except in the case of Chile, Mexico, and Uruguay; for this reason, it is considered that these countries are more aligned with the OECD guidelines. The VAT rate in most cases is the same as for other types of local transactions, and the taxpayers are the final consumers in all cases, combining with B2C in countries aligned with OECD parameters.

The good practices analyzed by Latin American peers allow Ecuador to set new challenges for VAT management and not only take it to the consumer collection field, which, although representative, does not generate the real purpose of implementing BEPS actions, which is to avoid the erosion of taxable bases and profit transfers of large MNEs.

Challenges in indirect digital taxation for Ecuador

Next, the challenges that Ecuador must face in indirect taxes are detailed, referencing the OECD guidelines and the reality of the Latin American environment.

- The essential feature of the VAT design is that the tax is collected through a multiphase process, so the entry of non-resident companies to the SRI cadaster must be strengthened.
- 2. Strengthen the registry of foreign suppliers.
- 3. Have a platform that provides easy access to registration, guidance, and support to comply with your tax obligations.
- 4. Receive information on service users from Financial Institutions to have relevant information for controls, for example, payment reports, as is the case in Chile.
- Receive information from external providers to be able to designate as taxpayers those who carry out local activity but do not have an RUC, for example, Airbnb in property rental services as done by Uruguay.
- 6. Following the example of Mexico, although it is more difficult for Ecuador because it does not have as much of a market as they do, it is carrying out subsequent controls with the blocking of web addresses, given the persistence in not registering in the

cadaster or worse still not making payments corresponding VAT.

## Methodology

Due to the diversity of the context and to answer the research questions, the present work will have a qualitative approach. Regarding the scope of the research, this will be exploratory, which investigates a problem that has not been thoroughly studied or examined in the past (Romero-Subia et al., 2022). This research scope is generally carried out to understand the existing problem better but naturally does not yield a conclusive result (Stebbins, Vergara-Romero et al., 2022). It must be borne in mind that the digital economy is not new; however, in recent years, it has evolved rapidly and allowed the development of new business models.

In exploratory research, the research process varies depending on discovering new data or knowledge (Macas-Acosta et al., 2022). Also known as interpretive research or the grounded theory approach, the results of this research provide answers to questions such as what, how, and why (Klein et al., 2022; Stebbins, 2001).

As a data collection instrument, a comparative matrix has been designed that includes reference countries in Latin America, their regulations regarding BEPS, and an analysis of the effectiveness of the actions taken. The information to be analyzed will be:

- Indirect taxes on the digital economy in Latin America.
- Ecuadorian regulations applied to digital services.
- Direct taxes of the digital economy in Latin America.
- Ecuadorian regulations applied to nonresidents.

The countries from which the information will be obtained will be Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico, Paraguay, Uruguay, and Ecuador, which have implemented direct and indirect taxes on digital services in the Region.

The documents used to obtain information will be reports, statistical data from the income institutions of the selected countries, laws and regulations related to the digital economy, and reports from entities such as CEPAL, CIAT, the KPMG Tax News Digital Economy Report, and



the application of KPMG on BEPS and the Digital Economy.

For the analysis, the regulations and actions taken by the region's countries regarding the collection of digital services will be reviewed and compared (Vishnevsky et al., 2022); after this, the best practices applied concerning the tax will be selected. Income and VAT will be analyzed if they adjust to the parameters established by the OECD (Faúndez-Ugalde et al., 2021).

Regarding collection estimates, data will be taken from the CEPAL report on the Fiscal Panorama of Latin America (CEPAL, 2019) on the allocation of revenue by country according to each digital multinational to determine the percentage proportion of income they would generate in Ecuador.

Concerning multinationals, the four largest worldwide are chosen for analysis, which are not resident in Ecuador and is the most used nationally in each segment. Therefore, Netflix, Airbnb, Uber, and Apple are chosen for the Subsequently, analysis; their Financial Statements will be reviewed, taken from the page of the U.S. Securities and Exchange Commission (SEC) and segmenting income by the Latin American Region (Latam) for the years 2019, 2020 and 2021.

Finally, an income projection of the five digital MNEs will be made for the years 2022 to 2025 through simple regression of the data. The potential collection of Ecuador will be estimated on the income of multinationals that do not operate in the country.

## Results and Discussion

In this section, the questions related to the problem exposed for the object of study are answered, and, in turn, the results are discussed. Do the current tax regulations in Latin America respond to the tax challenges of advancing the digital economy on a global scale?

In the last five years, tax regulations in LATAM have advanced on international tax issues, especially with VAT and Income taxes, which are the predominant collections of tax agencies. In VAT, similarities are observed in its application between the countries analyzed, being in most cases the same rate as for traditional services and opting for collection through withholding at source carried out by Banks.

Regarding Income Tax, the countries that are applying some derivation for its collection are Argentina, Mexico, Paraguay, and Uruguay, taking into account the jurisdictional link of significant economic presence to provide tax authority to the State where there is a digital presence of a signature without the requirement of having a permanent establishment in the country.

What is Ecuador doing regarding taxation to face the challenges the digital economy brings?

Ecuador is adopting measures to adapt to the challenges of international taxation, increasing tax collection, and having a global reach in companies that provide services in the country. Among these measures are the adoption of international standards, the updating of tax laws, the strengthening of the tax administration, and the participation in international forums.

For Ecuador, the challenge in Income Tax is more significant than VAT since there is currently no specific regulation on this subject; being able to create the figure of significant economic presence with the extension of the territoriality and permanence criteria to be able to expand the enforcement of its tax regulations to foreign companies.

When the challenges that the digital economy brings with it are not considered in the tax systems, significant tax collection is not obtained, which will increase year after year. For this reason, it is imperative to consider the recommendations and experiences of countries in the Region to take full advantage of measuring this source of income for the State.

What would be the estimated amounts of collection to the tax system if the collection of Income Tax to non-resident MNEs in the country is implemented in Ecuador?

In the case of Ecuador, an estimate of tax revenue from the digital economy in VAT and Income Tax is made during the years 2022 to 2025. In the case of VAT, there are already historical figures for 2021 for what is considered the collection base, while, in the Income Tax, it would be an assumption of what the SRI could receive if it applied an average rate of 3%.

The multinationals selected for the estimate are Netflix, Airbnb, Uber, and Apple; information was taken from their Financial Statements for 2019 to 2021 regarding sales in Latin America.

It is essential to mention that the calculations according to Pillars I and II implementation guidelines have been excluded from the estimates since they are not yet in force. Pillar II is more advanced and expected to enter the workforce in 2023. Ecuadorian regulations must be modified for its application and include the global minimum tax of 15%, although since it does not belong to the MI, its application is not mandatory. Pillar I is expected to enter into force in 2024 and still presents a preliminary version in public consultation. You could even take the position of Chile and wait for an international consensus to start applying the Income Tax to MNEs, but this passive position could be reflected in ceasing to collect taxes in this way.

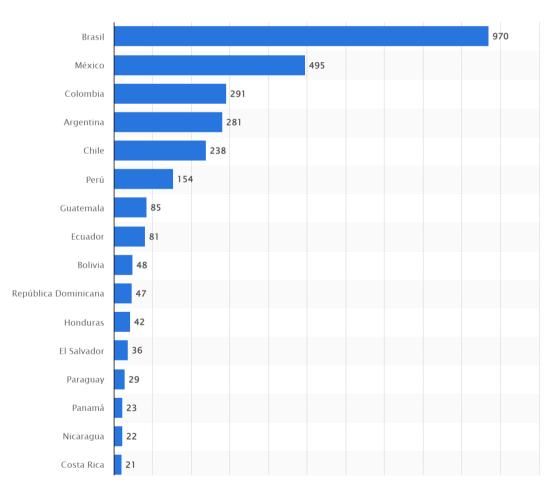
## Sales trend in Latin America for Netflix

The sales trend in the last three years for Latin America has been growth, showing a positive variation of 12.92% between 2019 and 2020 and 13.31% between 2020 and 2021, as reported in its Financial Statements published in the SEQ.

Even for the year 2022, it mentions in its quarterly reports that the Region represented the highest revenue growth compared to other regions worldwide.

According to data from Statista, it is forecast that by the end of 2026, the number of subscriptions to video-on-demand (SVOD) platforms in Latin America will exceed 115.6 million subscriptions. In that same year, the paid streaming video platform with the most significant presence in the region is expected to be Netflix, with 42.4% of all SVOD subscriptions in Latin America.

In the same portal, an estimate is presented for the year 2022, in which the Brazilian market for video-on-demand (VoD) streaming, consumption, and video downloads, would generate income of 970 million US dollars, which would make it the largest video-on-demand market in Latin America. In Mexico, it is expected that about 495 million dollars in revenues will be generated.



*Figure 1.* Netflix Revenue from VoD Services in Latin American and Caribbean Countries in 2021 (millions of dollars). Source: Statista, (2022).

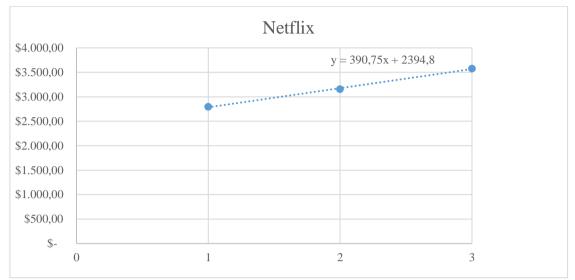




Figure 1 shows that Netflix has its largest market in Brazil, while Ecuador ranks eighth with 81 million by 2021.

For purposes of estimating revenue from Netflix in Latin America for the years 2022 to 2025, the equation that can be seen in Figure 2 was

considered, reflecting figures of \$3,958 million for 2022, \$4,348 for 2023, \$4,739 for the year 2024 and \$5,130 million by 2025. These figures will allow the association to the income generated by the VoD service provided in Ecuador and thus estimate the collection of taxes on digital services for the coming years.



*Figure 2.* Netflix Sales Trend in Latin America 2019-2021. Source: U.S. Securities & Exchange Commission (2022).

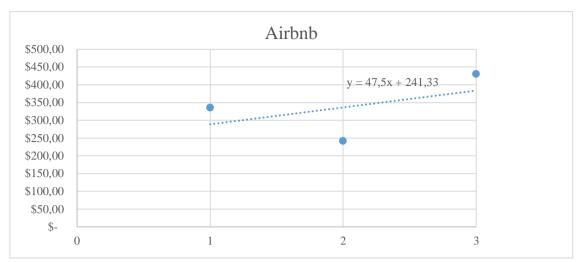
Airbnb sales trend in Latin America

The type of business that Airbnb presents has different characteristics; since they are an intermediary between those who provide their home for rent and the users who want to rent it, this causes the risk of not paying taxes to be higher since it not only includes the multinational but involves the owners of the real estate.

Worldwide there are 4 million hosts on Airbnb, and 90% of them are individuals; it is estimated that in total, Airbnb hosts have earned a total of 100,000 million dollars to date, with recent years being the fastest growing from income.

The scope of the service it provides is active in 98% of the world, allowing it to elucidate the content of this company and how complex its global taxation would be (Airbnb, 2022).

Although these figures are encouraging for the MNE, from 2019 to 2020, there was a 27.98% decrease in sales for the Region, going from \$336 million to \$242 million for 2020, as a result of the COVID-19 pandemic. This atypical behavior compared to previous years affects the sales trend, as shown in figure 3, so the revenue estimate for the coming years will be cautious. Even more so since, in some countries, there are still lockdowns for short periods.



*Figure 3.* Airbnb Sales Trend in Latin America 2019-2021. Source: U.S. Securities & Exchange Commission (2022).

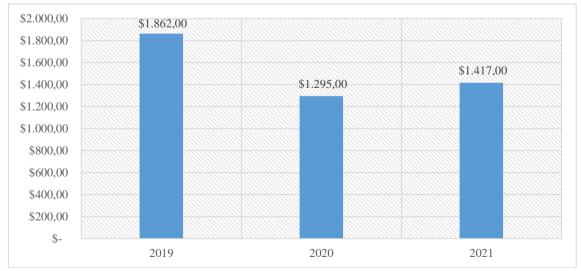
Sales trend in Latin America of Uber

Uber in Latin America has found a market in which cooperative "taxis" maintain licenses to operate, so it has had to adapt its business model in the Region. According to América Economía magazine, Latam was once a haven for Uber from stiff competition in the United States and European regulatory battles. However, the region has experienced massive demonstrations by taxi drivers against this type of transport, operating in a gray area in most countries.

Uber Technologies uses a massive network to power movement from point A to point B; this includes business divisions such as connecting consumers with independent ride-sharing service providers and connecting other consumers with restaurants, grocery stores, and other stores through delivery service providers.

One of the segments mentioned is drivers who own cars and are looking for a form of income, but they do not have an operating permit and do not pay taxes on the income they receive; similar to the case of Airbnb, the problem is not only the MNE that it does not pay taxes, but individuals are not regulated before the TA to carry out economic activity, which triggers a growth in informality and hinders the reduction of tax gaps.

In the COVID-19 pandemic, mobility restrictions significantly affected company revenues worldwide, and Latam was no exception; as can be seen in figure 4, sales decreased in 2020 compared to 2019 with a negative variation of \$30 .45%, and for the following period it is possible to recover with 9.42%. However, it still does not reach sales before the pandemic.



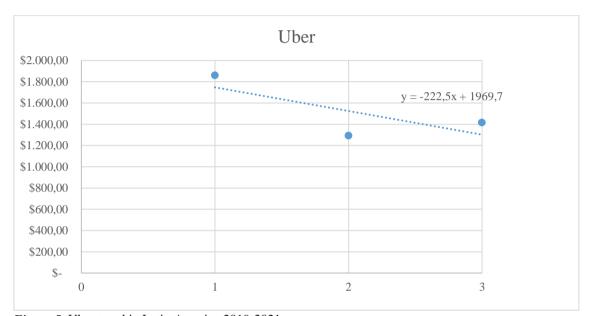
*Figure 4.* Uber Sales in Latin America 2019-2021. Source: U.S. Securities & Exchange Commission (2022).





The income recorded in its Financial Statements comprises three segments; the first is Mobility Income, mainly from the fees paid by drivers for the use of the platform; the second, delivery income, is given by the use that merchants and couriers make of the delivery platform and the last; freight revenue, consisting of revenue from freight transportation services provided to shippers. This allows knowing the company's scope so far in its services, identifying the national segment that has income from work through the platform, and carrying out respective tax controls.

Although Uber has not yet recovered from its market loss during the confinement period, the revenue trend in figure 5 shows that the recovery in sales levels, if the factors do not change, will take a few years to recover pre-pandemic levels. The impact on the economy and the increase in unemployment generated a growth in informality, being one of the jobs taken by people who work in parallel to the use of the platform; in Ecuador, the segment above is known as "informal taxi drivers".



*Figure 5.* Uber trend in Latin America 2019-2021. Source: U.S. Securities & Exchange Commission (2022).

## Apple's Latin American sales tren

For Apple, the trend is presented with growth figures for the following years; this is due to the favorable variations, as observed in figure 6, for the years 2019 to 2020, which registered an increase of 6.54%, while the income variation in 2020 and 2021 were 23.08%. A relevant piece of data found in the annual performance reports for

products and services shows an increase in sales for services by 27%, which includes sales of the Company's advertising, AppleCare, cloud, digital content, and payments.

The increase described in its notes to the Financial Statements shows the importance of taxation focused on cross-border digital services.

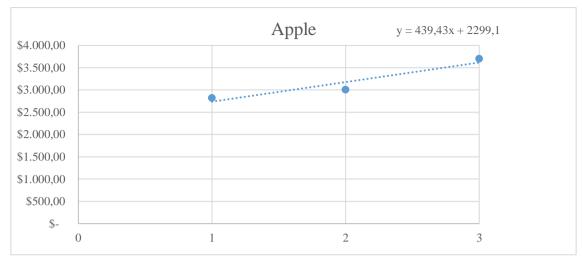


Figure 6. Apple trend in Latin America 2019-2021. Source: U.S. Securities & Exchange Commission (2022).

The reality that these services continue to expand and are not taxed prevents competition under similar conditions and implies a growing impact on tax revenues. Local economic activities in Latin America, although they are not highly digitized if they are displaced by these business models, as is the case of accommodation services that do pay corresponding taxes, as well as the permits that those who provide mobility must obtain to local people or companies that sell imported products paying tariffs and taxes. In contrast, foreign ones do so without any type of specific national regulation for them.

The negative impact on the income of local legal affects future collection levels, an effect that could further deepen if local companies or companies from traditional sectors seek to move towards the digital sector and industry out their operations from abroad, still causing plus the loss of revenue.

Table 3 shows the consolidated sales that these four large multinational companies NAUA (Netflix, Airbnb, Uber, and Apple) have had in Latin America in fiscal periods 2019-2021.

**Table 3.**Summary of NAUA sales in Latin America (millions of dollars)

	EMN	2019	2020	2021
	Netflix	2795,4	3156,7	3576,9
E E.	Airbnb	336	242	431
Sales in LATAM	Uber	1862	1295	1417
$\mathbf{S}_{\mathbf{r}}$	Apple	2823,45	3008	3702,31

Source: U.S. Securities & Exchange Commission (2022).

Estimation of tax revenue from digital taxes in Ecuador

Considering the sales trend of four large multinationals for the years 2022 to 2025 in figures, as shown in Table 4, and taking as a reference the estimates of the 2019 CEPAL Report on the Fiscal Panorama in Latin America, Ecuador has a 2.23 % of the average share of revenue of the mentioned MNEs.

The taxable base would be the net income, so it is estimated that in Income Tax, it could contribute 6.81 million dollars for 2023, \$7.25 million for 2024, and \$7.69 million for 2025. The

proposal presented is cautious since other digital companies provide services in the country and have not been considered as they do not have figures applied to the Region in their Financial Statements. Although 2022 is still at stake, due to the effects of the Ecuadorian Tax Code in article 11, the validity of the law in the annual Income Tax will apply from the first day of the following calendar year. If we analyze retrospectively, an estimated \$17.63 million have not been received for Income Tax on digital services from 2020 to 2022, which is the average application period in the rest of the Latin American countries.





In the case of VAT, the estimated collection is feasible since the regulations contemplate collecting this tax. As can be seen in table 4, tax revenue is higher for this indirect tax versus the direct one.

The collection of indirect taxes has represented Ecuador over the years, more than 50% of the national contribution, contributing to the country's tax structure with 6% of GDP. Highlighting the relevance of strengthening the collection of this tax considering the new businesses of the digital economy.

It is estimated that from 2022 to 2025, the collection for the treasury would be \$112.48 million. The form of VAT collection for digital services in Ecuador does not interfere even when Pillar 1 is applied since the current configuration of tax collection is from final consumers and not from MNEs. Therefore, the moratorium given in this Pillar did not impact a future elimination of your collection, at least in the short or medium term.

Table 4. Estimated tax revenue from taxes on the digital economy in Ecuador (millions of dollars).

	EMN	2022	2023	2024	2025
	Netflix	3.958	4.348	4.739	5.130
LATAM Trend	Airbnb	431	479	526	574
LATAM Trend	Uber	1.080	857	635	412
	Apple	4.057	4.496	4.936	5.375
	Netflix	88,26	96,67	105,69	114,4
F1	Airbnb	9,62	10,68	11,74	12,8
Ecuador	Uber	24,08	19,12	14,15	9,19
	Apple	90,47	100,27	110,07	119,86
TOTAL		212,42	227,03	241,64	256,25
VAT Collection 12%		25,49	27,24	29	30,75
Rent Collection 3%		6,37	6,81	7,25	7,69

Source: U.S. Securities & Exchange Commission (2022) & CEPAL (2019).

## Conclusions

The studies around the imposition of the digital economy show how the physical presence of the companies on which the taxation was based is already possible to apply in this type of company. The emerging regulation establishes tax rights based on the value that companies create through participation in consumer or market states. The initiatives on the part of the OECD have evolved to adapt to the new tax challenges that have had more significant growth, to the speed of response by the Tax Administrations, being its last proposal that of Pillars I and II, which are He hopes they will be of great help to regulate the collection of Income Tax worldwide when they come into force.

The initiatives presented regarding taxes on companies belonging to the digital economy are premised on the collection need of the states and to avoid abusive treatment by MNEs to avoid paying their tax obligations by being located in places of low taxation and being digital companies that have a global reach, their income is high. At the same time, the remuneration to society materialized in taxes is low.

In the diagnosis of advances in international tax matters in the Region, it is concluded that the tax regulations in Latin America respond to the tax challenges of advancing the digital economy on a global scale. In most cases, they are structured accordingly. Consumption taxes are not aligned with the OECD guidelines, which seek a consensual solution based predominantly on proposals to change the rules for the taxation of corporate profits of multinationals.

In the estimation of tax revenues from digital taxes in the Ecuadorian tax system, it is concluded that, currently, the contribution to the Ecuadorian State has been 28.80 million dollars in VAT collection for digital services, and it is estimated that this figure will increase. Year after year, due to the supposed increase in consumption reaching annual statistics between 25 and 30 million dollars.

In Income Tax, estimates are shown of the figures that the SRI could collect if it considers the collection of a fee of 3% on income, an amount that amounts to \$28.12 million until 2025, with an approximate annual collection of \$7 million. Finally, it must be considered that although implementing a tax on the digital

economy generates a positive collection effect, the decisions made in this area cannot be unilateral but instead follow the recommendations and guidelines of international organizations that allow adequate or consensual treatment of digital taxes.

Finally, the recapitulation of the work brings a relevant point in the investigation, this being the use of the supply of information that these digital companies can provide, that is, not only for the collection of taxes from them but through the derivation of data. For tax purposes, as a result of the extensive database of operations with subscribers, users, or payments, causing other potential collections. For example, real estate rentals that do not have their activity registered in the RUC base and do not pay taxes are unfair competition for the tourism sector. In Spain, this debate was presented years ago. Currently, they should report those platforms that mediate in the transfer of tourist homes, as is the case of Airbnb, having to identify the owner or owners of the house in the report, enter the full address of the property, the number of rental days including the start and end of the assignment, and the amount received by the owners of the home; All this information is beneficial to be able to place this type of business derived from the digital economy on the radar of the Tax Administration.

Another similar case is that of influencers, YouTubers, or Instagrammers, who receive income and are not subject to paying any tax as residents in the country. Although they should comply with the national regulations for paying income tax or VAT under any regime that their income level allows, they do not do so due to the lack of control or not having the necessary information to identify them quickly. For this reason, it is specified that the data provided by the digital platforms will be a way of supplying information to control national evaders.

Likewise, Financial Institutions that withhold foreign payments for digital services could provide information without prior request, for subsequent controls, for debugging the database of digital companies, and inclusion of new ones in the list so that it can be shortened. The evasion gap in the payment of VAT to digital services.

## **Bibliographic references**

Abdul Wahab, N. S., Ling, T. W., Abdurrahman, A. P., Keong, O. C., & Nik Abdullah, N. H. (2021). Effects of digital economy involvement on book-tax differences in Malaysia. Cogent Business &

- Management, 8(1), 1870806. https://doi.org/10.1080/23311975.2020.1870
- Airbnb. (2022). Airbnb news. Obtained from https://news.airbnb.com/about-us/ (28 august 2022).
- Bukht, R., & Heeks, R. (2018). Defining, conceptualising and measuring the digital economy. International Organisations Research Journal, 13(2). https://doi.org/10.17323/1996-7845-2018-02-07
- CEPAL. (2019). Panorama Fiscal de América Latina y el Caribe 2019. Políticas tributarias para la movilización de recursos en el marco de la Agenda 2030 para el Desarrollo Sostenible. In Panorama Fiscal de América Latina y el Caribe. https://repositorio.cepal.org/bitstream/handle /11362/44516/1/S1900075 es.pdf
- CEPAL. (2020). Panorama Fiscal de América Latina y el Caribe 2020. https://www.cepal.org/es/publicaciones/4573 0-panorama-fiscal-america-latina-caribe-2020-la-politica-fiscal-la-crisis-derivada
- CIAT. (2022). Chile IVA a los Servicios Digitales debuta con recaudación de más de 62 millones de dólares en su primer periodo trimestral de declaración y pago. https://www.sii.cl//noticias/2020/221020noti 02er.htm
- Durdu, M. (2020). Digital Service Tax in the European Union and Turkey Practice. Istanbul Law Review, 78(4), 1959-1988. https://doi.org/10.26650/mecmua.2020.78.4. 0008
- Faúndez-Ugalde, A., Vidal Olivares, A., Olguín Romero, A., & Molina Marisio, F. (2021). Tributación en la economía digital: Propuestas impulsadas por la OCDE y el impacto frente a los principios rectores de todo sistema tributario. Revista chilena de derecho y tecnología, 10(1), 9-28. http://dx.doi.org/10.5354/0719-2584.2021.53385
- Gelepithis, M., & Hearson, M. (2021). The politics of taxing multinational firms in a digital age. Journal of European Public Policy. https://doi.org/10.1080/13501763.2021.1992
- Jiménez, P., & Podestá, A. (2021). Tributación indirecta sobre la economía digital y su potencial recaudatorio en América Latina. Panamá: CIAT.
- Kling, R., & Lamb, R. (1999). IT and organizational change in digital economies. ACM SIGCAS Computers and Society,





29(3).

- https://doi.org/10.1145/572183.572189
- Klein, D., Ludwig, C. A., & Spengel, C. (2022). Taxing the digital economy: Investor reaction to the european commission's digital tax proposals. National Tax Journal, 75(1), 61-92. https://doi.org/10.1086/717518
- KPMG. (2022). TaxNewsFlash-Digital Economy - KPMG Global. https://home.kpmg/xx/en/home/insights/201 9/06/tnf-digital-economy0.html
- Kristel, G., Garcés, S., Tamara, E., Guevara, C., Luis, H., Veloz, P., Ivette, L., Mora, B., Ruben, C., & Villalva, C. (2020). Análisis de la disminución de la base imponible del impuesto a la renta por efecto de las tiendas virtuales en el Ecuador. RILCO. https://www.eumed.net/rev/rilcoDS/06/tiend a-virtual-ecuador.html
- Macas-Acosta, G., Macas-Lituma, G., & Vergara-Romero, A. (2022). The Internal and External Factors That Determined Private Investment in Ecuador 2007–2020. Economies, 10(10), 248. https://doi.org/10.3390/economies10100248
- Mpofu, F. Y. (2022). Taxing the Digital Economy through Consumption Taxes (VAT) in African Countries: Possibilities, Constraints and Implications. International Journal of Financial Studies, 10(3), 65. https://doi.org/10.3390/ijfs10030065
- OECD. (2018). Marco Inclusivo de BEPS Una respuesta global a un problema global. www.oecd.org/tax/beps/
- Pylypenko, O., Matviienko, H., Putintsev, A., Vlasenko, I., & Onyshchuk, N. (2022). Government tax policy in the digital economy. Cuestiones Políticas, 40(72), 279-296.
  - https://doi.org/10.46398/cuestpol.4072.15

- Romero-Subia, J. F., Jimber-del-Río, J.A., Ochoa-Rico, M. S., & Vergara-Romero, A. (2022). Analysis of Citizen Satisfaction in Municipal Services. Economies, 10(9), 225. https://doi.org/10.3390/economies10090225
- SRI. (2022). Registro, declaración y pago del IVA por parte de los prestadores de servicios digitales no residentes en el Ecuador intersri Servicio de Rentas Internas. Servicio de Rentas Internas. https://www.sri.gob.ec/registro-declaracion-y-pago-del-iva-prestadores-de-servicios-digitales-no-residentes
- Statista. (2022). Ingresos por los servicios de video-on-demand (VoD) en algunos países de América Latina y el Caribe en 2021. Https://Es.Statista.Com/Estadisticas/581829/Ingresos-Servicios-Vod-America-Latina-Pais/
- Stebbins, R. (2001). Exploratory Research in the Social Sciences Robert A. Stebbins Google Libros (Vol. 48). SAGE Publications. https://acortar.link/11poBc
- U.S. Securities and Exchange Commission. (2022). EDGAR Company Filings. https://Www.Sec.Gov/Edgar/Searchedgar/Companysearch.html
- Vishnevsky, V. P., Goncharenko, L. I., Dementiev, V. V., & Gurnak, A. V. (2022). The principles of taxation for digital economy. Terra Economicus, 20(2), 59-71. https://doi.org/10.18522/2073-6606-2022-20-2-59-71
- Vergara-Romero, A., Jimber-del-Río, J-A., & Márquez-Sánchez, F. (2022).Food Autonomy within Food Sovereignty: Evidence from a Structural Model. 1141. Agronomy, 12(5). https://doi.org/10.3390/agronomy12051141



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## Alternative ways of organizing distance practical classes for future music art teachers

## Альтернативні Способи Організації Дистанційного Навчання для Проведення Практичних Занять Майбутніх Учителів Музичного Мистецтва

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Written by:
Pavlo Yalovskyi<sup>117</sup>
https://orcid.org/0000-0002-4116-1674
Ruslana Lotsman<sup>118</sup>
https://orcid.org/0000-0002-8500-1402
Kateryna Yurieva<sup>119</sup>
https://orcid.org/0000-0001-6403-9973
Iryna Parfentieva<sup>120</sup>
https://orcid.org/0000-0001-6201-4916
Alla Sokolova<sup>121</sup>
https://orcid.org/0000-0003-0284-7320

#### Abstract

The aim of this research was to find and study the effectiveness of alternative ways of organizing practical classes in Musical Art for Pedagogy students in the context of distance learning. The research involved semi-structured interviews with teachers and student surveys using a closeended questionnaire. The content analysis of the answers revealed the main difficulties that the teachers had to deal with when organizing distance practical classes in Musical Art. It also enabled finding optimal ways to eliminate them. Their high efficiency was verified by conducting a pedagogical experiment. It was established that traditional methods of education are impossible during distance learning. They need to be replaced with new ones that are effective in technology-mediated learning. It was found that music teachers used special software, digital musical instruments as an alternative to traditional ones. Teachers also recorded video instructions and video lessons, and students recorded video reports on the work done.

#### Анотація

Метою даного дослідження було знайти та лослілити ефективність альтернативних способів організації практичних занять з музичного мистецтва при дистанційній формі навчання студентів-педагогів. У роботі проведено напівструктуровані інтерв'ю з викладачами та опитування студентів за допомогою закритої анкети. Контент аналіз відповідей виявив основні труднощі, з якими мали справу викладачі при організації практичних занять з музичного мистецтва дозволив листанційно. Також знайти оптимальні шляхи їх вирішення. Їх висока ефективність перевірена шляхом проведення педагогічного експерименту. Встановлено, що під час дистанційного навчання традиційні способи організації навчання неможливі. Їх необхідно замінити на нові, ефективні при технологічно-опосередкованому навчанні. Виявлено, що викладачі музики використовували спеціальні програмні забезпечення, цифрові музичні інструменти як

<sup>&</sup>lt;sup>121</sup> Doctor of Pedagogical Sciences, Professor of the Musical Art Department, Faculty of Arts, H.S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.



<sup>&</sup>lt;sup>117</sup> Doctor of Philosophy, Senior Lecturer at the Department of Art Disciplines and Methods of Teaching, Faculty of Pre-school and Primary Education, History and Art, Kremenets Taras Shevchenko Regional Academy of Humanities and Pedagogy, Kremenets, Ukraine.

<sup>118</sup> PhD of Pedagogical Science, Doctoral Student of Anatolij Avdievskyi Faculty of Arts, M. Dragomanov Ukrainian State University, Kviv, Ukraine

Kyiv, Ukraine.

119 Doctor of Pedagogical Sciences, Professor of the Musical Art Department, Faculty of Arts, H.S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.

<sup>&</sup>lt;sup>120</sup> Doctor of Philosophy in Education, Associate Professor, Department of Musical Arts, Faculty of Pedagogy and Psichology, V.O. Sukhomlynskyi National University of Mykolaiv, Mykolaiv, Ukraine.



Teachers began to use new teaching methods. Distance learning yielded higher learning outcomes than the traditional one, as technologies are interesting to students and contribute to their motivation and engagement. This article was reduced to the study of the peculiarities of the organization of distance learning of students — future teachers of Musical Art. Further research should be aimed at identifying ways of organizing Music Art education in general secondary educational institutions.

**Keywords:** learning technologies, digital competence, synchronous online learning, elearning, music education.

### Introduction

The pandemic of 2020 made people to revise the forms and methods of interaction with each other. Many workers in various industries have switched to teleworking. The education system has also undergone changes. Traditional offline learning had to be replaced by distance learning in a short period of time (Bork-Hüffer et al., 2021). This extreme shift to distance learning has caused a number of problems (Śliwa et al., 2021). Many curricula required direct contact of students with teachers, as well as the use of educational equipment that remained in the educational institutions. The problem that students didn't have musical instruments at home become one of the obstacles comprehensive practical training of future music teachers. The teachers of music education institutions were tasked to find ways of conducting practical classes in musical art different from the traditional ones because of the need to maintain distance. The analysis of the academic literature in the Literature Review section found that little attention was paid to the methods of organizing practical classes in musical art. Therefore, the aim of this research was to identify and study the effectiveness of alternative methods of conducting practical classes in the context of distance learning by using the example of future music teachers.

This aim involved the fulfilment of the following research objectives:

1) Study the experience of organizing practical classes by Music Art teachers in the context of distance learning.

альтернативу традиційним. Також педагоги записували відеоінструкції та відеоуроки, а студенти відеозвіти з проробленої роботи. Викладачі почали застосовувати нові методи навчання. Таким чином, при дистанційній формі було досягнуто вищих результатів навчання, ніж при традиційній, оскільки технології цікаві студентам і сприяють їх мотивації та залученню. У даній роботі обмежилися дослідженням особливостей організації дистанційного навчання студентів, майбутніх учителів музичного мистецтва. Подальші дослідження варто спрямувати на виявлення способів організації навчання з музичного мистецтва в закладах загальної середньої освіти.

Kevwords: технології навчання, цифрова компетентність, синхронне онлайн-навчання, електронне навчання, музична освіта.

- 2) Conduct a pedagogical experiment to study the impact of proposed alternative methods of organizing practical classes on the level of practical professional skills of future music teachers.
- Study the degree of students' satisfaction with alternative ways of organizing distance learning when conducting practical classes in musical art.

The next section after the Literature Review contains a description of the methods used to achieve the aim. The obtained results are presented in the Results section: the list and frequency of problems that the music teachers faced during the organization of distance learning, the strategies and methods used to achieve the desired result. Provisions according to which distance learning was organized during the pedagogical experiment are also indicated. The results of a survey of students on their impression of the experiment are presented. The results of the final assessment of students' academic performance are also provided. The obtained results were discussed, and the conclusions were drawn.

## Literature Review

In general, music education is important not only for cultural and educational development, but also for social, psychological (Gül, 2021) and intellectual one (Labunets et al., 2021). Therefore, it should be continuous regardless of extreme situations. Distance education can be an alternative to the traditional form of education. It

is not new. The first attempts at distance education were recorded as early as in 1728. Newspapers were the main means of education then, later — a radio, followed by a TV, a computer (Gül, 2021). However, only 2% of students studied remotely in 2016. The year of 2020 marked by a forced mass transition to this form of education (Bork-Hüffer et al., 2021). It was not immediately effective (Śliwa et al., 2021). Teachers acquired digital competences in a few weeks, learned new teaching methods and adapted their courses to online learning under extreme conditions (Schiavio et al., 2021). For example, more than 5,000 courses were prepared and posted on the online platform in two weeks in one of the Chinese universities (Cicha et al., 2021). The following online platforms were used: Zoom, Google Meet, Microsoft Teams, Cisco WebEx (Wannapiroon et al., 2022), Edmodo (Aslan et al., 2021), and Skype. Besides, TV channels, social networks (Facebook and YouTube) (Aslan et al., 2021) etc. were also used. Teachers acquired good experience that will be used after the pandemic (Cicha et al., 2021) by integrating online learning methods into the traditional form (Wannapiroon et al., 2022). They learned how to use conferencing, which made it possible to involve students and teachers from anywhere in the world in learning and teaching, regardless of the location of the university. However, the issue of organizing practical classes in the context of forced distancing remains poorly studied.

Researchers proved that the distance education had a number of advantages. In addition to solving the problem of distancing participants in the educational process, it provided flexibility of time (Vladova et al., 2021) and flexibility of learning (Zuo et al., 2021), opened the possibility of sharing and using materials via the Internet for many teachers, for example, Educational Information Network (Aslan et al., 2021). ICTs have provided teachers with resources that can be reused and quickly disseminated (Bolívar-Chávez et al., 2021). The organization of distance learning required solving many problems. For example, it is impossible to organize practical classes for students of some majors: doctors, artists, chemists, physicists, instrumental musicians (Cicha et al., 2021; Joseph & Trinick, 2021). The lack of instant feedback resulted in more time spent learning the same material online compared to traditional learning (Aslan et al., 2021). Teaching music has its own specifics. It involves both theoretical (Solfeggio, Music History) and practical (Instrumental Mastery, Ensemble) courses (Biasutti et al., 2021). The latter requires the synchronous interaction of participants in the educational process, the availability of musical instruments, and a place for learning (Aslan et al., 2021). Synchronous distance learning often depends on the quality of the Internet connection, as well as on the availability of ICTs. Besides, not all students have the necessary musical instruments at home. Therefore, the transition to the distance learning necessitated a search for alternative to traditional ways of teaching and learning. For example, the following were used: brainstorming, dramatization, exhibitions and demonstrations (Aslan et al., 2021), project method (Francom et al., 2021; Rolinska, 2021), flipped classroom (Ng et al., 2022), coaching (De Bruin, 2021), portfolio (Okay, 2021) and others. Various computer software for teaching music (Bresler, 2021), for example, Sibelius (Bolívar-Chávez et al., 2021), or Simply Piano — an application for learning to play the piano (Mei & Yang, 2021) - began to be used. They made it possible to focus on the elements of musical temperaments, intervals, chords, being more effective than in-class work and providing a student-centred approach (Rolinska, 2021; Ishhenko et al., 2022). ICTs help in audition, reading scores, listening to musical instruments (Ng et al., 2022).

The success of online learning depends on the digital literacy of the participants in the educational process (Willermark & Gellerstedt, 2022). A teacher must have high-level digital competence (Polhun et al., 2021) and be self-efficacious (Ogodo et al., 2021). The development of these competencies also depends on the community (urban, rural) in which the educational institution where the teacher works is located (Johnson & Stanley, 2021).

The transition to online education was facilitated by the creation of teacher communities and providing assistance to teachers through briefings and special courses. Their main objectives were the following (Wannapiroon et al., 2022): teach how to analyse course content, use videoconferencing, conduct classes online, create and manage online resources, develop tests, create videos, evaluate learning outcomes remotely, etc.

The effectiveness of distance education also depends on the acceptance of technologies by the participants of the educational process (Vladova et al., 2021). The technology acceptance model (TAM) is most often used to determine it (Zuo et al., 2021). Although students and pupils were born in the era of technological development and are familiar with virtual reality, this does not



mean that they have sufficient digital literacy for online learning (Joseph & Trinick, 2021).

Anderson (2022) discusses the CLASP model of music education, which includes the following components: composition (C), literature studies (L), audition (A), skill acquisition (S), and performance (P). Degé (2021) offers reading musical notations, distinguishing by ear, memorizing musical and auditory excerpts, training fine motor skills and gaining knowledge about the structure of music. Abeles et al., (2021) proposed to include the study of popular music in the programme. They advised to use international opportunities for professional development of popular music education — Musical Futures – in order to improve the teacher qualifications. Music teachers are taught to play, improvise, compose, model, and perform on modern musical instruments (guitar, electric bass, drums, and keyboard instruments). The access to digital resources containing lesson plans, popular music arrangements, and playback tracks is also provided. Those include the Berklee PULSE Music Method website or the LKR Jam Zone (Abeles et al., 2021) and CanDoMusic (Calderón-Garrido et al., 2021).

In musical practice, it is not so much the quantity, but the quality that matters (How et al., 2022), as well as the direct teacher-student interaction (Degé, 2021). The teacher must see all the details (finger movement, posture, pose) (Biasutti et al., 2021). Therefore, finding ways to make this practice qualitative is an important task for the researchers.

## Methodology

## Design

This study was conducted in three stages.

The first stage involved semi-structured interviews conducted in order to find out the difficulties music teachers encountered in the organization of practical classes in music during the transition to distance education and the ways they found to overcome them.

The second stage provided for a pedagogical experiment, which involved the introduction of the most effective methods and strategies for organizing practical music classes in the experimental group.

The third stage involved the evaluation and comparison of the level of students' achievements in the control and experimental groups, as well as a questionnaire survey of students of the experimental group to determine the effectiveness of the proposed methods of organizing practical music classes in the context of distance learning.

## **Participants**

The sample included 48 Music Art teachers who work with students majoring in Secondary Education (Music Art). Of them, 28 participated in semi-structured interviews and shared their impressions and experiences of organizing practical music classes during distance learning. There were 20 teachers who participated in the pedagogical experiment. The sample also included 390 students, of which 193 were included in the control group and 197 in the experimental group. All survey participants gave written consent. Interviews questionnaire survey were conducted online.

### Instruments

The study involved semi-structured interviews that included open-ended questions and a questionnaire containing closed-ended questions.

## Data collection

The degree of influence of the methods of organizing practical music classes proposed during the experiment was assessed remotely using videos recorded by students with their own performance (singing, playing a musical instrument). A total of 390 videos were recorded, analysed and rated.

## Analysis of data

All responses were recorded and then coded. Content analysis was used to process the obtained data. All responses were divided into the following categories:

- problems that arose during practical music classes in the context of distance learning;
- strategies and methods used to organize practical music lessons in the context of distance learning;
- technologies used in music lessons during online learning.

A survey of students of the experimental group was also conducted using a questionnaire with 10 questions. Each of them was evaluated on a fivepoint Likert scale, where 1 is a very low level, ..., 5 is a high level. Reliability was tested by Cronbach's alpha. It ranged from 0.74 to 0.86, which indicates its acceptability. Mathematical



methods of statistical data processing were used to analyse the obtained results: Cohen's kappa coefficient, Pearson's chi-squared test. Statictica application software was also used.

### Ethical criteria

Participation in the pedagogical experiment was voluntary and free of charge. The questionnaire survey was conducted in compliance with all ethical standards. There was enough time allocated for responses.

#### Results

The results of the interviews showed that music teachers encountered a number of obstacles during the transition to distance learning (Table 1). Not all students had a musical instrument at home. Synchronous accompaniment was not possible because of the online platforms and the quality of the Internet connection. It was impossible to play with four hands, conduct rehearsals of the ensemble, choir, etc. for the same reason.

**Table 1.**Problems that arose during practical music classes in the context of distance learning

Item No.	Questions	Number of positive answers, %
1	Was your competence enough to conduct practical music classes online?	64 %
2	Were the online music classes effective?	52 %
3	Was it necessary to change the content of the educational programme in connection with the transition to distance education?	8 %
4	Was it possible to involve students in online learning?	72 %
5	Was it possible to provide quality feedback?	54 %
6	Did students quickly adapt to distance learning?	86 %
7	Was it possible to achieve the necessary synchronization during the music class?	6 %
8	Was there a lack of direct interaction with the student when correcting posture, pose, hand position, finger movements, etc.?	92 %
9	Was it possible to achieve synchronicity in the joint performance of musical works and songs?	4 %

An analysis of the responses received during a semi-structured interview regarding the strategies and methods used by teachers to organize practical music classes during distance learning showed that the transition to online learning made music teachers to analyse the content of the course and change the forms and methods of teaching (Table 2). Face-to-face teaching and learning was replaced by online

video conferences. Teachers had to quickly learn how to use online educational resources and how to manage students' distance learning. They developed PowerPoint presentations, educational videos, online tests for knowledge control, etc. for this purpose. Teachers developed some educational materials themselves, and also used publicly available ones, for example, on YouTube.

**Table 2**. Strategies and methods used to organize practical music classes during distance learning

Item No.	Questions	Number of positive answers, %
1	What educational resources did you use?	
	created by myself	56 %
	online resources publicly available on YouTube	68 %
2	Have you developed new teaching methods that you can use when you return to offline education?	74 %
3	Has the number of hours allocated for independent work of students changed in connection with the transition to distance education?	48 %

Students had to compensate for the lack of musical instruments at home, for example, by performing rhythmic exercises with improvised materials available in every home. Students created rhythmic patterns by clapping, stomping, clicking, hitting

buckets or tables with spoons, using cereal in containers and the sounds of a mobile phone, hair dryer, mixer, newspaper, package, etc. Solfeggio skills were formed during distance learning through online music reading exercises.





The inability to achieve synchronicity during online performance was compensated by working in small groups. Working in small groups was also effective because students could support each other using the Learning by Teaching method. They also replaced the synchronous performance of works with a video recording of the performance of one's part while reproducing the records of all others.

Teachers often made video recordings of their own performance of certain works, while intentionally making mistakes that students had to identify and analyse. That was followed by showing a video with the correct performance of the work. Professional musicians were invited to the meeting whenever possible, who conducted an online workshop.

The teachers had to review the content of the courses and make them shorter, because online learning required more time to achieve the educational goal than offline learning. It was also necessary to take into account the individual capabilities of students and the educational needs of each student.

Besides, students were engaged in self-education most of the study time. For this purpose, conditions were created that encouraged to engage in independent work.

The teachers evaluated the level of students' musical and performance abilities (singing, playing musical instruments) based on videos recorded by students with their own performance. This enabled obtaining the most accurate (in the context of distance learning) reproduction of the sound of the student's voice or the sound of the instrument. It was also possible to assess the student's posture, pose, finger placement and movement, etc. Students had to make video recordings using additional cameras and tripods. Having received and analysed the video, the teacher could demonstrate it during an online meeting and stop at those fragments where the student made mistakes, review it together again and find the right ways to solve problems.

The most difficult thing was to organize the practical classes of the ensemble. However, none of the interviewed teachers cancelled these classes. The vast majority used alternate superimposition of sounds by students on the already existing recording of other parts (Table 3). Then they got a unified sounding. They also each played their part separately, while the others listened, evaluated and commented. Teachers and students learned to listen without interrupting and then give clear, concise and accurate comments.

Table 3. Technologies used in music classes during online learning

Item No.	Questions	Number of positive answers, %
1	Did you use technological devices during online music classes?	96 %
2	Did students actively use music technology in class?	82 %
3	Did the quality of the sound affect the effectiveness of the music class?	94 %
4	What websites and computer programmes did you use during distance learning?	
	Viber	74 %
	Google Classroom	26 %
	Zoom	62 %
	E-mail	86 %
	GoogleMeet	44 %
	Remind	12 %
	School Status	10 %
	YouTube	96 %
	Schoology	8 %
	Skype	22 %
5	What support did you receive during distance learning?	
	free consultations	64 %
	webinars	72 %
	advice from colleagues	86 %
	online forums or Facebook groups	36 %
6	Do you have enough skills to work with virtual musical instruments so that you can provide support for students when working with them?	56 %

Zoom, GoogleMeet, Skype, Viber were used for video conferences. Social networks were used to exchange information. Special software was also used, for example, hearing training programmes (GNU SOLFEGE, Functional Ear Trainer, etc.).

The teachers also used various software. For example, Sibelius - a programme for editing, recording and listening to musical works. Augmented reality technologies and their connection with musical instruments were also used. The Simply Piano application was widely used, which enables to simulate playing the piano, with the possibility of providing instant feedback on the correctness of the user's performance. It can be applied by users with different skill levels.

Digital music technologies were widely used in music classes, for example, electronic musical instruments. They provided students with an opportunity to learn how to edit music and create new sounds. Students showed interest in creating electronic music of various styles and genres. Computers enabled students to notate, write and edit music. Besides, Internet resources made it possible to listen and read music. The teachers also used Lola (n.d.), Swing (n.d.), AEC (n.d.) and Music Paint Machine (n.d.) projects.

Therefore, a pedagogical experiment was introduced taking into account the previous experience of music teachers. Teaching and learning was organized online during the experiment training according to the following provisions:

- organization of video conferences using one of the online platforms in groups of up to 8 people;
- 2) use of additional cameras, tripods, microphones during video conferences;
- making video recordings of instructions and samples of the performance of musical works by the teacher and their subsequent study by students;
- 4) video recording by students of their performance of musical works and further analysis of the work by the teacher during an online meeting with students;
- 5) use of digital musical instruments;
- use of mobile applications and application software designed for the development of practical abilities and skills in performing musical works.

The conducted pedagogical experiment had a positive effect on the results of student learning (Table 4). It contributed to the performance growth by 6% compared to the control group.

**Table 4.** *Results of the final control of the students' performance levels* 

The average score of students on a 100-point scale				
Control group		Experimental group		
Before the experiment	After the experiment	Before the experiment	After the experiment	
71	76	71	82	

The student questionnaire survey showed that the use of online digital music technologies, mobile applications and special software during practical classes contributes to enhancing students' their involvement, motivation to study, encourages independent learning. As a result, their performance increases. During distance learning, students gained experience working with ICT tools and learned to work with educational platforms. They quickly adapted to online learning. Almost 88% consider distance education effective. And 56% believe that it promotes the development of creative thinking. At the same time, 70% of respondents believe that distance learning is as effective as traditional learning for the development of practical skills and abilities.

The use of mathematical methods revealed that the weighted sum of squared deviations of the group means from the total mean, that is, the intergroup variance d, ranged from 283 to 1465 because of the heterogeneity of the sample. The latter is connected with conducting a pedagogical experiment in different groups, which included students from different higher educational institutions.

In turn, the root mean squared deviation from the mean value for the same questions of the questionnaire in different educational institutions of the sample was different. The intergroup variance, which describes the fluctuations of these groups, and the intragroup variance, which describes the fluctuations caused by random factors not taken into account, are unequal, which indicates that the null hypothesis is not valid.



Using the Pearson's chi-squared test for the results of the questionnaire, it was found that the values of  $\chi_1^2$  obtained for the experimental group are greater than  $\chi_{12}^2$  calculated for the control group. So, it can be stated that there is a certain connection between the methods used in classes in the experimental group during the development of practical skills in music in the context of distance learning and the acquired abilities and skills.

The Cohen's kappa coefficient calculated in the experimental group was 1.03. This indicates high effect of using the methods and approaches proposed during the pedagogical experiment. In the control group, which was taught using the traditional method, the Cohen's coefficient was 0.5, indicating a medium effect.

## Discussion

The findings of Cicha et al. (2021) showed that students felt comfortable with online learning. Their self-efficacy was high. They could use computer programmes for learning. The experiment carried out in this work confirmed the high interest of future music teachers in using the latest technologies during online practical classes.

In the spring of 2020, more than 93% of teachers completed advanced training in the organization and management of online learning and acquired additional skills necessary to increase their digital competence (Wannapiroon et al., 2022). Teachers started using digital documents (presentations, e-books, quizzes) and mobile applications (Aslan et al., 2021). This study showed that, most often, teachers used the advice of colleagues and webinars when organizing practical music classes online.

Online learning requires more time spent on the organization of training by teachers and on the completion of assignments by students (Zuo et al., 2021). More than 81% of students think so. Mobile devices (tablets, smartphones) were the most popular ICT tools used by 67% of students. Despite the transition to a new form of education, 68% of teaching methods have been preserved, having been slightly modified. Lectures and seminars have moved from classrooms to online platforms. And only 20% of students indicated the new learning methods such as online quizzes and real-time comments (Zuo et al., 2021). This study found that 74% of teachers used new methods during distance learning.

The disadvantages of online learning include: the negative impact of this form on the physical condition of teachers and their students (more than 67% of students complained of vision problems), more than 45% complained of feeling alienated, and about 44% — of poor Internet connection (Zuo et al., 2021). The teachers also noted that distance education enables achieving only part of the educational goals (Gül, 2021) and does not provide an opportunity to carry out an effective evaluation of the obtained learning outcomes. It was proved that educational information presented in the form of a video contributes to the achievement of learning outcomes. However, it was impossible to fully implement practical activities during distance learning. Ensembles experienced the greatest negative impact of the pandemic among all instrumental learning (Calderón-Garrido et al., 2021). Music Theory was the least impacted. It was impossible to implement singing, rhythm exercises and any group work in music classes because of the impossibility of synchronization. In this study, this problem was solved by recording individual parts.

It was established (Mei & Yang, 2021) that the use of augmented reality, ICT-based music learning tools (smart musical instruments) in classes contributed to the growth of students' interest in learning, the improvement of learning outcomes, and the development of mental and research skills. As this study showed, 56% of teachers are ready to work with virtual musical instruments. Teachers of all countries without exception, even the most digitized, such as experienced problems organization of online learning (Willermark & Gellerstedt, 2022). The 2020 pandemic forced 54% of surveyed teachers and 45% of their students to develop their digital competence.

The experience gained during the pandemic made enabled drawing conclusions regarding the organization of effective teaching and learning in emergency situations (Francom et al., 2021). For this purpose, it is necessary to create a plan for using the online education in extreme situations. It is mandatory to have communication channels. A survey (Francom et al., 2021) showed that 62% of respondents were provided with computers or tablets, and 66% had Internet access. It was also proved that regardless of the subject being taught, teachers tried to find new methods, which can be effective during distance learning. Despite all the difficulties of distance learning, the teachers are going to use the acquired knowledge during traditional learning as well.

This study has practical value, as it complements the existing teaching methods, which have already been used during practical classes in Musical Art, with new ones that can be used in distance learning.

The research was reduced to the issues of organization of practical work only for future Music Art teachers. The peculiarities of schoolchildren's music education were not considered. Therefore, further research should focus on finding alternative ways of organizing distance learning in Musical Art for students of general secondary educational institutions.

#### **Conclusions**

In extreme conditions, such as natural disasters, pandemics or wars, ensuring the continuity of the educational process is crucial. For this purpose, the search for effective forms and methods of teaching and learning is carried out. Distance education is the most acceptable under such conditions. As this research showed, it can provide high results with a successful selection of organizational methods and training methods. So, it is worth using digital technologies when organizing practical classes in Musical Art. For example, digital musical instruments, special application software. It is also effective to use video instructions developed by teachers or selected and used from the list publicly available on social networks. Asynchrony, which cannot be avoided when using Internet communication and technical means, was the main problem in the organization of group work online. Therefore, an alternative to conducting synchronous work in groups was to make video recordings of individual parts of each performer separately, and then carry out their subsequent group analysis by students and the teacher. The results of this study are useful for teachers of higher educational institutions when organizing practical classes in Musical Art in the context of distance learning.

## **Bibliographic references**

- Abeles, H., Weiss-Tornatore, L., & Powell, B. (2021). Integrating popular music into urban schools: Assessing the effectiveness of a comprehensive music teacher development program. International Journal of Music Education, 39(2), 218-233. https://doi.org/10.1177/0255761420986220
- AEC (n.d.). INTERMUSIC (2017-2020) Erasmus+ strategic partnership. Retrieved from https://www.aec-

- music.eu/projects/current-projects/intermusic-
- Anderson, A. (2022). Understanding curriculum design in the perceptions and practices of classroom music teachers in the lower secondary school in England. British Journal of Music Education, 39(2), 157-168. https://doi.org/10.1017/S0265051721000152
- Aslan, S. A., Turgut, Y. E., & Aslan, A. (2021). Teachers' views related the middle school curriculum for distance education during the COVID-19 pandemic. Education and Information Technologies, 26, 7381-7405. https://doi.org/10.1007/s10639-021-10587-z
- Biasutti, M., Philippe, R. A., & Schiavio, A. (2021). Assessing teachers' perspectives on giving music lessons remotely during the COVID-19 lockdown period. Musicae Scientiae, 26(3), 585–603. https://doi.org/10.1177/1029864921996033
- Bolívar-Chávez, O. E., Paredes-Labra, J., Palma-García, Y. V., & Mendieta-Torres, Y. A. (2021). Educational technologies and their application to music education: An action-research study in an Ecuadorian university. Mathematics, 9(4), 412. https://doi.org/10.3390/math9040412
- Bork-Hüffer, T., Kulcar, V., Brielmair, F., Markl, A., Immer, D. M., Juen, B., Walter M. H. & Kaufmann, K. (2021). University Students' perception, evaluation, and spaces of distance learning during the COVID-19 pandemic in Austria: What can we learn for post-pandemic educational futures? Sustainability, 13(14), 7595. https://doi.org/10.3390/su13147595
- Bresler, L. (2021). What formative research can do for music education: A tool for informed change. Visions of Research in Music Education, 16(5), 24. Retrieved from https://opencommons.uconn.edu/cgi/viewcontent.cgi?article=1780&context=vrme
- Calderón-Garrido, D., Gustems-Carnicer, J., & Faure-Carvallo, A. (2021). Adaptations in conservatories and music schools in Spain during the COVID-19 pandemic. International Journal of Instruction, 14(4), 451-462.
  - https://doi.org/10.29333/iji.2021.14427a
- Cicha, K., Rizun, M., Rutecka, P., & Strzelecki, A. (2021). COVID-19 and higher education: First-year students' expectations toward distance learning. Sustainability, 13(4), 1889. https://doi.org/10.3390/su13041889
- De Bruin, L. R. (2021). Instrumental music educators in a COVID landscape: A reassertion of relationality and connection in teaching practice. Frontiers in Psychology,





- 11, 624717. https://doi.org/10.3389/fpsyg.2020.624717
- Degé, F. (2021). Music lessons and cognitive abilities in children: How far transfer could be possible. Frontiers in Psychology, 11, 557807.
  - https://doi.org/10.3389/fpsyg.2020.557807
- Francom, G. M., Lee, S. J., & Pinkney, H. (2021). Technologies, challenges and needs of K-12 teachers in the transition to distance learning during the COVID-19 pandemic. TechTrends, 65(4), 589-601. https://doi.org/10.1007/s11528-021-00625-5
- Gül, G. (2021). Teachers' views on music education practices in secondary education in distance education during the COVID-19 pandemic process. Journal of Education in Black Sea Region, 6(2), 95-111. https://doi.org/10.31578/jebs.v6i2.235
- How, E. R., Tan, L., & Miksza, P. (2022). A PRISMA review of research on music practice. Musicae Scientiae, 26(3), 675-697. https://doi.org/10.1177/10298649211005531
- Ishhenko, Y. A., Kharchenko, T. H., Myhovych, I. V., Didkivska, I. A., & Viktorina, O. M. (2022). The qualification improvement model for teachers of philology on the use of cloud technologies in pedagogical activity. Apuntes Universitarios, 12(3), 199–215. http://dx.doi.org/10.20952/revtee.v15i34.171 66
- Johnson, D. C., & Stanley, A. M. (2021). A pilot project exploring rural classroom music teachers' perceptions and practices via an online professional development course. Journal of Music Teacher Education, 30(3), 99-114.
- https://doi.org/10.1177/10570837211008658 Joseph, D., & Trinick, R. (2021). 'Staying apart yet keeping together': Challenges and opportunities of teaching during COVID-19 across the Tasman. New Zealand Journal of
- Educational Studies, 56(2), 209-226. https://doi.org/10.1007/s40841-021-00211-6 Labunets, V. M., Topchieva, I. O., Bondarenko, A., Bondarenko, D., & Wei, L. (2021). An
- A., Bondarenko, D., & Wei, L. (2021). An innovative approach to training students of art pedagogical universities. Linguistics and Culture Review, 5(S2), 619-632. https://doi.org/10.21744/lingcure.v5nS2.141
- LoLa (n.d.). Low latency av streaming system. Retrieved from https://lola.conts.it/
- Mei, B., & Yang, S. (2021). Chinese pre-service music teachers' perceptions of augmented reality-assisted musical instrument learning. Frontiers in Psychology, 12, 609028. https://doi.org/10.3389/fpsyg.2021.609028

- Music Paint Machine. (n.d.). The Music paint machine. Retrieved from http://www.musicpaintmachine.be/
- Ng, D. T., Ng, E. H., & Chu, S. K. (2022). Engaging students in creative music making with musical instrument application in an online flipped classroom. Education and information Technologies, 27(1), 45-64. https://doi.org/10.1007/s10639-021-10568-2
- Ogodo, J. A., Simon, M., Morris, D., & Akubo, M. (2021). Examining K-12 teachers' digital competency and technology self-efficacy during COVID-19 pandemic. Journal of Higher Education Theory & Practice, 21(11), 13-27
  - https://doi.org/10.33423/jhetp.v21i11.4660
- Okay, H. H. (2021). Turkish Instrument Educators' Distance Education Experiences Related to Instrument Training during the COVID-19 Pandemic. World Journal on Educational Technology: Current Issues, 13(2), 201-222. https://10.18844/wjet.v13i2.5690
- Polhun, K., Kramarenko, T., Maloivan, M., & Tomilina, A. (2021). Shift from blended learning to distance one during the lockdown period using Moodle: Test control of students' academic achievement and analysis of its results. In Journal of Physics: Conference Series, 1840(1), 012053. Retrieved from https://iopscience.iop.org/article/10.1088/17 42-6596/1840/1/012053
- Rolinska, H. H. (2021). Using project method for the purpose of educating future music teachers. Linguistics and Culture Review, 5(S2), 387-400. https://doi.org/10.21744/lingcure.v5nS2.136
- Schiavio A., Biasutti, M. & Antonini Philippe, R. (2021) Creative pedagogies in the time of pandemic: A case study with conservatory students. Music Education Research, 23(2), 167-178, https://doi.org/10.1080/14613808.2021.1881
- Śliwa, S., Saienko, V., & Kowalski, M. (2021). Educating students during a pandemic in the light of research. International Journal of Educational Development, 87, 102504. https://doi.org/10.1016/j.ijedudev.2021.1025
- Swing. (n.d.). Synergic work incoming new goals for higher education music institutions. Retrieved from https://www.swingproject.eu/
- Vladova, G., Ullrich, A., Bender, B., & Gronau, N. (2021). Students' acceptance of technology-mediated teaching-how it was



054

- influenced during the COVID-19 pandemic in 2020: A study from Germany. Frontiers in Psychology, 12, 636086. https://doi.org/10.3389/fpsyg.2021.636086
- Wannapiroon, P., Nilsook, P., Jitsupa, J., & Chaiyarak, S. (2022). Digital competences of vocational instructors with synchronous online learning in next normal education. International Journal of Instruction, 15(1), 293-310.
  - https://doi.org/10.29333/iji.2022.15117a
- Willermark, S., & Gellerstedt, M. (2022). Facing radical digitalization: Capturing teachers' transition to virtual classrooms through ideal type experiences. Journal of Educational Computing Research, 60(6), 1351–1372. https://doi.org/10.1177/07356331211069424
- Zuo, M., Ma, Y., Hu, Y., & Luo, H. (2021). K-12 students' online learning experiences during COVID-19: Lessons from China. Frontiers of Education in China, 16(1), 1-30. https://doi.org/10.1007/s11516-021-0001-8



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# Full-scale military invasion of the Russian Federation of Ukraine as a factor of social transformations in higher education

## Full-Scale Military Invasion of the Russian Federation of Ukraine as a Factor of Social Transformations in Higher Education

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#### **Abstract**

The aim of the research is to study social transformations in the field of higher education under the impact of the factor of military invasion. Methods: The method of expert evaluations; Testing and questionnaire survey using the following methods: Life Stressor Checklist-Revised (LSC-R), Organizational Assessment Instrument Analysis of statistics was carried out using t-Student, φ-Fisher tests; multidimensional methods of data analysis (regression, factor, correlation). The results: The study showed that the average indicator for the sample is in the range of high values (M =  $518 \pm 604$ ). In general, neuro-psychological tension (NT) in the aggregate sample is in the medium range (M=58.4±7.32). The results demonstrate a typologically pronounced level of trust as a psychological phenomenon among students in the wartime (Trust Index: M=98.3±5.27). Conclusions: The results of the study showed a significant impact of the hostilities on the social

## Анотація

Метою дослідження є вивчення суспільних трансформацій у сфері вищої освіти під впливом чинника військового вторгнення. Метод: Метод експертних оцінок; Тестування та анкетне опитування з використанням таких методів: контрольний список життєвих стресів-переглянутий (LSC-R), інструмент оцінки організаційної культури (ОСАІ). Аналіз статистичних даних проводився за допомогою критеріїв t-Стьюдента, φ-Фішера; багатовимірні методи аналізу даних (регресійний, факторний, кореляційний). Результати: Дослідження показало, середній показник по вибірці знаходиться в діапазоні високих значень (M = 518 ± 604). Загалом нервово-психічне напруження (НТ) у сукупній вибірці знаходиться в середньому діапазоні  $(M=58,4\pm7,32)$ . Результати демонструють типологічно виражений рівень довіри як психологічного феномену серед студентів воєнного часу (Індекс довіри:  $M=98,3\pm5,27$ ). Висновки: Результати

<sup>&</sup>lt;sup>126</sup> PhD in Pedagogy, Associate Professor, Department of Preschool and Primary Education, T.H. Shevchenko National University "Chernihiv Colehium", Chernihiv, Ukraine.



<sup>&</sup>lt;sup>122</sup> Doctor of Pedagogical Sciences, Professor, Department of Pedagogy and Humanitarian Disciplines, Academy of the State Penitentiary Service, Chernihiv, Ukraine.

<sup>&</sup>lt;sup>123</sup> Doctor of Pedagogical Sciences, Professor, Department of Pedagogy and Humanitarian Disciplines, Academy of the State Penitentiary Service, Chernihiv, Ukraine.

<sup>&</sup>lt;sup>124</sup> Doctor of Pedagogical Sciences, Professor, Department of Pedagogy and Methods of Teaching History and Social Disciplines, T.H. Shevchenko National University "Chernihiv Colehium", Chernihiv, Ukraine.

<sup>&</sup>lt;sup>125</sup> PhD in Pedagogy, Associate Professor, Department of Pedagogy and Humanities, Academy of the State Penitentiary Service, Chernihiv, Ukraine.

transformations of the educational sector. This is due to changes in organizational needs and psychological stress. Prospects: Further research should be aimed at studying the driving forces of social transformation in the wartime. It is also necessary to develop a methodological framework for monitoring and evaluating such changes.

**Keywords:** Russian aggression, innovative education, psychological state, psychology of stress, academic performance.

### Introduction

Relevance. The full-scale invasion of the Russian federation of Ukraine on February 24, 2022 changed the fate of not only millions of Ukrainians, but also the system of social relations. Social transformations of higher education in the wartime are aimed at creating an effective environment for the functioning of higher education as a socially important institution (Davydenko & Volkov, 2022). The research focus in this work is studying the transformations of social relations between the participants of the educational process. This work is designed to study the main trends of such transformations (Trubavina et al., 2022).

The term "transformation" means quantitative changes and qualitative transformations that are caused by the complex interaction of external and internal development factors. The substance of social transformation is the emergence of a new quality of interpersonal relations (Unceta et al., 2021).

Social transformations cover various spheres of the life of society. Society adapts to environmental changes in the course of social transformations through the creation of programmes, projects, goals, technologies, resolution of contradictions, etc. (Ziegler, 2018).

It should be noted that the analysis and identification of general principles and properties of social transformations allows for a more detailed study of the socio-historical society. development of Therefore. transformation is not just a change in the content and functions of a certain sphere of society, but also a condition for optimizing the changes themselves (Robertson & Nestore, 2022). The development of a new communicative space provides an opportunity to improve the functioning of higher education institutions (HEIs) in view of the threat to the lives of

дослідження показали значний вплив бойових дій на соціальні перетворення освітньої галузі. Це пов'язано зі зміною організаційних потреб і психологічним стресом. Перспективи: Подальші дослідження мають бути спрямовані на вивчення рушійних сил суспільних перетворень у воєнний час. Необхідно також розробити методичну базу для моніторингу та оцінки таких змін.

**Ключові слова:** російська агресія, інноваційна освіта, психологічний стан, психологія стресу, успішність.

participants in the educational process (Ma & Wright, 2022).

The virtualization of social space is a form of radical transformation of the educational sector during active hostilities. Virtualization is supposed to mean a set of processes noticeable at all levels of the social world, which are based on the creation on top of or instead of material reality (Lavrysh et al., 2022). The main task of modern higher education is to determine and create the necessary learning conditions that contribute to revealing opportunities and enhancing students' learning (López & Bernal, 2019).

Unexplored issues. As there has been no military conflict of this scale on the territory of modern Europe for a considerable time, a number of issues remain unexplored. The problem of organizing the educational process during hostilities resulting and the social transformations remains an important unexplored issue.

The aim of the research is to study the impact of the hostilities on social transformations in the field of higher education in Ukraine. Objectives/questions

- 1. Examine the psychological state of respondents for anxiety.
- 2. Explore the psychological climate within groups of respondents for signs of social transformations.

## Literature Review

Current philosophical and psychological literature provides numerous classifications of spheres (spaces) of an individual's vital activity. They meet the general needs of a person and manifest themselves in almost all people without



exception. A person simultaneously enters many such spheres (spaces) throughout life. Their influence on personality development undergoes significant changes. A particular sphere (or spheres) of life becomes leading, dominant for a person in certain periods of his/her life, having the greatest influence on the process of his/her development. Others become only a background for development. Camarena (2022) studies the sphere of students' life. The author focuses on the social transformation of the student sphere of activity in the wartime conditions.

Sysoieva (2022) considered the issues of social transformations during the hostilities. The author analysed the reaction of Polish scientists to the war of the Russian Federation against Ukraine. The author cites forecasts, expectations and concerns of Polish colleagues regarding the functioning of various spheres of social and political life, including education. The author surveyed numerous works of Polish researchers on this issue.

The work of Schulten et al., (2022) is important for this study. Today, maintaining a sufficient level of students' academic performance during the war has become an important challenge for pedagogical science. According to the authors of the article, this problem is caused not only by the stressful factor and a disturbed integrity of the educational process, but also by the lack of an appropriate methodological framework. The authors insist on significant differences in the organization of training during martial law compared to the organization of educational institutions in any other critical conditions.

For this study, it is necessary to reveal the substance of the concept of "pedagogical conditions". The works of Trubavina et al., (2020) and Enriquez Layos (2022) summarize the works of modern researchers on the problem of developing pedagogical conditions at this stage. The authors of both works define the studied concept as a set of possibilities of the educational, as well as the material and spatial environment, the use of which increases the effectiveness of the pedagogical process as a whole. From the author's point of view, pedagogic conditions in the above studies are interpreted as a set of necessary methods, organizational forms, and material capabilities.

They contribute to increasing the effectiveness of professional training, the formation professional competence in the course of learning to a certain extent.

Schröder and Krüger (2019) study the problems of professional training in general. The authors note that there is no clear definition of the term "professional training". As a summary of the above-mentioned researchers, "professional training" is defined as a set of components aimed at the development of a specialist's personality in the chosen professional field.

Hwang et al., (2020) explored academic mobility in their work, that is, the right and real opportunity of students to get an education in different parts of the world educational space according to their own interests and educational needs. It also depends on the opportunities for obtaining education in the homeland and on the need of the economy and social sphere of their countries for personnel of a certain profession, which has always existed. According to the authors, academic mobility has been actively implemented in recent decades, in particular in the course of the Bologna process. In times of globalization, it becomes the most important factor in the improvement of the entire world educational space, which is covered by Al-Haija and Mahamid (2021).

Gordon et al., (2017) study occupational adaptation. Being involved in the working process, a person usually does not do it in isolation from other people, becoming part of a specific professional community, a professional society. The authors note that almost any labour is joint in content and form in a society. Most professional tasks that a person fulfils require collective efforts. Ekici (2021) stated that in the study. This thesis acquires is especially relevant in the current context, when the complexity of professional tasks is rapidly and steadily increasing.

### Methods

Research design

The research was conducted in several stages. Table 1 presents the research stages, their description and time limits.

**Table 1.** *Research stages* 

No.	Name of the stage	Time limits	Description
1.	Programming	March – September 2022	Determining the general population of the sample.  Determining the aim and objectives of the research.  Selection of research methods and tools.
2	<b>Information</b> September – June 2022		Distribution of respondents into control and experimental groups. Study of the general level of stress tolerance in respondents using the <i>Life Stressor Checklist–Revised (LSC-R)</i> test. The <i>Organizational Culture Assessment Instrument (OCAI)</i> test was used to examine the respondents' organizational culture profiles. The <i>method of expert evaluations</i> on the respondents' academic performance was applied. Statistical processing of research results.
3	Analytical	June – September 2022	Results processing. Summarizing research results.

Source: created by the authors

### Sampling

The experimental work was carried out at the National Pedagogical Dragomanov University (Kyiv). The study involved 120 students and 60 teachers (80 women and 100 men) from different university departments. Temporary displacement in connection with active hostilities was the criterion for selecting participants. Such a sample enables covering a sufficient number of respondents to ensure a high level of validity of the obtained results. The expert group consisted of 20 employees of the Department of General Pedagogy.

### Data collection

- 1. The method of expert evaluations was used in the research. It enabled to objectively and impartially assess the impact of the war factor on the students' academic performance and anxiety level.
- 2. Testing and the questionnaire survey were used in the research. The Life Stressor Checklist–Revised (LSC-R) technique (McLean, 1979) helps measure respondents' general level of stress tolerance. Two scales were analysed when interpreting the results in accordance with the objectives of the study, that showed how stressful the factor of active hostilities is. The high severity of the stressogenic impact of war is determined by the maximum score of 20 points.

Accordingly, the limits (ranges) of the levels were determined: from 20 to 10 points - highly stressful; from 9 to 7 points - medium; from 6 to 1 point - low. The Cronbach's alpha coefficient for this technique is 0.71.

The Test Methodology For Assessing The Level Of Trust In An Organization (Shaw, 1997) provides insight into the existing and preferred profile of organizational culture, which is based on four competing values. Flexibility and discreteness are separated from stability and control; as well as external focus and integration is contrasted with external focus and differentiation. The Cronbach's alpha coefficient for this technique is 0.76.

The questionnaire consists of six items that reflect important aspects of the organization (characteristics of the organization as a whole; general leadership style in the organization; HR management; the connecting essence of the organization; strategic goals; success criteria). Each item includes four statements characteristic of a certain type of culture, between which 100 points must be distributed. The respondent evaluates the existing OK and the desired one. The aspects that need to be changed for the most efficient operation of the organization are determined.

### Data analysis

The array of variables obtained in the course of psychodiagnostic procedures was subjected to statistical processing. Parametric and non-parametric methods of comparison according to the t-Student,  $\phi$ -Fisher tests; multidimensional methods of data analysis (regression, factor, correlation) were applied: The Cronbach's alpha reliability coefficient indicates the internal consistency of the test items. The Cronbach's alpha coefficient is calculated by the formula:



$$\frac{N}{N-1} \left( \frac{\sigma_x^2 - \sum_{i=1}^N \sigma_{Y_i}^2}{\sigma_x^2} \right) \qquad (1)$$

where  $\sigma_x^2$  – total test score variance;  $\sigma_{Y_i}^2$  – variance of i.

**Tools** 

Data processing was performed using SPSS-20. Calculation results are presented in relative values (%).

Ethical criterion

All research methods comply with academic principles of professionalism, integrity, verifiability, absence of contradictions, respect for general human rights and freedoms. All

respondents and experts gave informed consent to personal data processing and publication of research results. The work of experts is based on the principles of respect for the individual, scientific knowledge, impartiality and non-bias. Tools and techniques have been tested for reliability and validity.

### Results

The McLean scale was applied to determine the level of emotional tension of an individual involved in organizational processes. The study showed that, as a whole, the average indicator for the sample is in the range of high values ( $M = 518 \pm 604$ ), that is, there are systemic stressors of maladaptive influence among the respondents (Table 2).

**Table 2.** *Indicators of measured organizational stress in general for the total sample and differentiated by subgroups (students, teachers)* 

		Students (%)	Teachers (%)
	High	55	34
General indicators of stress	Medium	45	66
General indicators of stress	Low	-	-
	$M\pm\sigma$	51.8±6.04	52.0±4.04
	High	55	45
Acceptance of Other People's	Medium	34	34
Values Scale	Low	11	11
	$M\pm\sigma$	51.8±6.45	51.7±6.10
	High	40	22
A attacker and Doodnaticity Cools	Medium	37	70
Activity and Productivity Scale	Low	13	8
	M±σ	50.8±5.54	51.4±5.99

Source: calculated by the authors

The analysis, differentiated by the stress severity levels, showed that the majority demonstrated Type "A" behaviour (more than 50 total points), that is, a high stress level. Stress tolerance (Type "B" behaviour - less than 39 points) was not found. A third of the surveyed showed Type "AB" behaviour (40-49 points), which is characterized by a medium level of susceptibility to various stress syndromes, including the risk of professional burnout. A comparison of groups of students and teachers showed that teachers are susceptible to the influence of organizational stress factors - almost two thirds, which is significantly ( $p \le 0.05$  at  $\phi$ \*=1.62) higher than among students.

According to the Acceptance of Other People's Values, the average score was 8.8 ( $\sigma$ =2.06), which corresponds to the range of the medium

level. However, more than a third of the respondents had indicators in the range from 20 to 10 points, that is, the lack of empathy for others has a significant impact on their experience of stress. Almost half of the respondents feel the medium level of stressfulness of this factor. This is characterized by developed abilities of tolerant attitude towards other's values from organizational interaction. Teachers are most susceptible to the impact of this factor. If there are no differences in the indicators of the comparison of high-level severity shares in the "teachers" - "students" subgroups, they are obvious in the medium-level stress severity shares. The share of such persons is much higher in the group of teachers than in the group of students (with  $\phi$ \*=1.65 p $\leq$ 0.05).

There were 15% of students willing to accept each other's values, to show tolerance for other opinions and views, while only a few respondents among teachers showed this ability (with  $\phi$ \*=2.06 p<0.02). In average group values, the indicator is in the range of a high level (M=11.7±2.25), and there are no differences in the groups of students and teachers (M=11.6 and 11.8, respectively). If the content of indicators that determine the essence of this stress factor is considered, it can be stated that most respondents show a high level of psycho-emotional stress. Respondents are worried about keeping their job

or place of study. It is noted that a high level of stress according to the Activity and Productivity Factor reliably prevails in the group of teachers  $(\phi^*=1.63; p\leq 0.05)$ .

In general, neuro-psychological tension (NT) in the total sample is in the range of a medium level (M=58.4±7.32). A comparison of data on the distribution of measured indicators in groups of respondents differentiated by the "teacher" – "student" categories shows that teachers (45%) and men (35%) feel excessive stress the most (Table 3).

**Table 3.** *Indicators of the level of neuro-psychological tension in the surveyed groups* 

Comme	M±σ	NEURO-PSYCHOLOGICAL TENSION LEVELS				
Groups		Excessive	Moderate	Weak		
TOTAL FOR TH	HE SAMPLE					
All (N)	$58.4 \pm 7.32$	24	55	21		
Students	52.6±6.18	18	60	22		
Teachers	$64.2\pm8.48$	45	39	16		
Difference	t=2.09; p <.05	φ*=2.35; p≤.008	φ*=1.67; p≤.04	-		
Men	65.4±8.24	35	57	8		
Women	51.4±6.41	20	54	26		
Difference	t=4.11;p<.001	φ*=1.57; p≤.05	-	φ*=1.64; p≤.05		

Source: tabled by the authors

A quarter of the surveyed women experience weak MS, which can be noted as a differentiating feature by gender ( $p \le 0.05$  at  $\phi^*=1.64$ ). Moderate MS was found in more than half of the respondents (54.8%), and this condition is significantly more pronounced among students (compared to the group of teachers:  $p \le 0.04$  at  $\phi^* = 1.68$ ). Only a fifth of the respondents showed insignificant, weak MS.

We also used an integral indicator - the Trust Index (TI) to obtain focused data on the state of

interpersonal trust in the surveyed groups. It was defined as the sum of values on four scales. The obtained results give grounds to talk about a typologically pronounced moderate level of mutual trust as a psychological phenomenon among students in the wartime (Trust Index: M=98.3±5.27). In the percentages of expressiveness of the levels, the given average indicator is formed by: 4% of the values that are in the range of a high level; 81% – in the range of the moderate level; 15% – in the range of low values (Table 4).

**Table 4.** *Indicators of expressiveness of organizational trust in general by sample* 

I., 1:	Trust parame	T I J						
Indicators	Trust	Consistency	Effectiveness	Care	Trust Index			
$M{\pm}\sigma$	29.2±5.39	$28.3\pm9.00$	27.6±6.44	$18.2 \pm 7.12$	98.3±5.27			
Levels (%)								
Low	8	44	15	65	4			
Moderate	37	19	40	26	81			
High	66	37	45	9	15			

In terms of differentiation by the parameters that make up the integral indicator of trust, it is noted that the first parameter has the most pronounced high level. It is defined as true trust ("Trust"): with an average indicator for the group of 29.2±5.39, a high level was found by 66% of





respondents. Less than 10% of respondents have low values. People's performance of their duties and obligations, defined by the concept of Shaw (1997) as "Performance", ranks second  $(M=27.6\pm6.44)$  in terms of severity. Its high level is typical for almost half of the respondents, and low indicators are pronounced only in less than one fifth of the respondents. Interpersonal trust is the least pronounced in terms of the "Care" imperative. More than half of the respondents believe that organizations pay little attention to people's well-being and their needs. The average score on this scale is in the range of low values  $(M=18.2\pm7.12)$ . Less than one-tenth of the respondents had high indicators, while a quarter - moderate level. The analysis showed that dissatisfaction with interpersonal relations and the psychological climate in teams, determined by the indicators of the socio-psychological module in the space of organizational problems, is negatively related to the Trust Index (r=-0.216), the true trust imperative (r = 0.334).

The expert group noted a drop in the academic performance level. The experts agree that the stressful factors of war have a significant impact on academic performance.

### Discussion

In addition to the stressogenic factor, the armed aggression causes an urgent need for social modernization of society. Eichler and Schwarz (2019) discusses this need in their work. Kurepin (2022) considers war from the point of view of the main factor inhibiting the development of society. Despite this, one cannot but agree with the statement that the extraordinary conditions of war encourage the search for creative answers to complex issues of social development.

An individual's ability to successfully resist stress is one of the essential manifestations of developed psychological resources, systemic determination, and authenticity. The authors of such works as Galego et al., (2022) and Moreno-Guerrero et al., (2021) point to the need for an internal resource to carry out social transformations. In this regard, the analysis of the specifics of experiencing and overcoming stress by the subjects of different organizational processes can be considered as an actual direction of research in modern psychology and pedagogy. Psychological resources formed and developed to counteract the destructive impact of stress are an essential element of personal competence, which provides, together with other psychological and professional competences, a set of conditions for social transformations of society. Instead, the authors Giuri et al., (2019) and Monteiro et al., (2021) provide the findings that confirm the destructive power of the stressogenic factor. The authors of the former and latter studies note that the development of social transformations is possible only under favourable political and economic conditions. It should only be noted that there was no relevant experience of analysing social transformations in a large European country during the war until these days. This can largely cast doubt on previously obtained research results.

The educational process is currently characterized by increased stress reactions and neuro-psychological tension. This marks an insufficient ability to communicate, to accept other people's values, to adequately assess the situation without harming one's health and work capacity. Jurado et al., (2020) describe these factors in their study. Pronounced stressogenic provides poorly influence developed opportunities to accept other people's values, anxiety about keeping one's job, low satisfaction with it. The authors established a positive neuro-psychological relationship between tension and organizational stress. According to the authors, this indicates that stress is systemic affecting neuro-psychological, nature, personal-psychological regulators of behaviour. Gordon et al., (2017) describe the great negative role of stress for academic performance.

It should be noted that academic performance, together with the level of cohesion for this study, are markers of social transformations in the educational sector. That is why studying stress became an important task for this work. Nazarenko et al., (2022) and Shelever et al., (2022) studied the development of education in Ukraine in the course of hostilities. The authors focused on the main driving factors of the development of education in new realities. The authors of the second paper see the development of distance education as a mechanism for overcoming the existing crisis.

The theoretical significance of the study is coverage of the issue of social transformation of the educational sector from a new perspective. It is currently important to talk about the mechanisms and methods of studying such transformations during the acute phase of the war. The reliability and soundness of the research results are ensured by the clarity of the original methodological foundations for the study of the communicative competence of the individual. The mechanisms of social transformations in the higher education are theoretically substantiated.

The combination of theoretical and empirical concepts of the study of social transformations corresponds to the aim, objectives and logic of the study. The practical significance is the demonstration of the methodology of the study of social transformations through the study of team cohesion and the study of stress resistance of participants in the educational process.

The main limitations were both organizational and instrumental in nature. There are no direct indicators for monitoring the social transformation of both society as a whole and its individual The following areas. recommendations can be offered regarding the adaptation of the educational process in the wartime based on the obtained data and the aim of the study. First of all, it is necessary to implement advanced pedagogical technologies proved by the world experience as the most effective in order to accelerate the social transformation of higher education. The status of remote education during hostilities should be enshrined at the legislative level methodological recommendations for its use should be developed. It is necessary to work out the experience of distance education of the past develop methodological vears and recommendations for establishing the process of adaptation and socialization of students during their studies.

### **Conclusions**

The relevance of the study is determined by the need to study social transformations in the field of higher education in the context of a full-scale military invasion. Special focus in the study was made on the issue of the transformation of relations between the participants of the educational process as a direct indicator of the social transformation of higher education. Conclusions based on the obtained results. The armed aggression of the Russian Federation against Ukraine in the eyes of the entire civilized world looks like a barbaric act not against a single country, but against the entire civilization. Such a treacherous act of cruelty affects the process of social transformations in all areas of the country's life, including higher education. The active phase of the war caused tectonic movements inside of societies and changed its axiological orientations. Therefore. participants of the educational process in higher education became more hardened in overcoming the psychological and organizational crisis. Students, as well as teachers, are united by a single goal: establishing a normal life in times of war. Applications. The obtained results will be of interest to representatives of public authorities, civil society, managers of educational institutions and all those who are interested in qualitative changes in the field of education. First of all, the results of this research may be of interest to direct participants in the educational process — students and teachers of higher educational institutions. Prospects for further research. Further research should focus on the study of favourable conditions for social transformations of higher education. It is also necessary to develop a methodical framework for monitoring such transformations in real time.

### Bibliographic references

- Al-Haija, Y. A., & Mahamid, H. (2021). Trends in Higher Education under Neoliberalism: Between Traditional Education and the Culture of Globalization. Educational Research and Reviews, 16(2), 16-26.
- Camarena, K. (2022). Ukraine: Keeping education alive. Independent Education, 52(2), 12-13.
- Davydenko, N., & Volkov, A. (2022). The War in Ukraine: The Crisis of Innovative Startup. Economy and society, 38. https://doi.org/10.32782/2524-0072/2022-38-55
- Eichler, G., & Schwarz, E. (2019). What Sustainable Development Goals Do Social Innovations Address? A Systematic Review and Content Analysis of Social Innovation Literature. Sustainability, 11(2), 522. https://doi.org/10.3390/su11020522
- Ekici, M. (2021). A systematic review of the use of gamification in flipped learning. Education and Information Technologies, 26, 3327–3346. https://doi.org/10.1007/s10639-020-10394-y
- Enriquez Layos, P. (2022). Higher Education Support EU Education Solidarity Group for Ukraine. Italy: European Training Foundation.
  - https://policycommons.net/artifacts/2481351/higher-education-support-eu-education-solidarity-group-for-ukraine/3503569/
- Galego, D., Moulaert, F., Brans, M., & Santinha, G. (2022). Social innovation & governance: a scoping review. Innovation: The European Journal of Social Science Research, 35(2), 265-290. https://doi.org/10.1080/13511610.2021.1879 630
- Giuri, P., Munari, F., Scandura, A., & Toschi, L. (2019). The strategic orientation of universities in knowledge transfer activities. Technological Forecasting and Social Change, 138, 261-278.





- https://doi.org/10.1016/j.techfore.2018.09.03
- Gordon, A., Becerra, L. D., & Fressoli, M. (2017). Potentialities and constraints in the relation between social innovation and public policies: some lessons from South America. Ecology and Society, 22(4), 2. https://doi.org/10.5751/ES-09493-220402
- Hwang, G.J., Chang, S.C., Song, Y., & Hsieh, M.C. (2020). Powering up flipped learning: An online learning environment with a concept map-guided problem-posing strategy. Journal of Computer Assisted Learning, 37(2), 429-445. https://doi.org/10.1111/jcal.12499
- Jurado, P., Moreno-Guerrero, A.J., Marín-Marín, J.A., & Soler, R. (2020). The term equity in education: A literature review with scientific mapping in web of science. International Journal of Environmental Research and Public Health, 17(10), 3526. https://doi.org/10.3390/ijerph17103526
- Kurepin, V. M. (2022). The war in Ukraine: how to support anxious people. Phantom anxiety syndrome. Theses of Reports from the Annual Thematic "Round Table": Global Challenges, Threats of Desertification of Territories, International Obligations of the Countries of the World, 21-22. https://dspace.mnau.edu.ua/jspui/handle/123 456789/11217
- Lavrysh, Y., Lytovchenko, I., Lukianenko, V., & Golub, T. (2022). Teaching during the wartime: Experience from Ukraine. Educational Philosophy and Theory, 1-8. https://doi.org/10.1080/00131857.2022.2098 714
- López, M., & Bernal, C. (2019). Teaching in the Network Society: analysis of the digital competences of students in Education at the University of Cádiz. International Journal of Educational Research and Innovation (IJERI), 11, 83-100. https://bit.ly/2LIr8F0
- Ma, Y., & Wright, E. (2022). Expanding flexible citizenship: Chinese international school students and global mobilities for higher education. Social Transformations in Chinese Societies, (ahead-of-print). https://doi.org/10.1108/STICS-05-2022-0010
- McLean, A. A. (1979). Work Stress. Boston, MS: Addison-Wesley. https://books.google.com.ua/books/about/Work\_Stress.html?id=CNSRAAAAIAAJ&rediresc=y
- Monteiro, S., Isusi-Fagoaga, R., Almeida, L., & García-Aracil, A. (2021). Contribution of Higher Education Institutions to Social Innovation: Practices in Two Southern

- European Universities. Sustainability, 13(7), 3594. http://dx.doi.org/10.3390/su13073594
- Moreno-Guerrero, A. J., Soler-Costa, R., Marín-Marín, J. A., & López-Belmonte, J. (2021). Flipped learning and good teaching practices in secondary education. Comunicar, 29(68), 107-117. https://doi.org/10.3916/C68-2021-09, https://www.revistacomunicar.com/index.ph p?contenido=detalles&numero=68&articulo =68-2021-09
- Nazarenko, Y., Kogut, I., & Zheriobkina, T. (2022). Education and war in Ukraine (February 24–April 1, 2022). Analytical Center Cedos. https://cedos.org.ua/researches/osvita-i-vijna-v-ukrayini-24-lyutogo-1-kvitnya-2022/
- Robertson, S. L., & Nestore, M. (2022). Education cleavages, or market society and the rise of authoritarian populism? Globalisation, Societies and Education, 20(2), 110-123. https://doi.org/10.1080/14767724.2021.1955 662
- Schröder, A., & Krüger, D. (2019). Social Innovation as a Driver for New Educational Practices: Modernising, Repairing and Transforming the Education System. Sustainability, 11(4), 1070. http://dx.doi.org/10.3390/su11041070
- Schulten, K., Gonchar, M., & Engle, J. (2022). Teaching resources to help students make sense of the war in Ukraine. The New York Times. https://www.nytimes.com/2022/03/16/learning/lesson-plans/teaching-resources-to-help-students-make-sense-of-the-war-in-
- Shaw, R. B. (1997). Trust in the balance: building successful organizations on results, integrity, and concern. San Francisco: Jossey-Bass

ukraine.html

- Shelever, O. V., Koval, H. V., & Fizer, V. S. (2022). Online education: prospects and problems in the context of military conflicts. Scientific publications of the Department of Psychology, 49(2), 184-188. https://dspace.uzhnu.edu.ua/jspui/handle/lib/44110
- Sysoieva, S. O. (2022). The War in Ukraine. Reflections of Polish Scientists. Bulletin of the National Academy of Pedagogical Sciences of Ukraine, 4(1). https://doi.org/10.37472/v.naes.2022.4120
- Trubavina, I., Kalina, K., Tsybulko, L., Mohylova, N., & Ivanchuk, V. (2022). The Value and Ways of Providing Continuous Education in the Conditions of the State of Martial. Collection of theses of the 4th



- International Scientific and Practical Conference "Value Landmarks in The Modern World: Theoretical Analysis and Practical Experience", 340-343. http://dspace.tnpu.edu.ua/bitstream/123456789/25631/1/Czinnisni\_orienturu\_2022.pdf#page=341
- Trubavina, I., Tsybulko, L., Mohyliova, N., & Ivanchuk, V. (2020). The theoretical foundations of the regional training program for teachers' professional development «Education in conflict». The International Conference on History, Theory and Methodology of Learning. SHS Web of
- Conferences, 75, 02005. https://doi.org/10.1051/shsconf/2020750200
- Unceta, A., Guerra, I., & Barandiaran, X. (2021).

  Integrating Social Innovation into the Curriculum of Higher Education Institutions in Latin America: Insights from the Students4Change Project. Sustainability, 13(10), 5378. Retrieved from https://doi.org/10.3390/su13105378
- Ziegler, R. (2018). Social innovation and the capability approach. Atlas of Social Innovation, 36-39. https://acortar.link/x2GTum



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# The efficiency of language teaching through integration in future philologists' foreign language competence formation

# Ефективність навчання мові через інтеграцію у формуванні іншомовних компетенцій майбутніх філологів

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Written by:
Yuliia Bakai<sup>127</sup>
https://orcid.org/0000-0002-9744-274X
Lidiia Nanivska<sup>128</sup>
https://orcid.org/0000-0002-8922-8241
Olha Semenets<sup>129</sup>
https://orcid.org/0000-0002-7259-7788
Yuliia Hetman<sup>130</sup>
https://orcid.org/0000-0002-9501-3888
Viktoriia Pryma<sup>131</sup>
https://orcid.org/0000-0001-7331-9950

#### **Abstract**

The article aims at determining the impact of integrated methods and approaches to language learning on the development of various students' foreign language competencies. Methods. The research involved the questionnaire method, the method of expert evaluations, and the method of the development of language competences. The obtained data were processed by the methods of mathematical statistics. Results. It was found that the indicator "grammar knowledge" had a high correlation with "vocabulary" (r = 0.73) and "listening skills" (r =0.69), which indicates the tendency of students with a high level of grammar knowledge to enhance their vocabulary and improve their listening skills. Some other indicators such as "writing skills" and "speaking skills" also had a fairly high correlation with "listening skills". Summarizing Conclusion. the conducted research on the effectiveness of language through integration when building learning philologists' future foreign language

### Анотація

Мета. Стаття націлена на визначення того, наскільки успішно використання інтегрованих методів та підходів до навчання мови впливає на розвиток різних іншомовних компетенцій студентів. Методи. Під час дослідження було використано метод анкетування, метод експертних оцінок, метод аналізу сформованості мовних компетенцій. Обробка результатів отриманих даних відбувалася методами математичної статистики. Результати. Було встановлено, що показник «граматичні знання» мав високу кореляцію з «лексичним запасом» (r = 0.73) та «навичками аудіювання» (r = 0.69), що свідчить про схильність студентів з високим рівнем граматичних знань до збільшення свого лексичного запасу та покращення навичок аудіювання. Деякі інші показники, такі як «навички письма» та «навички говоріння», також мали достатньо високу кореляцію з аудіювання». Висновки. «навичками Підсумовуючи дослідження проведене

<sup>&</sup>lt;sup>131</sup> PhD in Philology, Associate Professor of the Department of Foreign Philology and Translation, Faculty of Trade and Marketing, Kyiv National University of Trade and Economics, Kyiv, Ukraine.



<sup>127</sup> Assistant Lecturer at the Department of General Education, College of Education and Languages, Lebanese French University, Kurdistan Region of Iraq.

<sup>&</sup>lt;sup>128</sup> Doctor of Philosophy in the field of Education/Pedagogy, Lecturer of the Department of Foreign Languages and Military Translation, Hetman Petro Sahaidachnyi National Army Academy, Lviv, Ukraine.

<sup>&</sup>lt;sup>129</sup> PhD in Philology, Head of the Department of Foreign Philology, Educational and Scientific Institute of Philology and Journalism, V. I. Vernadskyi Tavria National University, Kyiv, Ukraine.

<sup>&</sup>lt;sup>130</sup> PhD in Philology, Associate Professor of the Department of English Philology, Faculty of Foreign Languages, H.S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.

competences, it can be stated that this approach is effective and contributes to the improvement of language learning quality in higher educational institutions. Prospects. Future research could focus on different languages and students' nationalities.

**Keywords:** competences, educational method, education, innovations.

### Introduction

The urgency of the topic is due to the fact that future philologists need to study language on the basis of integrative approach to be competent in intercultural communication. This makes it possible to be competitive in a globalized context. Language learning through integration is an effective means of foreign language competence formation, which helps students learn knowledge and skills more successfully in the context of culture and social environment. Furthermore, language learning integration helps to keep students motivated to master the language and make the learning more engaging and meaningful (Vanichvasin, 2019).

A number of different approaches to language learning were examined, but integration in the formation of foreign language competences is one of the most effective methods. The need for intercultural communication has increased worldwide, as well as the requirement for future philologists to be fluent in the language, to be fully aware of the culture and traditions of the native speakers (Zadorozhna, 2022).

If conducted effectively, language learning can undeniably ensure success in intercultural communication and future career. From this standpoint, integration in foreign language competences formation becomes a key factor in enhancing the effectiveness of language learning (Yeromenko, 2022).

One of the main aspects of integration is mastering the language in the framework of country's culture and history. Such an approach allows students to study not only the language more thoroughly, but also to familiarize themselves with country's traditions and history. Hence, students have every chance to better understand cultural differences that can affect language and identify adequate ways of interaction in diverse situations (Huz, 2022).

ефективності навчання мов через інтеграцію у формуванні іншомовних компетенцій майбутніх філологів, можна стверджувати, що цей підхід  $\epsilon$  дієвим і сприя $\epsilon$  покращенню якості навчання мови у вищих навчальних закладах. Перспективи. Майбутні дослідження можуть зосередитися на різних мовах та національностях студентів.

**Ключові слова:** компетенції, освітня методика, освіта, інновації.

What should be stressed here is that yet another aspect is the use of multimedia resources and technologies in education. Consequently, this approach allows students to learn the language in real-time conditions and communicate with native speakers, making learning more effective and engaging. Moreover, their use allows creating more diverse and interesting tasks that stimulate students to actively engage in learning the language and practically apply it (Pak et al., 2022).

Furthermore, in the formation of foreign language competences, integration involves the students' engagement with the projects and research related to culture and language of the specific country. Consequently, this allows students to develop not only language but also research and analytical skills. As part of projects and research, students have the opportunity to address in more detail the history, traditions, literature and other aspects of country's cultural background, which facilitates the understanding of language and culture as a whole (Kalinina et al., 2022).

It is worth mentioning that one of the fascinating aspects of effective language learning through integration is active speaking practice. Students need to be able to use the language in different situations and with different interlocutors so that they can develop their linguistic and intercultural competences. Therefore, it is important to organize a variety of communicative tasks that contribute to the development of students' language skills (Chernysh et al., 2020).

# Unresolved issues

In educational institutions for decades language learning was conducted through integration and was addressed by a number of scholars, some aspects of this technology still remain unresolved. One of the unexplored issues is the influence of integration on the development of





students' speaking competence. Although there are studies that show the positive results of utilizing this method, it has not been studied in detail how integration affects the development of certain language aspects such as grammar, vocabulary, phonetics, etc. (Baumert et al., 2020).

A number of other unaddressed issues are the impact of integration on the development of students' cultural competence. A language is closely related to country's culture and traditions, so it is crucial not only to learn the language, but also to be aware of the cultural characteristics of the nation. That said, integration helps students not only to learn the language, but also to familiarize themselves with the culture of the country where it is used. This allows students to facilitate understanding other people and also enhance their chances of successful intercultural communication (Korol & Levytska, 2022).

The effectiveness of language learning through integration is not restricted to consolidation of language mastery and communicative skills, but also in the formation of foreign language and cultural competences indispensable for future philologists. Probing deeper into this topic can help to develop more effective teaching methods and improve the quality of education in the field of linguistics.

The purpose of the article is to evaluate the effectiveness of an integrated approach to language learning as a means of forming foreign language competencies of future philologists.

# Tasks / research questions

- Research into the effectiveness of integrated methods and approaches to language learning in the formation of grammatical knowledge in philology students.
- Study of the integrated approach impact on philology students' lexis development.
- Research of methods and approaches to language learning that contribute to the development of listening and speaking skills in philology students.

### Literature Review

Currently, pedagogical science faces the task of educating the new generation of competitive staff, which is why a broad number of studies are available today aimed at finding effective foreign methods of forming language competence. We can single out among them the work of Alibekova and Urinboyeva (2020),

which regards the use of communicative methods in language learning. The authors note the need for full immersion of students in a foreign language environment. This method, according to the authors, will yield effective results. When studying different approaches to the formation of foreign language competence, one should not limit oneself to the experience of teaching a particular language. The authors highlighted the peculiarities of foreign language competence formation during the study of the German language.

For the purposes of this study, the seminal article by Naidesh and Bilokopyta (2022) should be mentioned. The authors make an attempt to reveal the major universals with the help of which it is possible to form foreign language competence regardless of the chosen foreign language. With that in mind, they note that on the basis of these universals, it is possible to develop effective methods of teaching foreign languages that will be effective for students of various various specialties and in educational institutions. The authors also conducted an analysis of different approaches to learning foreign languages and determined that the integrated approach is one of the most effective for the formation of foreign language competence in students regardless of their specialty. In this context, Uztosun's research (2021) is worth highlighting, in which the author considers various methods' effectiveness as regards acquiring foreign language competences. It should be mentioned that numerous works are available that are devoted to independent language acquisition, for instance. Serdiuchenko's research (2021). Among other enquiries, the authors drew attention to the importance of self-regulation in language learning and its influence on the development of foreign language competences. Shen (2021) probes into the features of self-regulation and self-motivation in the process of learning foreign vocabulary. The author analyzes the problems faced by students during their studies. Likewise, Nuritdinovna (2022) highlights not only the issue of motivation, but also the importance of immersion in the language environment. According to the author, it is this mechanism that helps to overcome cognitive resistance during training. An article by Pak et al., (2022) deals with the key methods of organizing language learning. In particular, it is held that learning a foreign language should begin in childhood, given that this process is far more effective in the early stages of development. It is worthy of note that Fayzullaev and Eshnazarova (2019) examine pedagogical methods in general, which are of utmost importance when choosing language learning methods depending on the purpose of learning. In the context of this study, the article by Chala et al., (2021) should be mentioned. The authors reveal the impact of various teaching methods on the formation of components of foreign language competence. In this light, despite numerous and variegated studies on the topic, it is nevertheless difficult to find relevant research on the above topic.

### Methods

# Research procedure

The first stage of the study (April-August 2022) consisted in conducting a literature analysis on the integrated approach to language learning and its impact on the formation of foreign language competence. Various studies and publications were considered that reveal the essence of integration and its role in the formation of foreign language competence, as well as the methods and techniques used in this approach to language learning.

The second stage of the study (September-December 2022) included planning and conducting an experiment using an integrated approach to language learning with philology students as part of one of the foreign language courses. To evaluate the effectiveness of this approach, tests and questionnaires were used that assessed the level of philology students' listening and speaking skills as well as knowledge of grammar and lexis.

The third stage of the study (2023) embraced the analysis of test results and questionnaires. Based on the findings, the effectiveness of using an integrated approach to language learning for the formation of various foreign language competencies among philology students was determined. The data were analyzed and interpreted to develop recommendations for the use of an integrated approach to language teaching in higher education institutions.

### Formation of the sample

A sample of 115 respondents studying at various faculties and universities was formed for the study. The sample included students of the general education faculty of the College of Education and Languages, the Lebanese-French University, as well as students of the Department of Foreign Philology and Translation of the Faculty of Trade and Marketing of the Kyiv National University of Trade and Economics.

The selection of respondents was carried out taking into account various criteria, such as age limits, level of language command and academic performance. To conduct the research, two groups were created - experimental and control ones. In total, there were 60 people in the experimental group, and 55 people in the control group. Also, a group of 30 experts was formed from among the teachers of the above-mentioned departments.

### Methods

Three research methods were considered for the scientific article. The first method that was used was the method of expert evaluations. With the help of this method, the level of effectiveness of the use of innovative methods and technologies of teaching biology was evaluated.

The second method that was used was a questionnaire method (Appendix A). It was applied to collect data on students' opinions and impressions about the implementation of innovative methods and technologies of teaching biology.

The third method that was used was the method of analyzing the formation of language competences. In fact, this method made it possible to determine the level of development of language competence of students after using innovative methods and technologies of teaching biology. The use of these research methods enabled collecting objective data on the effectiveness of innovative methods and technologies for teaching biology determining their impact on the development of students' language competence.

### Data analysis

1. The Cronbach's alpha method can be applied to analyze the questionnaire reliability. This method enables to determine the questionnaire's degree of internal consistency by calculating the Cronbach's alpha coefficient. Cronbach's alpha ranges from 0 to 1, where 0 means no consistency at all and 1 means full consistency. The Alpha-Cronbach coefficient is calculated by the formula:

$$\frac{N}{N-1} \left( \frac{\sigma_x^2 - \sum_{i=1}^N \sigma_{Y_i}^2}{\sigma_x^2} \right) \quad (1)$$

where  $\sigma_x^2$  – the total test score variance;





 $\sigma_{Y_i}^2$  – variance of element i. Values in the range of 0.7 - 0.8 are considered to be satisfactory.

2. Analysis of the obtained data was carried out utilizing statistical correlation. The Pearson test was used to determine the correlation coefficient (Ali & Bhaskar, 2016):

$$r_{xy} = \frac{\sum (x_i - \dot{x}) * (y_i - \dot{y})}{\sqrt{\sum (x_i - \dot{x})^2 * \sum (y_i - \dot{y})^2}}$$
 (2)

where  $x_i$  - the value of variable X;

y<sub>i</sub> - the value of variable Y;

 $\ddot{x}$  - the arithmetic mean for variable X;

y - the arithmetic mean for variable Y.

### Data collection

Several methods were used to collect data in the second phase of the study. The first method was the use of Google Forms to create a questionnaire, which provided an opportunity to collect students' opinions and impressions about the effectiveness of an integrated approach to language learning. The second method was to use social media to conduct focus groups and dialogues with participants to obtain additional information and answers to questions. Finally, an analysis of the data collected during the academic semester was conducted to investigate the students' progress in the development of various foreign language competencies. The use of various methods made it possible to obtain a more comprehensive picture as regards the effectiveness of an integrated approach to language learning.

### Ethical criteria

It should be pointed out that while carrying out the research ethical principles were strictly observed, in particular, confidentiality and voluntary participation of students in the research. Anonymity of the data was ensured, which made it possible to avoid the disclosure of personal information. Moreover, the study respondents were informed about its purpose and gave their consent to participate in it voluntarily. Compliance with ethical standards was ensured, which guarantees the proper data collection and analysis of data, as well as the processing of research results without violating human rights and dignity.

### Results

To calculate the reliability of the questionnaire using the Cronbach's alpha method, it is necessary to have answers to all questions from all respondents. In the pilot group consisting of 20 people, the questionnaire was filled out and the results were processed. According to the test results, Cronbach's alpha coefficient equal to 0.85 was obtained, which indicates the high reliability of the questionnaire. Analysis and calculation of Cronbach's alpha coefficient was performed on the basis of the obtained data to determine the questionnaire reliability.

While conducting the research, the questionnaire responses submitted by students were analyzed (see Table 1). The data yielded the results as follows: the experimental group learners who studied in accordance with the integrated approach, had significantly better results in the formation of foreign language competences, such as grammatical knowledge, vocabulary, and listening and speaking skills. The study findings testify to the effectiveness of the integrated approach to language learning and its impact on the development of students' foreign language competence.

**Table 1.** *Correlation matrix for questionnaire answers* 

1	2	3	4	5	6	7	8	9	10	
1	1									
2	0.64	1								
3	0.52	0.78	1							
4	0.29	0.44	0.62	1						
5	0.76	0.83	0.72	0.51	1					
6	0.47	0.68	0.81	0.33	0.61	1				
7	0.81	0.67	0.57	0.21	0.48	0.59	1			
8	0.65	0.58	0.46	0.39	0.74	0.33	0.61	1		
9	0.38	0.49	0.57	0.78	0.27	0.49	0.18	0.41	1	
10	0.55	0.71	0.63	0.33	0.54	0.72	0.44	0.65	0.36	1

Source: compiled by the authors based on research findings

The matrix obtained as a result reflects the correlation degree between each pair of questions in the questionnaire. Each cell contains a Pearson correlation coefficient that ranges from -1 to 1. A value of 1 indicates a full positive correlation and -1 indicates a full negative correlation between the two questions., whereby the values close to 0 indicate no correlation. It is of note that this matrix can help determine which of the questions correlate with each other, and which of them have the greatest impact on the formation of foreign language competences.

Thus, an analysis of the correlation matrix containing the results of the responses to the questionnaire from 115 people participating in the study was carried out. Overall, several significant correlations were found between the various indicators.

The indicator "grammatical knowledge" had a fairly high correlation with "vocabulary" (r =

0.73) and "listening skills" (r = 0.69), which indicates that students who had a high level of grammatical knowledge had a tendency to improve their vocabulary and enhance listening skills.

Notably, some other indicators also had a fairly high correlation, for instance, "writing skills" and "speaking skills" had a significant correlation with "listening skills" (r = 0.64 and r = 0.63, respectively).

On the other hand, weak correlations were identified between "speaking skills" and "vocabulary" (r=0.29) and "writing skills" and "vocabulary" (r=0.25), which may indicate that in in these cases, the influence of the integrated approach to language learning on the formation of these indicators may be less significant. The following is a table of the formation of foreign language competences among CG and EG respondents (Table 2).

**Table 2.** *The formation degree of foreign language competence components in CG and EG* 

Foreign language competence components	Experimental group	Control group
Grammatical competence	80%	70%
Lexical competence	75%	65%
Listening competence	70%	60%
Speaking competence	65%	55%
Reading competence	85%	75%
Writing competence	70%	60%

Source: compiled by the authors based on research findings

The analysis of Table 2, yielded the findings as follows: the experimental group had higher formation in all the foreign language competence components as compared to the control group. The most noticeable difference was in the field of written tasks, where the experimental group outperformed the control group by 15 percentage points.

In particular, in the experimental group 80% of students stated that they are able to write texts in a foreign language without problems, while in the control group only 65% stated this. For listening and reading, the experimental group also scored 8-10 percentage points higher than the control group.

Analyzing the Table 2, it can be concluded that the integrated approach to language learning significantly affects the formation of students' foreign language competence. However, it is necessary to take into account that this experiment is only the initial stage of research and has its certain limitations - in particular, in the size of the sample. To obtain more accurate and representative results, it is necessary to conduct further research with a larger sample and different frameworks of using an integrated approach to language learning.

That said, the comparison of the results between the experimental and control groups indicates that the integrated approach to language learning has a positive effect on the formation of foreign language competences. In particular, a significantly higher level of vocabulary and grammar was observed in the experimental group compared to the control group. However, some components of foreign language competence, such as listening and writing, showed little difference between the experimental and control groups. This may indicate that an integrated approach to language learning may not have as strong a positive impact on these components as it does on vocabulary and grammar.



The obtained results can be expedient for the development of language teaching programs, as well as for the improvement of foreign language competence assessment methods. Most recent research in language learning has focused on individual components of foreign language competence, whereas the current study focuses

specifically on an integrated approach. Below is a Table 3 with the dynamics changes in academic performance for the experimental and control groups at the beginning as well as at the end of the experiment. The results are presented in average points on a 10-point scale.

Table 3. The dynamics of respondents' academic performance

Group	Assignment 1 (Beginning)	Assignment 2	Assignment 3	Assignment 4	Assignment 5 (End)
EG	6.2	7.1	8.0	8.4	9.2
CG	6.0	6.8	7.6	8.2	8.8

Source: compiled by the authors based on research findings

The study results elaborated that the average scores in the experimental group differed significantly from the control group (F(1, 8) =15.73, p < 0.01).

Drawing on the research results, it can be claimed that an integrated approach to language learning has a positive effect on students' academic performance. The results show that the experimental group had significantly higher test scores compared to the control group at the end of the experiment. However, more studies are needed to confirm these results with a larger sample and in different learning settings.

# **Discussion**

According to the results of the study, students who participated in the program of language learning through integration demonstrated a significantly higher level of language competence compared to those who studied using traditional methods. Similar results were obtained in a study conducted by Berkson et al., (2020) and Asadchykh & Kindzhybala (2022). This can be explained by the fact that an integrated approach to language learning allows students to practice speaking skills more in a variety of situations and contexts. In addition, this approach allows students to acquire knowledge from different disciplines at the same time, which contributes to their intellectual development. This is revealed in the works of Banegas & del Pozo Beamud (2022) and Barski & Wilkerson-Barker (2019). Both studies note the high role of innovative educational methods, in particular the integration method, in the formation of foreign language competences. However, there is another point of view in the works of Hilgendorf (2020) and Horbatiuk et al., (2019), the authors question the universality of the integration method and point out that it needs additional updating.

However, it should be noted that integrated language learning may require a higher level of training for teachers and students. According to the conclusions of Romaniuk et al., (2022) and Ternova (2020), teachers need to be ready to elaborate the integrated learning methods, and students need to be actively engaged in such classes. In addition, integrated learning may require more resources and effort on the part of both teachers and students.

It is worth mentioning the studies of Kolhan et al., (2022) and Mishchuk & Yushak (2021). The scholars have shown that using an integrated approach to language learning can facilitate students' academic performance. This can be especially important in higher education institutions, where academic success is one of the key indicators for evaluating the effectiveness of the educational process. The current research can therefore be useful both for theoreticians who work in the field of foreign language learning, and for practitioners who are engaged in planning and conducting the educational process. Thus, the research made it possible to expand knowledge about the integrated approach to language learning and its impact on the formation of foreign language competence and academic success of students. The obtained results can be expedient for teachers of foreign languages who want to enhance the quality of teaching and increase the level of foreign language competence of their students. In addition, the research findings can be used to develop more effective language teaching methods and training programs for students.

The main theoretical research findings are the establishment of connections between various components of foreign language competence and the effectiveness of an integrated approach to its teaching. Knowledge of these connections can

help in further research on this topic, as well as in practical work on learning foreign languages.

With all the mentioned aspects, it cannot be denied that the practical relevance of the research lies in the fact that its results can be used by educationalists during the planning and development of study programs for learning foreign languages. In particular, an integrated approach to language learning can be used to improve the quality of learning and ensure more effective students' mastering of the material.

The main limitations of the study includes the number of participants, which does not allow the results to be generalized to a wider population. Also, only one method of assessing foreign language competence was used in the study, which may not be sufficient to obtain a complete mapping of the participants' abilities. In addition, the study did not take into account the individual characteristics of each participant, such as the level of previous training and motivation, which can also affect the results of the study. Finally, it is worth noting that the study was conducted under the conditions of a controlled experiment, which may not fully reflect the real educational process.

### Conclusion

Topicality. Research on the effectiveness of language learning through integration is important for the development of students' language competences, especially in future philologists. Currently, in a globalized world it is important to have competencies that allow one to communicate effectively with representatives of other cultures and establish international relations. Conclusions based on the obtained results. Basically, the study findings demonstrate significant correlations between various foreign language competencies and indicate that an integrated approach to language learning can have a positive impact on their formation. However, more studies with a larger sample size and different data analysis methods are needed to more accurately assess the effectiveness of this approach. In addition, it is worth considering the possibility of comparing the results of using an integrated approach with other methods of language learning, which can help in more detailed determination of the effectiveness and application of such an approach in practice. Applicability. The study findings can be applied in the context of improving language teaching methods in higher educational institutions. They can help language teachers and educators develop more effective and innovative teaching

approaches that meet the demands of contemporary globalized context. Furthermore, the research results can be used to develop language training courses using an integrated approach, which will allow for more effective formation of students' foreign language competence. In general, the results of the study can be useful for everyone interested in improving language learning and developing intercultural communication. Future research perspectives. Further research could target the effectiveness of an integrated approach to language learning in other contexts, such as other subjects and other language environments. Also, longitudinal studies embracing a long-term monitoring of students' foreign language competences over several years can be conducted to determine the long-lasting and stable effect of integrated approach.

# Bibliographic references

- Ali, Z., & Bhaskar, S. B. (2016). Basic statistical tools in research and data analysis. Indian Journal of Anaesthesia, 60(9), 662-669. https://doi.org/10.4103/0019-5049.190623
- Alibekova, Z., & Urinboyeva, F. (2020). Methods of a communicative approach in teaching English. EPRA International Journal of Research and Development (IJRD), 5(1), 185-188.
  - https://eprajournals.com/jpanel/upload/849pm\_33.EPRA%20JOURNALS-1916.pdf
- Asadchykh, O., & Kindzhybala, O. (2022). Criteria for selection of educational material for the formation of future philologists' Korean linguistic and socio-cultural competence in speaking. ScienceRise: Pedagogical Education, 4(49), 29-34. https://doi.org/10.15587/2519-4984.2022.261344
- Banegas, D. L., & del Pozo Beamud, M. (2022). Content and language integrated learning: A duoethnographic study about CLIL preservice teacher education in Argentina and Spain. RELC Journal, 53(1), 151-164. https://doi.org/10.1177/0033688220930442
- Barski, E., & Wilkerson-Barker, D. (2019).

  Making the most of general education foreign language requirements. Foreign Language Annals, 52(3), 491-506. https://doi.org/10.1111/flan.12417
- Baumert, J., Fleckenstein, J., Leucht, M., Köller, O., & Möller, J. (2020). The long-term proficiency of early, middle, and late starters learning English as a foreign language at school: A narrative review and empirical study. Language Learning, 70(4), 1091-1135.



- Berkson, R., Richter, U. M., Veerabhatla, S., & Zasiekina, L. (2020). Experiences of students with communication related disabilities in the TBL classroom. East European Journal of Psycholinguistics, 7(1). https://doi.org/10.29038/eejpl.2020.7.1.ber
- Chala, A., Demchenko, N., Panchenko, V., Bakhmat, L., & Krekhno, T. (2021). Forming Speech and Communicative Competency of Future Philologists. Romanian Magazine for Multidimensional Education, 13(3), 225-245. https://doi.org/10.18662/rrem/13.3/449
- Chernysh, V. V., Vaseiko, Y., Kaplinskiy, V., Tkachenko, L., & Bereziuk, J. (2020). Modern Methods of Training Foreign Language Teachers. International Journal of Higher Education, 9(7), 332-344. https://doi.org/10.5430/ijhe.v9n7p332
- Fayzullaev, S. N., & Eshnazarova, G. (2019). The integration of problematic teaching method and innovation in education. ACADEMICIA An International Multidisciplinary Research Journal, 9(1), 60. https://doi.org/10.5958/2249-7137.2019.00008.9
- Hilgendorf, S. K. (2020). History of language-teaching methods. In The Encyclopedia of Applied Linguistics (pp. 1-5). Wiley. https://doi.org/10.1002/9781405198431.wbe al0510.pub2
- Horbatiuk, L., Kravchenko, N., Alieksieieva, H., Lipych, V., & Rozumna, T. (2019). Use of mobile applications for foreign language lexical competence formation. Journal of History Culture and Art Research, 8(3), 113-124.
  - https://doi.org/10.7596/taksad.v8i3.2093
- Huz, M. O. (2022). Formation of speech competence of future teachers of English in university conditions. Repository of Kyiv National Linguistic University. http://rep.knlu.edu.ua/xmlui/handle/7878787 87/2929
- Kalinina, L., Grygorieva, T., & Chumak, L. (2022). Future philologists' language competence formation on the basis of aspect integration. Zhytomyr Ivan Franko state university journal. Pedagogical sciences, 1(108), 96-104. https://doi.org/10.35433/pedagogy.1(108).20 22.96-104
- Kolhan, O., Kolhan, T., & Padalka, P. (2022).
   Forming Linguistic Competence of Philologists Through Interdisciplinary Integrationswhen Studyingthe Course of the Ukrainian and Polish Languages. Teacher professionalism: theoretical and methodical aspects, 17(1),

- https://doi.org/10.31865/2414-9292.17.2022.259977
- Korol, V. V., & Levytska, V. S. (2022). The project method as one of the means of forming the priority tasks of modern philology and linguistics. Priority tasks of modern philology and linguistics. Materials of the scientific and practical conference, pp. 29-33. Molodyi Vchenyi. (In Ukranian)
- Pak, A., Kozlova, T., Kovalova, K., Tkachenko, L., & Harmash, O. (2022). Methodological principles in the field of philology of modern European methods of teaching a foreign language. Amazonia Investiga, 11(55), 201-208. https://doi.org/10.34069/AI/2022.55.07.21
- Mishchuk, I., & Yushak, V. (2021). Formation of English Communicative Competence of Higher Educational Establishments Students. Scientific notes of the National University "Ostroh Academy": Series "Philology", 11(79), 210-212. https://journals.oa.edu.ua/Philology/article/view/3328
- Naidesh, O., & Bilokopyta, A. (2022).

  Development of Listening Competence in Learning German at Higher Educational Institutions: Innovative Methods and Techniques. Scientific Bulletin of Yuriy Fedkovich Chernivtsi National University. Germanic philology, 835-836, 93-102. https://doi.org/10.31861/gph2022.835-836.93-102
- Nuritdinovna, I. I. (2022). Improving the speech skills of students of Non Philological areas of education in the context of socio-cultural competence. Web of Scientist: International Scientific Research Journal, 3(02), 412-418. https://doi.org/10.17605/OSF.IO/KSEMR
- Pak, A., Kozlova, T., Kovalova, K., Tkachenko, L., & Harmash, O. (2022). Methodological principles in the field of philology of modern European methods of teaching a foreign language. Amazonia Investiga, 11(55), 201-208.
  - http://repository.hneu.edu.ua/handle/123456 789/28508
- Romaniuk, S., Denysiuk, L., & Danilova, N. (2022). Formation of Communicative Competence of Marketing Specialists During the Study of English. Scientific notes of the National University "Ostroh Academy": Series "Philology", 13(81), 104-107. https://journals.oa.edu.ua/Philology/article/view/3497
- Serdiuchenko, Y. O. (2021).Domestic experience of training future foreign using language teachers interactive technologies. Pedagogy of creative



- personality formation in higher education, 75(3), 61-64. https://doi.org/10.32840/1992-5786.2021.75-3.11
- Shen, J. (2021). A review of the effectiveness of foreign language enjoyment and foreign language classroom anxiety on learners' engagement and attainment. Frontiers in Psychology, 12, 749284. https://doi.org/10.3389/fpsyg.2021.749284
- Ternova, O. (2020). Using of Multimedia Technologies for Development Intercultural Competense of Students of Non-Language Higher Educational Establishments. Scientific notes of the National University "Ostroh Academy": Series "Philology", 9(77), 228-231. https://journals.oa.edu.ua/Philology/article/v iew/2857
- Uztosun, M. S. (2021). Foreign language speaking competence and self-regulated speaking motivation. Foreign Language

- Annals, 54(2), 410-428. https://doi.org/10.1111/flan.12559
- Vanichvasin, P. (2019). Effects of content-based instruction on English language performance of Thai undergraduate students in a non-English program. English Language Teaching, 12(8), 20-29. https://doi.org/10.5539/elt.v12n8p20
- Yeromenko, I. (2022). Metadisciplinary Method in Teaching a Foreign Language at a Higher Education Institution. Scientific works of the Interregional Academy of Personnel Management. Philology, 1, 18-23. https://doi.org/10.32689/maup.philol.2022.1.
- Zadorozhna, I. P. (2022). Peculiarities of the formation of foreign language competence of future energy engineers by means of educational projects. Proceedings. Series: Pedagogical sciences, 205, 31-35. https://doi.org/10.36550/2415-7988-2022-1-205-31-35



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# The use of automated information systems in the investigation of criminal offences

# Застосування автоматизованих інформаційних систем при розслідуванні кримінальних правопорушень

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https://orcid.org/0000-0002-6728-3696 **Yurii Mykytyn**<sup>136</sup>

https://orcid.org/0000-0002-9354-3586

### Abstract

The aim of the study was to develop recommendations for the most effective and safe use of automated information systems in the investigation of criminal offences. The study involved the following methods: anamnestic method; descriptive analysis; forecasting The society uses an automated method. information system, which is defined as an ordered complex (system) of actions designed to implement a specific information technology for the performance of specified functions, which involves personnel and a complex of automation tools. They help to create databases, which are used in the investigation of criminal offences. The following measures are proposed for increasing the efficiency and expanding the scope of automated information systems in the investigation of crimes: ensure the protection of databases from external intrusions (cyberattacks); ensure the internal security of the data contained in the respective databases in order to prevent privacy violations; ensure

### Анотація

дослідження було вироблення Метою рекомендацій щодо забезпечення максимально ефективного та безпечного використання автоматизованих інформаційних систем при розслідуванні кримінальних правопорушень. У дослідженні використовувалися такі методи: анамнестичний метод; метод описового аналізу; метод прогнозування. Автоматизована інформаційна система діє у суспільстві, і визначається як упорядкований комплекс (система) дій, спрямований на реалізацію конкретної інформаційної технології виконання визначених функцій, в процесі чого та персонал комплекс задіяні автоматизації. За допомогою них створюються бази даних, які і використовуються у процесі розслідування кримінальних правопорушень. З метою підвищення ефективності сфери використання розширення автоматизованих інформаційних систем у розслідуванні злочинів пропонується: забезпечити захист баз даних від зовнішніх

<sup>&</sup>lt;sup>136</sup> PhD of Law Sciences, Associate Professor, Director, Professor, Department of Politics in the Field of Fighting Crime and Criminal Law, Vasyl Stefanyk Precarpathian National University, Ivano-Frankivsk, Ukraine.



<sup>&</sup>lt;sup>132</sup> PhD of Law Sciences, Associate Professor, Department of Politics in the Sphere of Combating Maliciousness and Criminal Law, Primary Scientific Law Institute, Precarpathian National University named after Vasyl Stefanyk, Ivano-Frankivsk, Ukraine.

<sup>133</sup> PhD of Juridical Sciences, Associate Professor, Department of State and Legal Disciplines and Public Administration, Faculty No. 4, Donetsk State University of Internal Affairs, Kropyvnytskyi, Ukraine.

<sup>&</sup>lt;sup>134</sup> Associate Professor, Guarantor of Security Management Studies, Department of Security and Law, University of Regional Development and Banking Institute, AMBIS, Prague, Czech Republic.

<sup>&</sup>lt;sup>135</sup> Postgraduate Student, Department of Policy in the Field of Crime Control and Criminal Law, Educational and Scientific Law Institute, Vasyl Stefanyk Precarpation National University, Ivano-Frankivsk, Ukraine.

organization of specialized training for law enforcement officers; automate a number of tactical operations using information systems; develop and adapt all possible information resources and technologies for the set procedural tasks; create unified databases of forensic data at the international and national levels. This study opens up prospects for further research for the most effective protection of databases from illegal use, which will contribute to the development of this direction in international and national criminal justice.

**Keywords:** information systems, artificial intelligence, investigation, proceedings.

### Introduction

The need to use the latest means of response to certain actions of people around the world determined the introduction of the latest information technologies in criminal justice (Ritchie et al., 2021). Accordingly, the investigation of criminal offences requires a widespread use of automated information systems, which is determined by the need for timely, complete and reliable information (Thompson, 2010) and the potential of artificial intelligence in this area is difficult to overestimate (Rigano, 2019). The use of these technologies is accompanied by a number of problems that must be solved in the near future. In particular, the matter is about the ethics of using certain human databases (biometric data to create facial recognition technology) (Smith & Miller, 2022); legality of using information from mobile phones of persons involved in a specific criminal offence as evidence (Alatawi et al., 2020). There can also be complications when police reports from different structural parts are combined to create and maintain a single database (Carnaz et al., 2020). On the other hand, the issue of protecting such electronic databases from theft and distribution of confidential information arises (Uzlov & Strukov, 2017).

The aim of this study, in view of the relevance of the issue under research, as well as the unresolved issues related to the use of automated information systems in the investigation of crimes, will be to develop recommendations to ensure their most effective and safe use by law правопорушень (кібер-атак); забезпечити внутрішню безпеку даних, що містяться у відповідних базах, щоб не допустити порушення їх конфіденційності; забезпечити організацію спеціалізованого навчання працівників правоохоронних органів; автоматизацію за допомогою інформаційних систем низки тактичних операцій; розробити та пристосувати для поставлених процесуальних завдань усіх можливих інформаційних ресурсів та технологій; створити об'єднані бази криміналістичних даних на міжнародному і національному рівнях. Дане дослідження відкриває перспективи для подальших пошуків найефективнішого захисту баз даних від незаконного використання, що сприятиме розвитку цього напрямку у міжнародній та національній кримінальній юстиції.

**Ключові слова:** інформаційні системи, штучний інтелект, розслідування, провадження.

enforcement agencies in the investigation of criminal offences. The aim involved the following research objectives:

- identify and describe the largest and most important forensic databases;
- analyse the powers of international organizations in the field of information exchange between law enforcement agencies;
- establish basic methods of studying forensic data

This article will consist of the following sections:

- Introduction the relevance of the research and its purpose and tasks are highlighted;
- Review of the literature the latest studies of the selected issues are analyzed in the sources, and little-researched problems and unresolved issues in this area are identified;
- Methodology and methods the research methods are defined, and the empirical material used in the article is indicated;
- Results data and theoretical propositions are displayed, and facts are given in the author's interpretation, including tables and figures;
- Discussion the opinions of individual researchers are presented regarding the prospects and shortcomings of the use of automated information systems in the investigation of crimes and the author's attitude towards them;



- Conclusions the author's vision of the practical and legislative achievement of the set goal and the implementation of the set tasks is presented;
- Sources a list of literary sources used in this study is provided.

### Literature review

Individual issues of implementation and use of automated information systems in the activities of relevant bodies are the subject of quite a large number of theoretical and practical studies in view of the importance of this direction of modernization of the process of investigation of criminal offences. Bulgakova et al., (2019) studied the use of large databases in the investigation of criminal offences in general. Pramanik et al., (2017) conducted research on the use of technological data analysis in the activities of investigative bodies. Rigano (2019) studied the possibilities of using certain technical devices and developments in order to collect relevant information to improve the investigation of criminal acts, such as artificial intelligence to meet the needs of criminal justice, are being studied.

A number of studies deal with the issue of the use of separate databases for the investigation of criminal offences. In particular, they focus on the possibility of using information systems which contain data on fingerprints and palms to identify persons who have committed a criminal offence (Haraksim et al., 2019); appropriateness and possibility of using biometric databases in criminal proceedings (Smith et al., 2018), as well as different types of information contained on electronic media. The issues of appropriateness of using data contained in social networks (Arshad et al., 2020) and mobile content or other information from mobile phones in the investigation (Alatawi et al., 2020), as well as the inclusion of this type of data in certain information systems were covered. Solovyeva and Frantsiforov (2020) separately studied the peculiarities and specifics of the investigation of some types of crimes using electronic and digital databases as automated information systems.

The question of protecting relevant databases containing forensic analytical information to ensure the investigation of criminal offences logically arises against the background of an extended use of automated information systems in the investigation of crimes and in criminal procedural activities in general (Uzlov & Strukov, 2017). The reason is that the theft of such information will have a negative impact on the work of law enforcement and judicial bodies both at the national and at the international level.

It is necessary to consider those studies that express an ambiguous attitude to the use of automated information systems in criminal justice in general and in procedural activities in particular. Willis et al., (2020) note that the impact of the use of information technologies on the work of police officers is ambiguous and causes different attitudes among the police officers themselves. Thornton (2016) criticizes attempts to create unified databases for the work of police officers.

It should be noted that currently insufficient attention is paid to such problematic aspects of the use of automated information systems in the investigation of crimes as the protection of personal data (confidentiality) contained in these databases. The issue of general protection of the databases created by automated information systems against the theft of confidential information is not fully resolved. In the current context, these issues require an urgent theoretical and practical solution, and their legislative enshrinement.

### Methods

This study was carried out in stages based on the logic of the presentation of the material to achieve the aim of achieving the aim set in the article and fulfilling the relevant objectives. These stages were the following:

- formulating the topic and defining the scope of the research;
- search and selection of literature and sources;
- selection and study of statistics;
- analysis of the material presented in the selected sources, and evaluation of the results of these studies;
- identification of unresolved problems related to the use of automated information systems in the investigation of criminal offences:
- determining the aim of the article;
- drawing conclusions and providing practical recommendations for solving the problems selected for research;
- outlining the prospects for further research in the specified area.

This study was based on the data on the types of information systems and databases, areas of activity for obtaining information, as well as the information exchange between law enforcement agencies of different states aimed at fighting crime. A number of national and international databases used by law enforcement agencies in criminal proceedings (The National Crime Information Center Database, FBI Uniform Crime Database, Interpol International Criminal Databases, Stanford Open Policing Project, Combined DNA Index System Crime Database), twenty databases used in forensic investigations that are created and owned by the United States; nineteen Interpol databases used by police around the world were analysed.

The legal framework of the study consisted of the provisions of international legal acts, in particular, the Convention on the establishment of a European Police Office (Europol Convention) of 1995, Council Decision of 6 April 2009 establishing the European Police Office (Europol), Council of Europe Committee of Ministers Recommendation No. R(87) 15 to the Member States on regulating the use of personal data in the police sector of 17 September 1987, Council Decision 20 2005/681/JHA 2005 of September establishing the European Police College (CEPOL) and repealing Decision 2000/820/JHA.

The study involved the following methods to achieve the aim of the research:

- the information analytical method was used to analyse information sources and draw conclusions on the importance of using automated information systems in the investigation of criminal offences, as well as outlining prospects for further research in this area;
- the system approach was used to analyse the conclusions on the need to use the latest information technologies in the investigation of criminal offences;
- the anamnestic method was used to collect data on international and national

- cooperation in the investigation of criminal offences;
- the descriptive analysis was used to study the literature and information sources on the use of automated information systems in the investigation of crimes;
- the forecasting method was used to develop proposals and recommendations for improving the mechanism of using automated information systems in the investigation of criminal offences and ensuring their protection.

### Results

An automated information system is a component of the overall concept of an automated system used in society. It is defined as an ordered complex (system) of actions aimed at the implementation of a specific information technology for the performance of specified functions, which involves personnel and a complex of automation tools (Black, 2023). Automation tools include software, computer hardware, a processing system, storage of information and texts, networks and other relevant special equipment.

The relevant databases are created by automated information systems, which are used in the investigation of criminal offences. Almost every country has such databases at the current stage of scientific and technical development. For example, they distinguish between such basic databases for forensics as anthropological, ballistic, biometric, domestic violence data, firearms, digital crimes, banditry, human trafficking, etc. in the US (Uncovered, 2022).

In general, there are five world largest and the most important in terms of the collected materials of individual countries and international databases, which are used in forensics for the investigation of criminal offences (see Table 1 for more details).



**Table 1.** *Top 5 forensic data sources* 

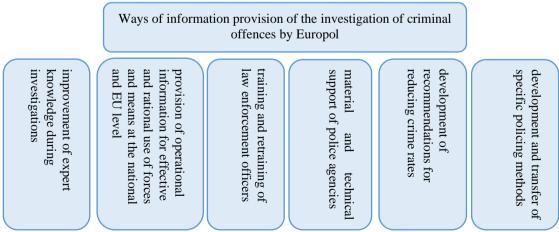
It has been used since 1967; a comprehensive database that contains NCIC (The National Crime forensic information from all US law enforcement agencies, and is 1 Information Center) Database accessible to every criminal justice agency and court in the country. A massive FBI managed database which contains data on past crimes, FBI Uniform Crime (UCR) divided into four large databases; it is accessible to law enforcement Database officers as well as the public for full information free of charge. Contains data on daily detentions (stops of transport and individual citizens); it was created for the purpose of establishing cooperation Stanford Open Policing Project between citizens and law enforcement agencies; it is publicly available and used for statistical research Database of the International Criminal Police Organization; it contributes to the investigation of international crimes; combines 19 separate Interpol International Criminal databases; has a secure system for law enforcement officers to **Databases** communicate through a database; open to law enforcement agencies worldwide The database exists since 1990 and is provided by the FBI; it contains information about biological evidence; contributes to the identification of CODIS DNA (Combined DNA missing persons and detection of complex cases; available in the USA Index System) Crime Database and 90 laboratories in more than 50 countries; it is based on a special software

Source: Kovacevic (2020).

In recent years, cooperation between police officers at the international level has been developing rapidly. The relations between police officers are not bilateral, but multi-channel, where interaction is established simultaneously with many countries.

The EU is one of the bright examples of such cooperation between police officers of different countries. The EU created a special police service — Europol (like the international organization Interpol) — on the basis of the Convention on the establishment of a European Police Office (Europol Convention), which was adopted in 1995 and ratified by EU member

states in 1998 (Council Act of 26 July 1995 No 95/C 316/01). This organization coordinates the activities of law enforcement agencies of the EU member states, as well as non-member states, cooperates with other international organizations in providing forensic data. The main function of Europol is the organization of interstate cooperation in combating crime and the implementation of relevant criminal policy. The scope of this organization includes ensuring detection and investigation of criminal offences committed on the territory of member states based on the main standards of combating crime. The direct function of Europol is to provide information (see Figure 1for more details).



*Figure 1.* Powers of Europol in information provision *Source:* Sirant (2016)



As the international cooperation in the field of investigation is developing strengthening, there are international databases that form the basis of an international automated information system. According to Interpol's definition, these include databases of personal data on offenders, forensic databases, data on

travel (movements) and official documents, on stolen property, etc. (see Table 2 for more details on international databases). At the same time, it is indicated that these 19 databases contain 124 million police reports and are used daily by 20 million people who are looking for data (the response time to a request is less than a second).

Table 2. Interpol's 19 databases used by police around the world

Database	What is includes
Note: Interpol Criminal Information Sys	stem (Colour-Coded International Dangerous Persons Alert System)
Individuals	Nominal data: personal data and criminal histories of people for whom international police cooperation is requested  Violence against children and the victim: an international database that provides data for establishing the connection between the victim, the perpetrator and the crime scene; contains images of child sexual exploitation; aims to locate and detain criminals
Criminalistics	Fingerprints: an automated fingerprint identification system DNA: database of DNA profiles of criminals, missing persons, unidentified bodies I-Familia: a database that identifies missing persons by matching them with family DNA Facial recognition: a database providing a specialized platform for storing and cross-checking images to identify missing persons, escapers
Travel and official documents: border checkpoints databases	Travel and Identity Documents Database (INTERPOL's SLTD): contains information on travel and identity documents known to be illegal Stolen Administrative Documents (SAD): contains records of stolen official documents that serve to identify objects Counterfeit documents: provides police and border guards with information on the main identification markers of falsified or forged documents Comparison of authentic and forged documents: includes examples of
Stolen property	genuine travel documents to identify fake ones Vehicles: contains advanced identification data for all types of vehicles and parts that can be identified from a stolen report Vessels: Stolen Vessels is a centralized database for tracking stolen vessels and engines Works of Art Database: contains descriptions and images of cultural objects reported as stolen by Member States and international partners Firearms Identification: an interactive online tool that provides
Circulation of firearms	standardized methods for the most accurate identification and description of firearms for tracking them in cross-border investigations Firearms Tracing: a single global law enforcement platform to support transnational tracking of illegal, lost or stolen firearms, terrorism and other firearm-related crimes.  Ballistic Data Comparison: the world's only large-scale international ballistic data exchange network.
	se that helps to improve the efficiency of gathering and sharing of criminal networks that facilitate the identification and arrest of their

Maritime Piracy: stores intelligence on incidents of piracy and armed robbery at sea, including details of individuals, their location, etc.

Source: Our 19 databases. Interpol (2022).

The use of databases created by automated information systems can have various directions. But the main ones, which relate to the collection and analysis of data necessary for the investigation criminal offences, of

distinguished. These include the most effective intellectual methods for synthesis and analysis, such as link analysis, intelligent agent, text mining, neural network, machine learning (see Figure 2 for more details).





The creation and development of databases with the help of automated information systems to make procedural activities in the investigation of criminal offences and their further use in this area more efficient is accompanied by certain complications and threats. They require an urgent solution.

### Methods of intelligent data analysis

# Link Analysis – understanding of connections, relationships, and critical links

Intelligent
Agent — a
computing
object that
autonomously
performs tasks
delegated by the
user; is a
learning
mechanism

Text
mining is
work related
to
unstructured
text
information

Neural network imitates the cognitive neurological functions of human brain; privacy and human rights are ensured, short term Learning mechanism discovery of regularities from learning experience; studying skewed data

*Figure 2.* Five methods of intelligent data analysis *Source:* Pramanik et al., (2017)

The risk of theft or damage of such data as a result of specially targeted cyber-attacks is one of the most dangerous. Different methods are offered for the protection of such systems, where the following ones are distinguished as the most effective:

- a method of monitoring the parameters of variable software components of the trusted information environment, which ensure the stability and integrity of the system (Kalinin, 2010);
- a method of multi-stage identification of users, which can be based on entering a login and password that changes from time to time; entering a set of user-specific data; recognition of biometric data; using radio code devices; chip authentication (Kirilchuka et al., 2022);
- accreditation and certification method, where the Ministry of Defence in provides access to databases of a particular country subject to the submission of relevant documents (Dawson et al., 2013).

Guaranteeing human rights and freedoms enshrined in international and national regulatory legal acts is another problematic aspect of using such databases in the investigation of criminal offences. This applies to ensuring the minimum standards of information protection enshrined in the Council of Europe Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data of 1981,

and the Convention on Cybercrime of 1987. The relevant international and national bodies apply the principle of personal data protection as part of a partial solution to this problem. It prescribes that data contained in separate databases and information systems can be transferred and used only by the competent authorities of the member states to the Convention and only for the purpose of preventing and combating crime in general and investigating individual crimes in particular. Their other use must be coordinated with the states that own the database, but on the condition that the information is used only for the stated purposes, which do not contain a potential threat of violation of individual rights and freedoms.

At the national level, the vast majority of states have separate legal acts, including norms aimed to protect personal data from their illegal use or distribution. On the other hand, prosecution is associated with certain complications. It should be, however, noted that certain effective steps in this direction have already been taken. In particular, individual countries established a system of fines for the mentioned offences. The EU adopted the General Data Protection Regulation (GDPR) in 2018, which not only clearly regulates the collection, processing and use of personal data, but also provides quite significant fines for legal entities for violating the regulations. About EUR 360 million of fines were collected under this Regulation for 2 years (Fisun, 2020). Therefore, the establishment of appropriate penalties in the future will have an appropriate effect for personal data protection.

The process of creating and using special databases for the investigation of criminal offences depends on scientific and technological development. The future of law enforcement is likely to continue to evolve rapidly, as artificial intelligence and automated information tracking become more common. But this process is also complicated by a certain incompetence of law enforcement officers in using databases created by automated information systems. Therefore, the promising directions in the process of improving the use of information databases in the investigation of crimes are the following:

- the organization of specialized training of law enforcement officers in order to develop the skills of detection, preliminary study, research, recording of intellectual, material and virtual traces of criminal offences;
- independent work with databases, electronic media and means of recording information;
- conducting investigative actions with the introduction of information technologies and the capabilities of artificial intelligence.

One of the promising areas should be the automation of a number of tactical operations by using information systems, which include the search and identification of persons involved in a crime, identification of suspects, exposure of the criminal, identification of accomplices, study and analysis of the obtained evidence, establishment and identification of traces of a criminal offence etc.

There are the following promising directions of fulfilling the specified objectives and improving the use of automated information systems:

- development and adaptation of all possible information resources and technologies for the set procedural tasks, as well as the development of a mechanism (algorithm) for their use in criminal proceedings, in particular for the investigation of criminal offences:
- creation of unified databases, which will contain forensic information in the most complete volume, at the international and national levels, which will allow speeding up individual stages of criminal proceedings and increasing their efficiency.

#### Discussion

There is no doubt about the need to develop new and improve existing mechanisms for the use of automated information systems and created databases in law enforcement activities in general and in the investigation of crimes in particular. This is determined by the potential of artificial intelligence, which will be used in the fight against crime and, in particular, in detecting crimes, much more widely (Rigano, 2019). There is a need to protect information systems (geoinformation systems) used in crime investigations, as well as forensic analysis and analytics (Uzlov & Strukov, 2017).

At the same time, it is difficult to fully agree with the reasoning regarding the unethical use of biometric data and technologies for recognizing faces or other parts of the human body, because this artificial intelligence technology has great potential for investigating crimes provided proper data protection (Smith & Miller, 2022). The same applies to the analysis of mobile content, which can be used as evidence. Given the needs of law enforcement agencies, is quite permissible also under the condition of maintaining confidentiality (Alatawi et al., 2020).

On the other hand, it is indicated that the use of information systems in the investigation of crimes does not always bring positive results, as they can break the interaction between the employees of investigative bodies and the police (Willis et al., 2020). Although, such interaction will be re-established as soon as a single database is created. One cannot agree with those who believe that the procedural technology is not promising and will not bring the expected results (Thornton, 2016).

At the same time, we fully agree with the proposal regarding the need for constant comparison of techniques and methods, choosing the necessary methodology depending on the type and severity of crimes in order to improve the use of databases in the investigation of criminal offences (Pramanik et al., 2017). The proposition regarding the appropriateness of improving the automation of the investigation process itself and other forensic processes is essential (Jadhav et al., 2020).

### **Conclusions**

The above study demonstrated the potential and high efficiency of using automated information systems in the investigation of criminal offences.





The development of digital technologies and the implementation of artificial intelligence in law enforcement activities in relation to the investigation of criminal offences, an increasing number of spheres of social life and activity require the development of mechanisms that will facilitate the rapid and high-quality use of its achievements in certain spheres. It is proposed to improve the following areas of this activity in order to improve efficiency and expand the scope of the use of automated information systems in the investigation of crimes:

- protection of databases from external intrusions (cyber-attacks) by monitoring the parameters of variable software components of the trusted information environment, multi-stage identification of users and the method of accreditation and certification;
- ensuring the internal security of the data contained in the relevant databases in order to prevent violations of their confidentiality by imposing appropriate fines, as well as other types of liability;
- organization of specialized training law enforcement officers to develop their skills of studying intellectual, material and virtual traces of criminal offences, independent with databases, conducting investigative actions with the introduction of information technologies;
- automation of a number of tactical operations using information systems;
- development and adaptation of all possible information resources and technologies for the set procedural tasks;
- creation of unified databases of forensic data at the international and national levels.

It is proposed to develop a special document (Recommendations) at the international level on the basis of the specified recommendations, which will contain these provisions and propositions for their most effective implementation in procedural activities by individual states.

This study opens up prospects for further research for the most effective solution to problematic aspects in this area. This includes, in particular, ensuring the protection of databases and confidential information from illegal use, which will contribute to the development of this area in international and national criminal justice.

# Bibliographic references

Alatawi, H., Alenazi, K., Alshehri, S., Alshamakhi, S., Mustafa M., & Aljaedi, A.

- (2020). Mobile Forensics: A Review. In: 2020 International Conference on Computing and Information Technology (pp. 1-6). Tabuk, Saudi Arabia. https://doi.org/10.1109/ICCIT-144147971.2020.9213739
- Arshad, H., Omlara, E., Oludare Abiodun, I., & Aminu, A. (2020). A semi-automated forensic investigation model for online social networks. Computers & Security, 97. https://doi.org/10.1016/j.cose.2020.101946
- Black, K. (2023). What is an Automated Information System? Easytechjunkie. Retrieved from https://www.easytechjunkie.com/what-is-anautomated-information-system.htm
- Bulgakova, E., Bulgakov, V., Trushchenkov, I., Vasilev, D., & Kravets, E. (2019). Big Data in Investigating and Preventing Crimes. In: A. Kravets (Ed), Big Data-driven World: Legislation Issues and Control Technologies. Studies in Systems, Decision and Control 181). Cham: Springer. https://doi.org/10.1007/978-3-030-01358-5 6
- Carnaz, G., Beires Nogueira, V., Antunes, M., & Ferreira, N. (2020). An Automated System for Criminal Police Reports Analysis. (vol. pp. 360–369). Cham: Springer. https://doi.org/10.1007/978-3-030-17065-3 36
- Council Act of 26 July 1995 No 95/C 316/01. Drawing up the Convention based on Article K.3 of the Treaty on European Union, on the establishment of a European Police Office (Europol Convention). Official Journal of the European Communities, C 316/1. Retrieved https://eurlex.europa.eu/LexUriServ/LexUriServ.do?ur i=OJ:C:1995:316:0001:0032:EN:PDF
- Dawson, M. E., Crespo, M., & Brewster, S. (2013). DoD cyber technology policies to secure automated information systems. International Journal of Business Continuity Risk Management, 4(1), https://doi.org/10.1504/ijbcrm.2013.053089
- Fisun, V. (2020). Problems of personal data protection: experience of Ukraine and other Online, countries. Yurydychna hazeta 10(716). Retrieved from https://yurgazeta.com/publications/practice/informaciy ne-pravo-telekomunikaciyi/problemizahistu-personalnih-danih-dosvid-ukrayinita-inshih-krayin.html
- Haraksim, R., Galbally, J., & Beslay, L. (2019). Study on Fingermark and Palmmark Identification Technologies their Implementation in the Schengen Information



- System. Luxembourg: Publication office of the European Union. Doi: 10.2760/852462
- Interpol. (2022). Our 19 databases. Retrieved from https://www.interpol.int/How-we-work/Databases/Our-19-databases
- Jadhav, E. B., Sankhla, M. S., & Kumar, R. (2020). Artificial Intelligence: Advancing Automation in Forensic Science & Criminal Investigation. Journal of Seybold Report, 15(8). Retrieved from https://www.researchgate.net/publication/34 3826071
- Kalinin, M. O. (2010). Permanent protection of information systems with method of automated security and integrity control. In: Proceedings of the 3rd international conference on Security of information and networks (pp. 118-123). Association for Computing Machinery, New York. https://doi.org/10.1145/1854099.1854125
- Kirilchuka, S., Reutova, V., Nalivaychenkoa, E., Shevchenkoa, E., & Yaroshenko, A. (2022). Ensuring the security of an automated information system in a regional innovation cluster. Transportation Research Procedia, 63, 607–617. Retrieved from https://acortar.link/RW4oVv
- Kovacevic, A. (2020). The 5 Most Important Criminal DNA And Crime Data Sources. Smart data collective. Retrieved from https://www.smartdatacollective.com/5important-criminal-dna-and-crime-datasources/
- Pramanik, M. I., Lau, R. Y. K., Yue, W. T., Ye, Yu., & Li, C. (2017). Big data analytics for security and criminal investigations. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 7, e1208. https://doi.org/10.1002/widm.1208
- Rigano, C. (2019). Using artificial intelligence to address criminal justice needs. National Institute of Justice, 280. Retrieved from https://www.cep-probation.org/wp-content/uploads/2020/11/252038.pdf
- Ritchie, K. L., Cartledge, C., Growns, B., Yan, A., Wang, Y., Guo, K., Kramer, R. S. S. ... White, D. (2021). Public attitudes towards the use of automatic facial recognition technology in criminal justice systems around the world. PLoS ONE, 16(10), e0258241. https://doi.org/10.1371/journal.pone.025824
- Sirant, M. (2016). Police cooperation Ukraine and the European Union legal aspects.

- Bulletin of Lviv Polytechnic National University. Series: Legal Sciences, 850, 353-360. Retrieved from http://nbuv.gov.ua/UJRN/vnulpurn\_2016\_85 0 54
- Smith, M., & Miller, S. (2022). The ethical application of biometric facial recognition technology. AI & SOCIETY, 37, 167–175. https://doi.org/10.1007/s00146-021-01199-9
- Smith, M., Mann, M., & Urbas, G. (2018). Biometrics, Crime and Security. London: Routledge,
  - https://doi.org/10.4324/9781315182056
- Solovyeva, N. A., & Frantsiforov, Y. V. (2020). Specifics of Electronic and Digital Law Enforcement in Crime Investigation. (vol. 110, pp. 449–458). Cham: Springer. https://doi.org/10.1007/978-3-030-45913-0 53
- Thompson, T. (2010). Crime software may help police predict violent offences. The Guardian. Retrieved from http://www.theguardian.com/uk/2010/jul/25/police-software-crime-prediction
- Thornton, J. (2016). Cost, Accuracy, and Subjective Fairness in Legal Information Technology: A Response to Technological Due Process Critics. 91 N.Y.U. L. Rev. 1821 Retrieved from https://heinonline.org/HOL/LandingPage?ha ndle=hein.journals/nylr91&div=52&id=&page=
- Uncovered. (2022). 20 Databases Used in Forensic Science Investigations. Retrieved from https://uncovered.com/20-databases-used-in-forensic-science-investigations/
- Uzlov, D., & Strukov, V. (2017). Web-based protected geoinformation system of criminal analysis (RICAS) for analytical support for crimes investigation. In: 2017 4th International Scientific-Practical Conference Problems of Infocommunications. Science and Technology (PIC S&T) (pp. 508-511). Kharkiv, Ukraine. https://doi.org/10.1109/INFOCOMMST.201 7.8246450
- Willis, J. J., Koper, C. S., & Lum, C. (2020). Technology use and constituting structures: accounting for the consequences of information technology on police organisational change. Policing and Society, 30(5), 483-501. https://doi.org/10.1080/10439463.2018.1557 660



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# The impact of gamification on the motivation of primary schoolers under martial law

# Вплив гейміфікації на забезпечення мотивації учнів початкової школи в умовах воєнного стану

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> Hanna Byhar<sup>137</sup> https://orcid.org/0000-0002-4480-8293 Iryna Pits138

Written by:

https://orcid.org/0000-0002-7911-9922

Krystyna Shevchuk<sup>139</sup>

https://orcid.org/0000-0002-9365-1456

Inna Prokop<sup>140</sup>

https://orcid.org/0000-0003-2409-4892

Olha Shestobuz<sup>141</sup>

https://orcid.org/0000-0001-7268-8316

Serhii Dariichuk<sup>142</sup>

https://orcid.org/0000-0001-8089-1293

### **Abstract**

Ensuring an uninterrupted learning process requires new approaches that will enhance pupil motivation. The aim of the work is to ensure the possibility of including gamification in the learning process of primary schoolers under martial law. This aim was achieved through the use of the methods of questionnaire survey and analysis; calculations of significance, efficiency ratios and Spearman's rank correlation coefficient. The study found that only 19% of teachers used gamification processes before the study. Learning approaches included core material learning through EdApps and Can't Wait to Learn. EdApp and Google Form were used to study basic terminology in the form of a game, do homework, and test knowledge. Dynamism is of the greatest importance for

### Анотація

Забезпечення безперебійного процесу навчання потребує нових підходів, які сприятимуть мотивації учнів. Мета роботи полягає у забезпеченні можливості включення гейміфікації у процес навчання учнів початкової школи в умовах військового стану. Для досягнення поставленої мети в роботі були використані методи анкетування, аналізу; розрахунки коефіцієнтів значимості. ефективності й коефіцієнта кореляції Спірмена. В роботі виявлено, що процеси гейміфікації до початку дослідження постійно використовували лише 19% викладачів. Підходи до навчання включали вивчення основного матеріалу за допомогою застосунків EdApp й «Вивчаю не чекаю». Для вивчення основної термінології в ігровому форматі,

<sup>142</sup> PhD of Pedagogical Science, Assistant, Department of Physical Culture and Basics of Health, Faculty of Physical Culture and Human Health, Yuriy Fedkovych Chernivtsi National University, Chernivtsi, Ukraine.



<sup>137</sup> PhD of Pedagogical Science, Associate Professor of the Department of Pedagogy and Methods of Primary Education, Faculty of Pedagogy, Psychology and Social Work, Yuriy Fedkovych Chernivtsi National University, Chernivtsi, Ukraine.

<sup>138</sup> PhD of Pedagogical Science, Associate Professor of the Department Pedagogy and Methods of Primary Education, Faculty of Pedagogy, Psychology and Social Work, Yuriy Fedkovych Chernivtsi National University, Chernivtsi, Ukraine.

<sup>139</sup> PhD of Pedagogical Science, Associate Professor of the Department Pedagogy and Methods of Primary Education, Faculty of Pedagogy, Psychology and Social Work, Yuriy Fedkovych Chernivtsi National University, Chernivtsi, Ukraine.

<sup>140</sup> PhD of Pedagogical Science, Associate Professor of the Department Pedagogy and Methods of Primary Education, Deputy Dean for Educational and Methodical Work Faculty of Pedagogy, Psychology and Social Work, Yuriy Fedkovych Chernivtsi National University, Chernivtsi, Ukraine.

<sup>141</sup> PhD of Pedagogical Science, Associate Professor at the Department of Pedagogy and Methodology of Primary Education, Faculty of Pedagogy, Psychology and Social Work, Yuriy Fedkovych Chernivtsi National University, Chernivtsi, Ukraine.

teachers, as it promotes the participation of all pupils, and affects the development of independence, thinking, and creative skills. The study found that pupils of grades 2-4, who used gamification in their studies, showed a higher knowledge level. It was established that memory and sociability were developed to the greatest extent among schoolchildren. The practical significance of the work is the possibility of transformation of the educational process as a result of the use of the proposed interactive programmes. Prospects of the research may be related to the comparison of the effectiveness of using gamification techniques among primary and secondary schoolers.

**Keywords:** gamification, primary school, group process, game format, pupil motivation, martial law.

### Introduction

The impact of information technologies is also reflected in the educational process, which affects the search for new approaches to teaching the material (Ross & Bennett, 2022). A significant amount of educational information should be presented in a non-standard form, which will make students interested in studying it (Arifin & Setiawan, 2022). Gamification can be applied for easier perception of educational materials, both with and without a combination of innovative technologies (Gupta & Goyal, 2022). The relevance of this research is in the development of new approaches to ensuring the education of primary schoolers using gamification techniques.

Gamification is an approach aimed at using a game format in the educational process, which promotes the activation of intellectual and mental processes of students (Legaki et al., 2022). Gamification affects the socialization of students, which is manifested in the ability to analyse, work in a group without being afraid to express one's opinion. The advantages of gamification also include the possibility of receiving regular feedback from the teacher and can be used in the distance learning process (Milosz & Montusiewicz, 2018). introduction of the gamification principles into education during wartime allows for better assimilation of information in connection with game presentation. This approach enables

виконання домашніх завдань, перевірки знань були використані програма EdApp и Google Форма. Для вчителів найбільше значення має динамічність, оскільки сприяє участі всіх учнів і впливає на розвиток самостійності, мислення, творчих навиків. Під час дослідження виявлено, ЩО учні 2-4 класів, використовували В навчанні процеси гейміфікації, показали більш високу ефективність рівня знань. Встановлено, що серед школярів пам'ять і комунікабельність були розвинена в найбільшій степені. Практичне значення роботи полягає можливості трансформації учбового процесу в результаті використання запропонованих інтерактивних програм. Перспективи дослідження можуть бути пов'язані меннянаідоп ефективності використання прийомів гейміфікації серед учнів початкової і середньої школи.

**Keywords:** гейміфікація, початкова школа, груповий процес, ігровий формат, мотивація учнів, воєнний стан.

uninterrupted access to educational materials stored in the online space for students of the corresponding grade (Kanaki et al., 2022). The term "gamification" was introduced in 2022 by N. Pelling, but it was mentioned as early as 1896 with the release of Sperry & Hutchinson brands (Panyajamorn et al., 2018). The spread of gamification in Ukraine became possible thanks to O. Zaporozhets and D. Elkonin (Lovianova et al., 2020). The researchers found that it is the game that contributes to the psychological and mental development of the child, which can be used in the educational process.

The introduction of the gamification process in education contributes to increasing the level of students' knowledge, and developing skills that will make it possible to resolve different tasks. The introduction of the Wuzzit Trouble game into the learning process can be an example of gamification. According to the rules of the game, the learning process consists in the transition of students to different levels after completing mathematical assignments (Yang et al., 2022). The computer game Wuzzit Trouble provides for freeing the person from the cage by solving problems in order to motivate students more. The LMS Web application also promotes learning through gamification (Luo & Yu, 2022). Tovuti LMS is used to develop lessons and edit existing ones, which enables to display information using a virtual classroom. The programme provides for



the making lists of the most successful students. The application of the Loquiz online platform facilitates the development of games for learning and interaction between students (Oliveira et al., 2023). The application Can't Wait to Learn was developed with the assistance of the Ministry of Education and Science of Ukraine, which contributes to the education of elementary schoolers (Smyrnova-Trybulska et al., 2017). According to the relationship, the learning process takes place by watching video lessons using game approaches to learning the material.

The issue of the introduction of gamification for learning during wartime in Ukraine is superficially covered in the academic literature. The aim of the article is to analyse the effectiveness of including gamification in the learning process when studying educational branches of primary school under martial law.

The research objectives are the following:

- identify the peculiarities of teachers' use of gamification in the educational process before the research, taking into account basic and additional assignments;
- develop approaches to the introduction of gamification into the learning process of primary schoolers, taking into account the combination of game format and innovative technologies;
- determine the significance of aspects of gamification that were taken into account in the educational process for students and teachers:
- determine the quality of the acquired knowledge of primary school students with the help of the efficiency ratio, taking into account the skills that have been developed.

# Literature review

The introduction of game technologies in the educational process affects the development of students' thinking, which was tested among 32 students and 4 teachers. Game technologies make it possible to eliminate the mechanical memorization of educational information, and to initiate the study of the material in an easy way. Game technologies contribute to development of multi-functionality, student motivation, logical thinking, and also influence the development of independence. The game format of learning increases the efficiency of learning complex assignments as a result of the introduced innovations (Elmira et al., 2022a). Online platforms (Proprofs.com) facilitate the study of terminology by introducing creative

elements and a game format. The effectiveness of learning is related to the completion of various assignments that are available in online. Gamification is aimed at the assimilation of knowledge as a result of the use of motivating elements (badges, incentive prizes, excursions, etc.). The use of various quests also affects the motivation and development of students (Mirzoyeva, 2022). The use of gamification processes in the development of reading skills in primary school improves the organization of learning during the COVID-19 pandemic. Gamification makes it possible to provide a cross-learning process, which is aimed at the interaction of students and teachers with each other. Gamification contributes to the acquisition of technical and analytical skills as a result of ensuring the dynamism of learning. Learning was built on discussing the material that the students read, as well as presenting their own interpretation of the text (Calderón Arévalo et al., 2022).

EasyLogic3D enables integrating gamification in 3D format into the learning process. This programme facilitates the adaptation of primary schoolers to learning as a result of the use of a game scenario that attracts their attention. This approach promotes interaction between players, which affects the independence of studying the material. Games contribute to activation of brain activity, provision of individual and emotional connection (Ríos Félix et al., 2020). The main approach to teaching with Scratch was aimed at ensuring the sequence of learning. Scratch helps to present difficult material through a game using media technology. Audio and video materials contributed to text processing and influenced the provision of visualization in education. It is important to take into account that the game is adapted to the educational materials and to the age of schoolchildren (Prykhodchenko et al., 2020). Gamification affects the level of motivation of primary schoolers during physical education lessons. The Exergames application enables using digital games as a result of repeating movements. The application contributes to the concentration of students' attention in the specified period of time. Cognitive motivation affects students' interest in attending classes (Quintas-Hijós et al., 2020).

Gamification is an alternative to the traditional learning process, as it provides the study of theoretical material in an unusual format that is in line with the current stage of development. Gamification helps to overcome obstacles in the form of a game and to memorize material based on visualization. It also affects the development

of students' individuality, interaction with other students, and the absence of obstacles to expressing one's own opinion (Martínez-Hita & Miralles-Martínez, 2020). The WCRAS webbased system facilitates reading and annotating the material read, which increases the effectiveness of understanding the information read. Involvement of 55 students in the experiment made it possible to identify the level cooperation between students effectiveness in understanding the read material. The results showed that there was no difference in efficiency between gamification and the traditional process. However, students who involved gamification in learning presented a larger number of annotations on the read material. The degree of immersion in the studied material was also greater as a result of ensuring interaction between students. The difference in results is related to the motivation of students in the experimental group (Chen et al., 2020). The history and culture for primary schoolers was taught based on the use of slides depicting various assignments. Completing assignments enabled a transition to a different

level as a result of searching for answers on the Internet. The use of mobile technologies enhanced students' learning motivation (Li et al., 2019).

The analysis of studies revealed the advantages of gamification, which affect students' motivation. However, the analysed works do not cover the approaches to the step-by-step study of the material, only elements that can provide training (online programmes, applications) are presented.

### Methods

### Research Design

The first stage of the research was based on interaction with teachers, which involved obtaining information about their understanding of the gamification process. A questionnaire survey was conducted among teachers through this method in order to find whether they used non-standard approaches earlier in the educational process (Table 1).

**Table 1.**Peculiarities of the teachers' use of gamification in the educational process (before the research)

Answer options	Answers of the respondents
Yes, gamification processes are used in the research	
Partially used	
No, they are not used	

The questionnaire survey was conducted through the use of e-mail, which made it possible to receive data directly from the respondents. E-mails of teachers were previously registered by authors. which precluded obtaining the unreliable results. According to questionnaire, teachers were given 8 hours to present their answers. The obtained data were presented using percentages in the Results section.

The second stage of the research involved the development of approaches to the transformation of the educational process using gamification. For this purpose, the authors analysed various game approaches that can be used in the learning process. During the analysis of game approaches, the authors took into account the possibility of their adaptation to the education of junior schoolchildren, the possibility of using them in different subjects. The ability to use the programmes for a group of students, ease of use were also important. The development of learning approaches included the search for correct modern interactive programmes that

enable the inclusion of educational material in accordance with state recommendations.

At the second stage of the research, it was also planned to find out which of the aspects of gamification are most important for the educational process. The authors identified four aspects (dynamism, mechanics, aesthetics, social interaction) as a result of the literature analysis (Luo & Yu, 2022; Martínez-Hita & Miralles-Martínez, 2020; Oliveira et al., 2023; Prykhodchenko et al., 2020). The significance of gamification aspects was revealed after 4 months of training (September - December 2022). Data from the respondents were obtained through a questionnaire survey, which were used to calculate the significance coefficient.

The third stage of the research consisted in identifying the effectiveness of the developed educational approaches, which provided for the application of gamification principles. First of all, the effectiveness of education of primary schoolers was revealed. The effectiveness of learning the material was checked as a result of



taking into account the level of acquired knowledge, the ability of pupils to cooperate in a group, and their activity in classes. The obtained parameters were correlated with the total permissible number of points. The efficiency level was calculated according to the efficiency ratio. The results of the study present percentage data that reflect the number of students who received a certain level of knowledge (high, medium, low). The results were presented for students of two groups, which enabled evaluating the effectiveness of the developed approaches to learning. Group 1 pupils were taught according to the approaches developed by the authors, which included gamification approaches. Group 2 pupils studied according to the traditional system, which provided for the presentation of methodical materials in the conventional form. The pupils of two groups used Zoom online platform in order to ensure uninterrupted education during wartime. The online platform facilitated the interaction between students and teachers remotely. The obtained results were compared among different groups of pupils through calculations of the Spearman's rank correlation coefficient.

The third stage of the research also provided for identifying the skills they developed during the learning process in Group 1 pupils. The percentage ratio of pupils was presented using the results provided by the teachers. Emphasis in the study was placed on the skills of independence, sociability, creative thinking, memory, as gamification is primarily related to them.

# Sampling

The study involved 180 students, who were divided into two groups. Group 1 (92 pupils) studied with the use of the approaches developed by the authors, Group 2 (88 pupils) - using the traditional system. The criteria for the selection of pupils was their study in the junior grades of a school in Chernivtsi. The authors planned to involve 250 pupils in the study, but 60 of them were excluded. First-grade pupils were excluded from the study, as their curriculum requires more teacher supervision. The research programme provided for the involvement of gamification in the following educational fields: language and literature (literary reading), natural science, social and health care, mathematics, art).

# Methods

The first stage of the research involved the use of the questionnaire survey. The advantages of this method are the possibility of its use not only offline, but also online. The survey of primary schoolers was ensured as a result of interaction with parents, which excludes violations of ethical norms (Committee on Publication Ethics, 2021). The questionnaire form is presented in Table 1.

The second stage of the research involved the use of a well-known method of analysis, which included the analysis of game approaches and existing computer programmes. The method of analysis was applied to identify interactive technologies that will contribute to the provision of education using the gamification principles. The implementation of approaches to learning became possible due to the availability of the classrooms, as well as access to the Internet and online programmes. The following technologies were used in learning: Zoom, Can't Wait to Learn, EdApp, Google Forms. Using wellknown methods, the authors came to the conclusion that these programmes will ensure an uninterrupted learning process. The presented programmes will also motivate students to study. provides uninterrupted Zoom communication between students and the teacher, as required. The programme Can't Wait to Learn ensures an uninterrupted learning process in accordance with state requirements. The application provides for the development of educational materials, performance of game tasks. EdApp programme helps to ensure the study of the main material, which was presented in a game format (Find the Word, Yes or No). The EdApp programme also facilitated the study of basic academic terms. The use of Google Forms made it possible to verify knowledge with the help of computer tests, as well as passing different levels.

The second stage of research also provided for the calculation of the significance ratio, which was developed by the authors of the article (Formula 1):

$$R_{sign} = \frac{\sum (N_c + N_{a(i)})}{N_i} \quad (1)$$

 $N_c$  – conditional score for the need to use the gamification aspect in education (5 - the maximum conditional score);

 $N_{a(i)}$  – conditional assessment of effectiveness of the selected aspect of gamification (5 - the maximum conditional assessment)

 $N_{\pi}$  – the total number of indicators.



The calculation included experimental survey data. The calculation was carried out using the data received from pupils and teachers. The gradation enabled identifying discrepancies between the answers, which will contribute to improving the educational process in further research.

The third stage of the research involved mathematical methods of analysis, which were used to calculate the effectiveness of students' knowledge. The effectiveness of knowledge was tested among two groups of students, with further comparison of the results.

The efficiency level was obtained as a result of calculating the efficiency ratio according to the formula 2 developed by the authors:

$$R_{ef} = \frac{g_s + g_h}{g_m} \times R_{\rm a}, \quad (2)$$

 $G_s$  – average grades for the study period;

 $G_h$  – average grades for doing homework;

 $R_{\rm a}-{\rm in}$ -class activity coefficient (1 - maximum value):

 $S_m$  – maximum allowable total score.

If the calculation of the efficiency ratio was within the limits of:

- from 1.7 to 2.0 pupils had a high level of performance;
- from 1.3 to 1.69 pupils had an average level of performance;
- below 1.29 pupils had a low level of performance.

The distribution of performance levels differed from established school grades. A high level of

knowledge was obtained as a result of making 2 minor mistakes, as well as active participation in group work. Pupils who made from 2 to 5 mistakes were assigned medium level of knowledge. Pupils who made more than 4 mistakes, didn't perform homework and didn't actively participated in classes had a low level of knowledge.

The results of Group 1 and Group 2 pupils were compared by calculating the Spearman's rank correlation coefficient (Luo & Yu, 2022) (Formula 3).

$$r_s = 1 - \frac{6\sum_i d^2}{N(N^2 - 1)},$$
 (3)

N – a quantitative indicator that shows the number of points scored;

d — a ranked tabular value.

Values are correlated if the Spearman's rank correlation coefficient does not exceed 1.

#### Results

In order to understand the specifics of the approach to the education of primary schoolers, the proportion of teachers who previously used gamification processes was identified. The data are necessary because they indicate the creative development and motivation of schoolchildren, which differs from the traditional approach to learning. The basic idea will contribute to the further development of approaches to the introduction of gamification into the learning process. Data from teachers were obtained as a result of a preliminary questionnaire survey (Figure 1).

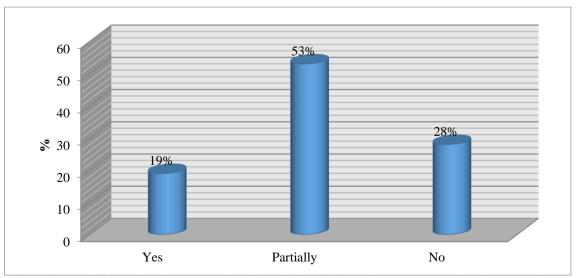


Figure 1. Peculiarities of teachers' use of gamification in the educational process before the research.



The results of the survey showed that more than half of the teachers who participated in the study partially used gamification techniques in the educational process. Features of the use were related to the study of a separate topic or during preparation for open lessons. For this purpose, the teachers used computer programmes that provided a game format for the answers. The teachers who partially used gamification approaches taught certain topics in a game format. The process involved completing assignments to advance to the next level. "No" answers ranked second according to the results of questionnaire survey, because traditional approaches were used in learning. Traditional approaches were based on the use of teaching materials that did not provide for the game format of acquiring knowledge. It was

established with the help of a questionnaire that only a part of teachers regularly uses gamification techniques in education, which affects the level of pupils' motivation.

Based on the result of the obtained survey data, the authors came to the conclusion about the need to apply a serious approach to the development of gamification approaches in education. When applying gamification approaches, not only the level of teachers' skills, the age of schoolchildren, but also the possibility of using them offline and online were taken into account. This approach is necessary because learning during wartime is blended and requires the most coordinated system. Such a system will allow conducting regular classes that do not depend on individual conditions (Figure 2).

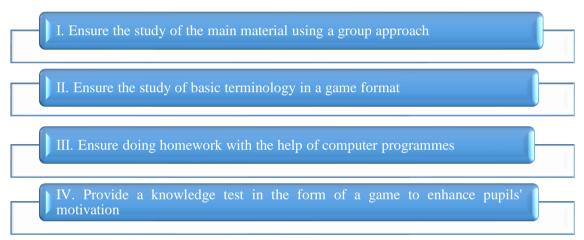


Figure 2. Approaches to the introduction of gamification into the educational process in the study of educational branches of primary school

The authors came to the conclusion that a Ī. group learning process should be introduced for greater motivation of students and better assimilation of knowledge. For this purpose, schoolchildren were grouped by 4 people, which provided for the fulfilment of the assigned tasks. The learning process was organized in such a way that teachers explained the main topic of the lesson. Next, schoolchildren were given the assignment of revealing the main aspects of the presented material at their own discretion. The mobile application Can't Wait to Learn was used to ensure the gamification of learning, which made it possible follow the educational programme approved at the state level. The study of a separate paragraph in the textbook involved its submission by schoolchildren in the format that they chose (retelling, use of their own illustrations, etc.). Then, among all groups of pupils in the class, it was found out

which of them studied the material in detail and was able to present it in an understandable format. The process included not only the determination of the group that most accurately learned the educational material, but also the receipt of virtual awards. The group of pupils who collected the most awards received an incentive prize — a visit to the museum. Aesthetic aspects were also taken into account during studies, which provided for a coherent educational process, as well as the emotionality schoolchildren's of participation. The study of the main material also took place as a result of the use of the online application EdApp, which facilitates the conduct of classes offline and online. The authors used EdApp to develop templates for learning, which enabled teaching materials to be presented in a game format. Quizzes and templates were developed For this purpose, which provided the games Find the Word, Yes or No.

The second approach, which was used in the II. training, was to ensure the study of basic terminology in a game format. For this purpose, teachers should have used the description of a separate term in accessible which would allow making associations. An associative series enables students to use creative thinking, which helps to memorize information. The groups of pupils were expected to display the description of the term with possible adjustments. The pupils learned of terminology during the game, where the schoolchildren were in the tower. They way out of the tower was possible as a result of correct answers to the questions. Correct answers to 5 questions gave the right to enter a new level. Studying terminology in this format enables pupils to learn the material, as terms are the basis for understanding the subject. The game format of studying terminology was conducted in the classroom with the help of questions posed by teachers, as well as through using the EdApp programme. Memorizing simple terms in the future helps to learn more complex ones. In the learning process, terms should be understood, not memorized with 100% accuracy according to teaching materials.

III. The approach in the education of primary schoolers was to ensure the completion of homework with the help of computer programmes. EdApp was used to implement the approach, which enabled teachers to create a homework plan. The assignments included studying the material and performing step-by-step actions in a game format. Answers to quiz questions enabled pupils to focus on the subject and ensure its gradual study. The homework was completed when every subsequent level was

passed. The lack of knowledge at one of the levels did not allow students to go to the next one, which affected the percentage of homework completion. Preparing homework in a game format gave pupils the opportunity to find ways to overcome difficulties and acquire the necessary level of knowledge. Using the EdApp programme enables obtaining a grade for the homework immediately after completing it. The teachers checked the correctness of solving individual examples and problems.

IV. A knowledge test in the form of a game helps to make pupils less nervous than during regular tests. The knowledge test included short answers using developed computer tests, as well as detailed answers to questions. Test items were created using Google Forms. The pupils who completed the assignments most correctly were awarded virtual prizes, the largest number of which gave the right to visit the educational exhibition at the end of the semester. A ranking of the pupils of the class was also created based on the results of the acquired knowledge, which contributed to the development of competition and pupils' motivation. The pupils' motivation was ensured through the use of certificates, which indicated a high level of acquired knowledge.

After 4 months of learning with the use of developed approaches, the teachers and pupils identified the aspects of gamification that were developed with the highest quality. Dynamism, mechanicalness, aesthetics and social interaction were identified among the gamification aspects. Data from respondents were collected using a questionnaire, which subsequently allowed for the calculation of the significance ratio using Formula 1. The results are presented in Table 2.

**Table 2.** *Identification of gamification aspects that were most clearly taken into account in the educational process* 

Gamification aspect	According to pupils	According to the teachers	
Dynamism	1.75	2.5	
Mechanicalness	2.45	1.8	
Aesthetics	1.6	1.55	
Social interaction	2.15	2.2	

It was established based on the calculations that the "mechanical" aspect was of the greatest importance for the pupils. The results are related to the fact that mechanicalness is interconnected with the received awards, the use of specialized programmes (Can't Wait to Learn, EdApp, Google Forms). Mechanicalness was of the greatest importance, as it was aimed at motivating students to achieve the highest results. Teachers believe that mechanicalness





should be ranked third, as the emphasis should be on the acquisition of knowledge. According to the teachers' answers, dynamism was developed most clearly, because it involved the concentration of pupils' focus on a separate task. Social interaction is also important for learning, as it promotes the development of pupils' socialization, enables them not to be afraid to express their opinion. Pupils ranked dynamism third, as it requires a lot of concentration and independence during learning. Both teachers and students ranked aesthetics last, as it relates to creating an overall learning experience and emotional commitment. But it was first necessary learn approaches to using modern programmes, which affected the overall impression. Aesthetics during learning was only

partially taken into account, which requires its further development.

The level of pupils' knowledge was identified during the research. For this purpose, the knowledge of pupils who studied with the use of gamification techniques (Group 1) was compared. The results were also compared with students who studied according to the traditional education system (Group 2). During the comparison, the level of acquired knowledge, the ability to cooperate in a team, and pupils' activity in groups were taken into account. The efficiency was calculated as a result of applying the efficiency ratio calculations according to Formula 2. The results are presented in Table 3.

Table 3. Efficiency of acquired knowledge of primary schoolers

Efficiency of the class	Group 1		Group 2		Spearman's
	Calculation of the efficiency ratio	Percentage ratio of pupils	Calculation of the efficiency ratio	Percentage ratio of pupils	rank correlation coefficient
		Gr	ade 2		
High	1.78	68%	1.73	41%	0.834
Medium	1.32	32%	1.30	48%	0.718
Low	-	-	0.92	7%	-
Grade 3					
High	1.80	72%	1.72	29%	1.261
Medium	1.40	26%	1.36	59%	1.037
Low	0.91	2%	0.90	12%	0.983
Grade 4					
High	1.75	52%	1.73	38%	0.693
Medium	1.38	47%	1.28	54%	0.367
Low	0.93	1%	0.92	8%	0.951

Comparison the performance of the pupils of both groups found that the pupils of Group 1 showed higher results. Their effectiveness is related to the use of gamification techniques, which enhance pupils' motivation. Pupils of Group 1 in Grade 3 obtained the highest results, because they completed the assignments responsibly. The high efficiency of pupils of Group 1 is associated with the development of independence, receiving constant feedback from the teacher. The learning process was aimed at developing confidence, sociability, and nonstandard thinking. Pupils of Group 2, who studied according to the traditional system, had a lower knowledge efficiency. This is explained by the fact that learning required concentration when learning the subject. Repetition of the material was possible only as a result of using textbooks. The pupils of Group 1 could reproduce the lesson at a convenient time as a result of using the materials of Can't Wait to Learn and EdApp. They also had the opportunity to complete assignments and check the level of knowledge they had acquired. The pupils of Group 2 also had low efficiency indicators, which is explained by the lack of regular feedback. A comparison of the obtained results showed that the indicators of third-graders had the largest values that do not correlate.

The final stage of the research provided for identifying the skills that the pupils of Group 1 developed during training. The results are presented in percentages in Figure 3.

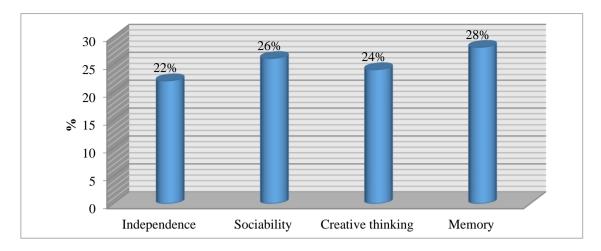


Figure 3. Skills acquired by pupils of Group 1, who studied with the use of gamification

distribution of acquired skills schoolchildren during their studies showed that the most pupils developed memory. The process is connected with regular memorization of the completion of assignments to material, consolidate it, discussion between pupils and teachers. Sociability ranks second in terms of acquired skills, which was developed as a result of grouping pupils by 4 people. This approach enabled all schoolchildren to continue education. This was reflected in defending one's opinion, showing initiative and lack of fear in presenting information in front of the class and the teacher. Pupils' creative thinking ranked third, which is connected with the use of computer programmes for studying terms and analysing material. Independence was developed among a smaller number of students, since elementary schoolers need correction of their actions by teachers.

#### Discussion

contribute Digital technologies to the implementation of the gamification process in education, thereby contributing to the creation or use of existing computer games for education. Game dynamics help encourage students to learn new material, as it is built on mystery that can be revealed after solving tasks. The mystery lies in the form of presentation of the material, obtaining the final result, which affects the overall ranking, the final reward format (Elmira et al., 2022b). The use of the gamification process in education with the help of board games promotes the study of the English language. Learning efficiency is achieved as a result of reducing students' anxiety. A double hierarchical structure of the board game was developed in order to ensure an uninterrupted learning process, which involved game learning and the use of board cards. Board cards reflected

the main material and promoted the visual perception of new words with the help of images. Group discussion and joint reading made it possible to use the learned words, which contributed to the effectiveness of their memorization. This approach made it possible to understand the read material and develop memory (Li et al., 2022). A personalized learning process can be achieved as a result of using the Smart-Learning Partner (SLP) platform, which includes the basics of artificial intelligence. The availability of various assessment tools, highquality lectures, and video materials contributes to the improvement of learning. Social interaction between students as a result of using the Smart-Learning Partner platform enables expanding knowledge in the process of exchange between students (Niu et al., 2022). In comparison with the presented works, several information technologies were used in this study support the educational process. The technologies used (Can't Wait to Learn, EdApp, Google Forms) promote gamification in education among primary schoolers.

The use of the WCRAS virtual system in the educational process improves the reading quality of primary schoolers. WCRAS programme made it possible to carry out a more detailed analysis of the text and note down the information. The results show that the reading competence of students increases as a result of improving the text comprehension system (Tsai et al., 2020). The use of gamification methods can also promote not only the acquisition of a high-level knowledge, but also provide a positive emotional state. Emotions are important for providing intellectual activity, which can be associated with stress, frustration. The game format reduces negative factors in the educational process, as it contributes to a lower workload, promotes visual



perception of information in an understandable way (Zatarain Cabada et al., 2020). Information technologies in combination with gamification affect the transformation and popularization of education. Completion of practical assignments promotes the development of creativity and thinking as a result of conducting a parallel between the educational process and the game format. Gamification is interconnected with feedback, which makes it possible to progress through game levels until the minimum number of mistakes is made. The games developed for learning are built on a comprehensive approach, which facilitates the learning of the necessary material in a simpler format (Wei & Yang, 2023). relationship between The personalized gamification learning approach, gained experience and student motivation was not found. The results of the study showed that only regular classes help to achieve a high level of knowledge (Oliveira et al., 2022). This study established not only the effectiveness of the information technologies used, but also the importance of gamification aspects.

The effectiveness of learning can be increased as a result of conducting open online lessons and principles. the gamification using effectiveness of learning is related to the possibility of obtaining knowledge as a result of access to educational materials. The use of an game contributes educational the familiarization of schoolchildren with new material and its consolidation as a result of orientation to graphic materials (Panyajamorn et al., 2022).

The analysis of literature showed that the majority of studies are aimed at applying the gamification principles in distance education. It was established that gamification affects the improvement of the emotional state of students, which affects the level of acquired knowledge. In this study, approaches to ensuring the educational process using gamification of primary schoolers under martial law were developed. The gamification aspects (dynamic, mechanical, aesthetic, social interaction) that have the greatest impact on students and teachers have also been identified. The quality of the acquired knowledge in the work was measured using the efficiency ratio. The obtained results correspond to the hypothesis of the study and correspond to the aim of the study, as the work presented mechanisms for organizing the education of primary schoolers. The approaches can be adapted in the course of the learning process.

#### Conclusions

The relevance of the research was confirmed as a result of achievement of the aim, as the work presented approaches to providing education to primary schoolers using the gamification principles and revealed their effectiveness. Gamification processes contribute to the motivation of schoolchildren to study subjects and are aimed at the development of their socialization thanks to the ability to express their own opinion. Emphasis on gamification contributes to the assimilation of educational materials in a more understandable format.

The authors of this study established that 28% of teachers have not previously used gamification techniques in education, 53% have used them partially. The obtained data made it possible to assess the level of preparation of teachers for the transformation of the educational process using gamification techniques. As a result, the authors developed the following approaches to the transformation of primary schoolers' learning:

- emphasis on studying the main material;
- study of basic terminology in game format;
- doing homework using computer programmes;
- providing a knowledge test in the form of a game to motivate students.

The implementation of the educational process became possible as a result of the use of online programmes such as EdApp, Can't Wait to Learn, creation of tests using Google Forms. Pupils were divided into groups of 4 people for the convenience of conducting lessons.

The research established that mechanics (2.45) and social interaction (2.15) are of greatest importance for pupils in the learning process. The reason it that these gamification aspects contribute to receiving incentives and are directed to work in a team. Teachers believe that the most important aspects are dynamism (2.5) and social interaction (2.2). This is explained by fact that pupils develop thinking, independence and sociability during their studies.

A comparison of two groups of pupils revealed that students of Group 1 (gamification was used during learning) showed greater performance. The largest number of high results were obtained by third-graders (72%), which is related to the responsibility of completion and accuracy of assignments. The highest results in Group 2, which studied according to the traditional

system, were obtained by second-graders. It was found that 28% of schoolchildren, developed memory, 26% developed communication skills, 24% developed creative thinking, and 22% developed independence.

The practical significance of the work is the possibility of transformation of the educational process as a result of the introduction of gamification for learning material and terminology, testing knowledge. The obtained research results can be used in offline and online education, as well as when conducting optional classes. Prospects for future research may be related to the use of various digital gamification technologies in education, and comparison of their effectiveness among schoolchildren.

## Bibliographic references

- Arifin, Z., & Setiawan, B. (2022). Utilising gamification for online evaluation through quizizz: Teachers' perspectives and experiences. World Journal on Educational Technology: Current Issues, 14(3), 781-796. https://doi.org/10.18844/wjet.v14i3.7278
- Calderón Arévalo, M. Y., Flores Mejía, G. S., Ruiz Pérez, A., & Castillo Olsson, S. E. (2022). Gamification in the reading comprehension of students in times of pandemic in Peru. Revista De Ciencias Sociales, 28(ESPECIAL 5), 63-74. https://doi.org/10.31876/rcs.v28i.38145
- Chen, C., Li, M., & Chen, T. (2020). A web-based collaborative reading annotation system with gamification mechanisms to improve reading performance. Computers and Education, 144, 103697. https://doi.org/10.1016/j.compedu.2019.103697
- Committee on Publication Ethics. (2021). About COPE. Retrieved from https://publicationethics.org/about/our-organisation
- Elmira, U., Abay, D., Shaimahanovna, D. A., Erzhenbaikyzy, M. A., Aigul, A., & Rabikha, K. (2022a). The importance of game technology in primary education. World Journal on Educational Technology: Current Issues, 14(4), 996-1004. https://doi.org/10.18844/wjet.v14i4.7652
- Elmira, U., Duisengalievna, E. A., Akgul, Z., Zhorabekovna, B. B., Yntyk, B., & Meiramkul, K. (2022b). Primary school teachers' acceptance levels of educational technologies. Cypriot Journal of Educational Sciences, 17(6), 2187-2198. https://doi.org/10.18844/cjes.v17i6.7557

- Gupta, P., & Goyal, P. (2022). Is game-based pedagogy just a fad? A self-determination theory approach to gamification in higher education. International Journal of Educational Management, 36(3), 341-356. https://doi.org/10.1108/IJEM-04-2021-0126
- Kanaki, K., Kalogiannakis, M., Poulakis, E., & Politis, P. (2022). Investigating the association between algorithmic thinking and performance in environmental study. Sustainability (Switzerland), 14(17), 10672. https://doi.org/10.3390/su141710672
- Legaki, N., Galeote, D. F., & Hamari, J. (2022). The impact of different gamification types in the context of data literacy: An online experiment. CEUR Workshop Proceedings, 3147, 22-32.
- Li, C., Hou, H., & Lee, L. (2022). Design of a dual-hierarchy scaffolding board game-based learning activity for EFL reading comprehension. Language Teaching Research. https://doi.org/10.1177/13621688221125903
- Li, C., Lee, M., Lien, Y., Huang, Y., Wang, C., & Hou, H. (2019). A real escape gamification teaching activity integrated with situated learning and multi-dimensional scaffolding for elementary school social studies course. Proceedings 2019 8th International Congress on Advanced Applied Informatics, IIAI-AAI 2019, 1051-1052.
  - https://doi.org/10.1109/IIAI-AAI.2019.00222
- Lovianova, I., Vlasenko, K., Sitak, I., Akulenko, I., & Kondratyeva, O. (2020). Model of the on-line course for training master students majoring in mathematics for teaching at university. Universal Journal of Educational Research, 8(9), 3883-3894. https://doi.org/10.13189/ujer.2020.080912
- Luo, J., & Yu, S. (2022). Implementing a keycompetence-based subject knowledge learning tool in Chinese middle schools: The direct and sustained effects. Interactive Learning Environments. https://doi.org/10.1080/10494820.2022.2120 018
- Martínez-Hita, M., & Miralles-Martínez, P. (2020). Evaluation of the design of a gamified intervention program to develop historical thinking competencies in primary school students. Revista Interuniversitaria De Formacion Del Profesorado, 34(2), 187-204.
- Milosz, M., & Montusiewicz, J. (2018). The "Architectural jewels of Lublin" game as a tool for collaborative interactive learning of history. Advances in Intelligent Systems and Computing, 715, 96-105.



- https://doi.org/10.1007/978-3-319-73210-7\_12
- Mirzoyeva, L. (2022). Online platforms as a resource for teaching professional terminology. Lecture Notes in Networks and Systems. 499. 147-154. https://doi.org/10.1007/978-3-031-11435-9 16
- Niu, S. J., Luo, J., Niemi, H., Li, X., & Lu, Y. (2022). Teachers' and students' views of using an AI-aided educational platform for supporting teaching and learning at Chinese schools. Education Sciences, 12(12), 858. https://doi.org/10.3390/educsci12120858
- Oliveira, W., Hamari, J., Joaquim, S., Toda, A. M., Palomino, P. T., Vassileva, J., & Isotani, S. (2022). The effects of personalized gamification on students' flow experience, motivation, and enjoyment. Smart Learning Environments, 9(1), 16. https://doi.org/10.1186/s40561-022-00194-x
- Oliveira, W., Hamari, J., Shi, L., Toda, A. M., Rodrigues, L., Palomino, P. T., & Isotani, S. (2023). Tailored gamification in education: A literature review and future agenda. Education and Information Technologies, 28, 373-406. https://doi.org/10.1007/s10639-022-11122-4
- Panyajamorn, T., Suanmali, S., & Youji, K. (2022). Using MOOC and gamification hybrid learning models in rural public schools in Thailand. Journal of Educators Online, 206-223. https://doi.org/10.9743/JEO.2022.19.3.12
- Panyajamorn, T., Suanmali, S., Kohda, Y., Chongphaisal, P., & Supnithi, T. (2018). Effectiveness of E-learning design in Thai public schools. Malaysian Journal of Learning and Instruction, 15(1), 1-34.
- Prykhodchenko, S. D., Prykhodchenko, O. Y., Shevtsova, O. S., & Semenov, S. Y. (2020). Gamification of learning scratch elementary school. OpenAccess Series in Informatics, 81, 20. https://doi.org/10.4230/OASIcs.ICPEC.2020
- Quintas-Hijós, A., Peñarrubia-Lozano, C., & Bustamante, J. C. (2020). Analysis of the applicability and utility of a gamified didactics with exergames at primary schools: Qualitative findings from a natural experiment. **PLoS** 15(4). ONE.

- https://doi.org/10.1371/journal.pone.023126
- Ríos Félix, J. M., Zatarain Cabada, R., & Barrón Estrada, M. L. (2020). Teaching computational thinking in Mexico: A case study in a public elementary school. Education and Information Technologies, 5087-5101. https://doi.org/10.1007/s10639-020-10213-4
- Ross, R., & Bennett, A. (2022). Increasing engagement with engineering escape rooms. IEEE Transactions on Games, 14(2), 161-169.
  - https://doi.org/10.1109/TG.2020.3025003
- Smyrnova-Trybulska, E., Morze. Kommers, P., Zuziak, W., & Gladun, M. (2017). Selected aspects and conditions of the use of robots in STEM education for young learners as viewed by teachers and students. Interactive Technology and Smart Education, https://doi.org/10.1108/ITSE-04-2017-0024
- Tsai, L., Li, M., Chen, C., & Kao, Y. (2020). The effects of collaborative reading annotation system with gamified mechanisms on reading comprehension performance. Proceedings -2020 9th International Congress on Advanced Applied Informatics, IIAI-AAI 2020, 254-259. https://doi.org/10.1109/IIAI-AAI50415.2020.00057
- Wei, Y., & Yang, X. (2023). Evaluation and improvement methods of preschool children's education computer based level on technology. Computer-Aided Design and Applications, 20(s4), 112-122. https://doi.org/10.14733/cadaps.2023.S4.112 -122
- Yang, X., Wei, Y., Li, X., & Wang, H. (2022). Optimization of early childhood education information system based on computer aided methods. Computer-Aided Design and 19(S7), 122-132. Applications, https://doi.org/10.14733/cadaps.2022.S7.122 -132
- Zatarain Cabada, R., Barrón Estrada, M. L., Ríos Félix, J. M., & Alor Hernández, G. (2020). A virtual environment for learning computer coding using gamification and emotion recognition. Interactive Learning Environments, 28(8), 1048-1063. https://doi.org/10.1080/10494820.2018.1558 256



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# Digital services of regional centers for scientific and technical information in China

# Цифрові послуги регіональних центрів науково-технічної інформації Китаю

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Written by:
Guo Zhiliang<sup>143</sup>
https://orcid.org/0000-0002-0939-0530
Alla Solianyk<sup>144</sup>
https://orcid.org/0000-0002-7167-6695
Olena Karpenko<sup>145</sup>
https://orcid.org/0000-0002-9922-165X

#### Abstract

The article aims to study the current level of digital services of the regional subsystem of the National System of Scientific and Technical Information of the People's Republic of China and to determine its optimization directions.

A content analysis of 28 provincial institutes of scientific and technical information's official sites was carried out; the most powerful of them were identified in terms of resource and service potential, the level of organization of corporate cooperation based on consolidated digital platforms of multifunctional user service. It is proved that the level of efficiency of digital services of regional scientific and technical information systems directly depends on the level of the province's economic development and the ability of its government to finance and technologically equip information industry centers activities, and to establish sustainable interaction of all subjects of the information market. Summarizing the results of the content analysis made it possible to identify reserves for improving the service capabilities of the Chinese information industry's regional clusters, to design vectors for diversifying consulting, expert-analytical, cognitive services provincial institutes of scientific and technical information, the development of integrated innovation-oriented intelligent service platforms operating based on artificial intelligence technologies.

#### Анотація

Метою статті є дослідження сучасного рівня цифрових сервісів регіональної підсистеми Національної системи науково-технічної інформації КНР та визначення напрямів її оптимізації.

Здійснено контент-аналіз офіційних сайтів 28 провінційних інститутів науково-технічної інформації, виявлено найпотужніші з точки зору ресурсного та сервісного потенціалу, рівня організації корпоративної співпраці на базі консолідованих цифрових платформ мультифункціонального реалізації обслуговування користувачів. Доведено, що рівень ефективності цифрових сервісів науково-технічної регіональних систем інформації напряму залежить від рівня економічного розвитку провінції. спроможності її уряду фінансувати та технологічно оснащувати діяльність центрів інформаційної індустрії, налагоджувати сталу взаємодію усіх суб'єктів інформаційного ринку. Узагальнення результатів контентвиявити аналізу дозволило резерви сервісних вдосконалення можливостей регіональних кластерів інформаційної індустрії Китаю, розробити вектори диверсифікації консалтингових, експертно-аналітичних, когнітивних послуг провінційних інститутів науково-технічної інформації, розвитку інноваційно-орієнтованих інтегрованих інтелектуальних сервісних платформ,

<sup>&</sup>lt;sup>145</sup> PhD in Pedagogy, Associate Professor, M. Ye. Zhukovskyi National Aerospace University "Kharkiv Aviation Institute", Kharkiv, Ukraine.



<sup>&</sup>lt;sup>143</sup> Postgraduate student, Department of Information, Library and Archival Affairs, Kharkiv State Academy of Culture, Kharkiv, Ukraine.

<sup>&</sup>lt;sup>144</sup> Doctor of Pedagogical Sciences, Professor, Kharkiv State Academy of Culture, Kharkiv, Ukraine.



Keywords: regional institutes for scientific and technical information, digital information services, artificial intelligence technologies, consulting services, innovation transfer.

#### Introduction

In the conditions of digitization of all spheres of society's life, China is rebuilding the National System of Scientific and Technical Information like the best world models. Based on the study of the experience of creating scientific and technical and analytical centers in the USA, Germany and Great Britain, the study of the organizational principles of the functioning of such powerful institutions as the Information Technology and Innovation Foundation of the USA Gold Association (Information, Technology and Innovation Foundation (ITIF), the British Science Policy Research Unit, SPRU, Korea Science and Technology Policy Institute (STEPI), Indian Science Congress Association (ISCA), etc., the People's Republic of China is transforming the information service system of specialists into a digital knowledge industry, artificial which relies on intelligence technologies capable of extracting knowledge as a result of analytical processing of large volumes of scientific and technical information. This large-scale task requires an analysis of the existing information and infrastructural potential of the regional component of the National System of Scientific and Technical Information of the People's Republic of China, which is the resource core of information service for users throughout the country.

To realize the aim of the study concerning the peculiarities of the current level of digitizing Chinese society and transforming the regional subsystems of the National System of Scientific and Technical Information to determine its optimization directions the relevant literature was analyzed and systematic, classification, comparative, and socio-communication approaches were used. Works by Baiyang et al., (2020), Chzhylian (2022), Defang (2007), Jialin & Zhang (2007), Jianxun(2019), Li & Guang (2017), Li et al., (2021), Xin. (2022) were chosen as the theoretical base of analyzing the study problem. And as the main methods for studying the current state and potential of 28 Institutes of Scientific and Technical Information in different regions of China were content analysis, the statistical method and the ranking method. Using

працюють на основі технологій штучного інтелекту.

регіональні Ключові слова: інститути науково-технічної інформації, цифрові інформаційні сервіси, технології штучного інтелекту, консалтингові послуги, трансфер інновацій.

the methodological tools allowed us not only to study the current state of digitalizing regional subsystems of the National System of Scientific and Technical Information but also to determine their directions as to forming regional science and technology clusters, increasing generation productivity, and introducing scientific and technological innovations, which is badly important for developing the economies of China's poor provinces.

#### Literature Review

The analysis of publications by Chinese librarians and computer scientists devoted to the evolutionary changes of the National System of Scientific and Technical Information of the People's Republic of China made it possible to determine the regularities of its development and diversification of service functions under the influence of sociopolitical, economic, technical, technological and cultural factors. The works by Chzhylian (2022), Defang (2007), Jialin & Zhang (2007), Xisheng (2022), Yan (2022) and others were particularly significant in this context. The study of the main historical stages of the state's development of regional institutes of scientific and technical information and the legal basis of their coordinated functioning developed by Zhou et al., (2019) is fundamental, as well as the results of the research by Shilin et al., (2022) in the context of forming state policy to ensure national security is of great interest.

The author's classification of scientific and technological services of regional institutions of the information industry of China was developed by experts of the Information Resources Research Center of Wuhan University such as Baiyang et al. (2020). They emphasized the objective regularity of the transition from a resource to a service model of proactive information service for users, which is due to the modern pace of mastering the latest technologies of the global digital society based on cloud computing, big data, 5G, and blockchain. The trend of diversifying the range of information services under the influence of Internet 3.0

technologies is confirmed in their publications by Hannas & Chang (2022), Huld, A. (2022), Shelestova et al., (2021), and others. The effectiveness of implementing digital platforms for providing intelligent services in the regional system of scientific and technical information is evidenced by the results of the research by Li et al., (2021) who are specialists of the Documentation and Information Center of the Chinese Academy of Sciences. Yi et al., (2022) as experts in the field of automation of modern information services by using the example of the integrated service platform of scientific and technical information of Shaanxi province, reveal the possibilities of building innovationoriented intelligent service systems of the new generation. The peculiarities of the System Function of the Science and Technology Service Industry were researched by Jing et al., (2006). The results of the research by Chen et al., (2017) devoted to implementing Chinese innovationdriving factors including regional structure, innovation effect, and economic development data contributed to the policy measures to implement innovation-driven strategies. for improving the information support system of regional innovations.

# Methodology

A complex of scientific approaches and methods, which complement each other's heuristic capabilities, was used to achieve the goal and objectives of the research. The systematic approach made it possible to establish the structure and functional features of regional components of the National System of Scientific and Technical Industry of China, to determine their connections and contribution to the formation of integrated information resources and to provide remote access to them for collective and individual users. The classification approach made it possible to organize various digital services of the regional Institutes of Scientific and Technical Information of the People's Republic of China; the comparative approach allowed defining advanced information institutions that implement actual competitive intelligence services and semantic methods of searching for hidden knowledge and develop analytical brain centers with expert services for evaluating the prospects of innovative projects.

Combining the possibilities of information and socio-communication approaches with historical, genetic and socio-cultural ones made it possible to prove the importance of the aggregation of consolidated information resources at the national and interregional levels, their unification

with the help of network communications into a single system of multifunctional information centers that can level the digital and economic inequality of the rich and the poor provinces of the People's Republic of China by providing high-quality scientific and technical service to their industrial enterprises.

Based on the application of content analysis and the statistical method, the sites of 28 Institutes of Scientific and Technical Information in different regions of China were surveyed, the ranking method helped to determine the most powerful of them, with a developed system of digital products and services.

#### **Results and Discussion**

The evolution stage of China's digital information industry began in 1997, when Wanfang, the first professional database manufacturing company, was established in the country. Its activity stimulated the development of other high-tech database aggregators — Tsinghua Tongfang and Chongqing VIP, etc. The next important step in forming a powerful resource base for the production of digital products and services by regional NTI Institutes is the creation of the National Map of Science and Technology in June 2000, which, under the auspices of the National Science and Technology Library (NSTL), united all branch databases created by the Chinese Academy of Sciences, the Chinese Institute of Chemistry and Metallurgy, the Chinese Academy of Medical Sciences, the Chinese Academy of Agricultural Sciences and other branch scientific centers into a single network to exchange of scientific and technical information. Based on them, the Consortium of Information Resources was created, the access points to which were designated at the regional level by regional NTI Institutes. Currently, on their official websites, subscribers are offered to search for information in such authoritative databases of Chinese scientific and technical literature as CNKI, Wanfang Data, VIP Information, Guoyan, numerous databases of regulatory, patent, periodical, and other scientific and technical publications in foreign languages.

Among the basic digital services of regional institutes of scientific and technical information to individual and collective subscribers, which they produce based on powerful digital platforms of NSTL, the following are the most popular:

 implementing collection, comparison and analysis of scientific and technical data, forming information resources of the



province, in particular scientific and archives, integrating profile technical databases of scientific and technical direction, providing services for searching scientific and technical literature, scientific and technological novelties, international patent online searching and consulting on copyright for all segments of society;

- supporting science and technology departments of their provinces in project management, such as research and development plans in key sectors of the economy, the opening of research institutes and scientific and technical associations.
- analyzing the effectiveness of introducing innovations, collection and provision of statistical indicators of the development of science and technology in the region; advertising of scientific and technical achievements through the preparation and publication of annual statistical directories; reporting on realizing plans for the scientific and technical development of the province and the market of its technologies, as well as popular science magazines that form an attractive economic image of the region.

Under the influence of the development of the digital economy and knowledge society in China, there is a diversification of digital services of regional NTI Institutes as consulting centers and technology transfer centers, and information brokerage agencies.

Thus, nowadays the leading regional NTI Institutes already offer:

- providing decision-making services, such as the study of development strategy and economic policy of the region, planning of innovations and creating a technical road map for their implementation, participating in tenders for technological projects and competitive intelligence for business structures and government departments at all levels and in all sectors of the national economy:
- industrial cluster research. regional planning, development of business incubation strategies, intelligence analysis and operational economic planning for provincial governments, science and technology parks, business incubators, manufacturing enterprises, and transfer of their technologies.

One of the key tasks of regional scientific and technical institutes as information intelligence agencies is to help the government and enterprises to make innovative decisions, forecasts and development substantiate strategies, and evaluate production management technologies. They perform the function of a strategic intelligence service and a think tank, which are an important basis for making timely and effective management decisions. For example, the Guangdong Institute of Scientific and Technological Information provides the provincial government with highquality consultations on the strategic directions of regional planning and conducts research to assess the economic efficiency of Guangdong's industrial and regional development. The information resource center of this institute is one of the most powerful platforms of the network created by the National Science and Technology Library (NSTL) for the exchange of scientific and technical information and access points to such authoritative databases of Chinese scientific and technical literature as CNKI, Wanfang Data, Information, Guoyan, databases of periodicals and other scientific and technical publications in foreign languages. Awards for the high level of information service for users of scientific and technical literature documentation were received from NSTL in different years by NTI institutes of the provinces of Gansu, Guangdong, Tianjin, Fujian, Hubei, etc.

The most powerful institutes of NTI, in particular the Institute of Gansu province, create Systems of cloud services for searching scientific and technological information and Intelligent information systems for search management for scientific and technological novelties (SNRMIS). These high-tech systems of the new generation apply cloud computing, intelligent data analysis, text messages on mobile phones, and WeChat to realize the effective management of business processes, such as the search, collection, analysis, and introduction of scientific and technological innovations, assessment of intellectual property protection and the prospects of scientific and technical achievements.

In recent years, the Science and Technology Information Research Institute of Hubei Province has implemented about 300 projects above the regional and ministerial levels, received about 10 provincial-level awards for promoting scientific and technological progress, and issued about 100 intellectual property rights, such as invention patents, useful models, software, has provided users with more than 3,000 informational advice for decision making. The effective activity of the Institute made it possible to create social and economic benefits in the amount of more than 3.5 billion yuan, to satisfy the information needs of about 3.5 million users; produce more than 800 scientific and technical television films, videos, feature films, documentaries, and news films, including on CCTV and Hubei TV. According to the analysis of the Institute's powerful information resources, its employees discovered 40,000 scientific and technological innovations, acted as mediators in more than 200 successful technological projects with a new initial value of nearly 400 million yuan; completed more than 600 research projects in the field of soft sciences at various levels; provided more than 3,000 pieces of information for the adoption of management decisions by state bodies. The business philosophy of the Institute's service to universities, research enterprises and investors is based on "building a green bridge between technology and capital", integrating information market and technology transfer market and promoting the transformation of scientific and technical achievements into real productivity. In addition, Hubei NDINTI publishes China's most influential academic journal "Scientific and Technical Progress and Countermeasures", which is indexed in the authoritative scientometric databases of CSSCI. In 2019, this publication was included in the "List of the Impact Index of World Academic Journals" in the field of humanities and social sciences.

In one of the most powerful provincial Institutes, the Guangdong Institute of NTI, the Industrial Technology Research Center has been opened, which provides services for the management of the full process of scientific and technological projects in the key sectors of the economic plan of research and development of Guangdong Province, and also conducts promising interdisciplinary research on the main strategic issues of industrial development region The service of integrated management of scientific and technical projects assists in preliminary analysis and strategic evaluation of research results, preparation of plans for implementation, project approval, signing of the task log, management of project launch, assessment of allocations at the second stage, evaluation of effectiveness and acceptance of project completion results. It is important to emphasize that problems of scientific and technical projects, which are realized by the Guangdong INTI, are devoted to development of such extremely complex industries as the technologies of artificial intelligence of the new generation; chips, software and computing; laser and additive

manufacturing; virtual reality and information security networks; production of intelligent robots and equipment, cars running on new energy. The center provides information and consulting support for the research of innovations in the field of industrial technologies of Guangdong Province through the provision of information on industrial technologies and development strategies, a support system for the field of industrial innovations in technologies, technology transfer; research on the formation and development of industrial and innovation clusters in Guangdong Province, including the development of traditional industries and characteristic industry clusters, the development of new industry clusters, industrial technological innovation policy, industrial development strategy and planning, as well as strategic planning and management of corporate technology.

One of the mandatory services of provincial NTIs is forming digital scientific and technical archives of science and technology departments of their provinces to provide services for managing the implementation of innovative technologies and realizing strategic research. In the 2000s, most of the regional NTI institutes transferred the work of the archives to a digital format, organizing the reception, processing, safe storage, daily management, and maintenance of a large number of files of scientific and technological documents of the provincial departments of science and technology. On average, about 20,000 files are processed and stored annually in such archives, and about 1,000 services are provided for searching scientific and technical archival documents, which provides effective information support for the introduction of technological innovations.

An important area of activity of provincial INTIs is the popularization of the scientific and technical achievements of their provinces and the promotion of their scientific and economic development through publishing monthly magazines in the field of science and technology. Leading institutes of NTI, such as Guangdong, can support publishing two magazines, such as "Science and Technology" and "Research on the strategy of scientific and technical innovative development". The purpose of these publications is to provide intellectual support for innovative development strategies realized by the regions of the People's Republic of China.

The experience of building digital e-commerce platforms in the field of science and technology, operating in O2O mode, by Chinese regional NTI



institutes is also effective. These platforms are a link that brings together scientific instruments and equipment, scientific database s, intellectual property rights, research and development, business incubation, scientific and technical consulting, scientific and technical financing, technology transfer, and other scientific and technical resources and services Thanks to the functioning of such platforms, an organic combination of scientific and technical resources and services, public procurement and financial support for innovations of small and mediumsized enterprises is carried out.

For example, since 2008, the Beijing Institute of Scientific and Technical Information has significantly expanded the range of free services, providing in particular competitive intelligence services that improve users' understanding of the competitive environment and reduce decisionmaking risks. Such services are especially important for high-tech enterprises, investors, state institutions, and branch authorities. In Beijing and other powerful regional centers of scientific and technical information, specialized laboratories of "competitive intelligence and evaluation of innovations" have been created, which serve the needs of business groups engaged in the production of high-quality equipment, intelligent transport, IT technologies, and other innovative projects. Carrying out professional competitive intelligence, regional intelligence agencies monitor internal and external factors affecting the development of science and technology, and propose to state governing bodies several action plans built according to possible financial and other economic risks. An important service of NTI regional institutes should be realizing the functions of think tanks, the task of which is to collect, sort and analyze information and its intellectual screening, as well as further processing for decision-making. Thus, since 2015, the Center for Documentation and Information of the Chinese Academy of Sciences has been implementing a strategic plan of transformation into a scientific, technological and analytical center with innovation assessment and competitive intelligence services. Similar tasks are set before the regional institutes of NTI. Their expansion of the range of free services

through the provision of competitive intelligence services improves users' understanding of the competitive environment and reduces the risks of their decision-making regarding the opening of high-tech enterprises in the region and communication with investors and industry authorities.

However, the level of service and participation of scientific and technical analytical centers in the development of each province is different. It depends on the ability of the governing bodies of the province to finance and technologically equip the activities of such centers. In total, China has 34 provincial-level administrative regions. including 23 provinces, 5 autonomous regions, 4 municipalities directly under the central government (Beijing, Tianjin, Shanghai, and Chongging), and 2 special administrative regions (Hong Kong and Macau). To establish the presence of regional NTI Institutes in these administrative areas and the level of digitization of their services, a content analysis of their official sites was conducted as a basic channel for providing digital products and services. According to the results of the content analysis, problems with the stability of work, prompt updating, and the quality of the content of the sites of NTI Institutes of remote autonomous regions: Inner Mongolia, Guangxi-Zhuang, Tibet, Ningxia-Huei and Xinjiang-Uygur were revealed. Among provincial institutions, the sites of Guizhou, Liaoning, Hainan, Shanxi NTI Institutes, and Shandong NTI Academy, which make up 30% of the total number of regional NTI centers, are the least informative and partially outdated. The sites of NTI Institutes in such regions as Beijing, Gansu, Guangdong, Tianjin, and Hubei were recognized as the most informative and meaningful from the point of view of the presence of advanced intellectual management systems for the search for scientific and technical innovations, which is 15% of the total number of surveyed sites. The established ratio of the degree of informativeness of the sites of the regional institutes of the NTI of the KRN is illustrated in Figure 1. It clearly shows that 55% of the sites of the regional NTI Institutes of China still need improvement as channels for providing subscribers with a modern range of digital services comfortably and efficiently.

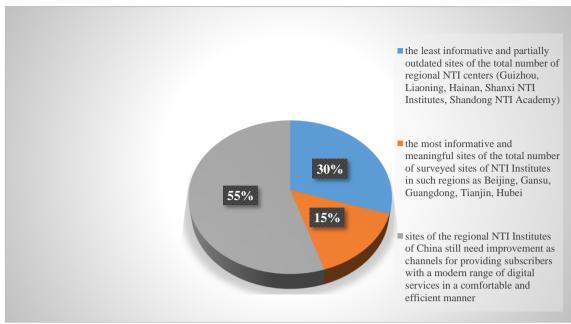


Fig. 1. Degree of informativeness of sites of regional institutes of scientific and technical information of the People's Republic of China

Thus, the actual trend today is that the NTI Institutes of economically developed provinces significantly deepened their analytical activities in the early 2010s, which allowed them to move to a qualitatively new level of user service by creating consulting divisions. Thus, in 2012, relying on the support of the Department of Science and Technology of its province, the Research Institute of Science and Technology Information of Zhejiang established consultative committee for the development of science and technology in its province. This Advisory Committee on the development of a Regional Innovation System and Scientific and Technical Activities currently plays an important supporting role in creating and implementing development strategies for the economic growth of Zhejiang Province.

Currently, the key trend in the transformation of regional NTI centers is to change them into centers for promoting the development of science and technology in their provinces. Their functions include not only scientific and technical information services but also strategic research, scientific and technological consulting,

innovation evaluation and competitive intelligence.

For generalizing the nomenclature of basic digital services of regional Institutes of Scientific and Technical Information of China, an analysis of the organizational structure of 28 institutions of the following administrative regions at the provincial level such as Zhejiang, Fujian, Jiangsu, Shanghai, Anhui, Jiangxi, Guangdong, Guangxi, Hainan, Henan, Hunan, Hubei, Beijing, Tianjin, Hebei, Shanxi, Inner Mongolia, Qinghai, Shaanxi, Gansu, Xinjiang, Sichuan, Guizhou, Yunnan, Chongqing, Liaoning, Heilongjiang was carried out. Figure 2 illustrates the 100% availability of documentation, search and consulting services in regional NTI Institutes. Regarding the degree of development of high-tech information services related to the evaluation of innovative technologies and enterprises, the examination of scientific projects and competitive intelligence, they systematically provided only by 65% of the provincial institutes of scientific and technical information of the provinces, in which specialized units have been created for this purpose.



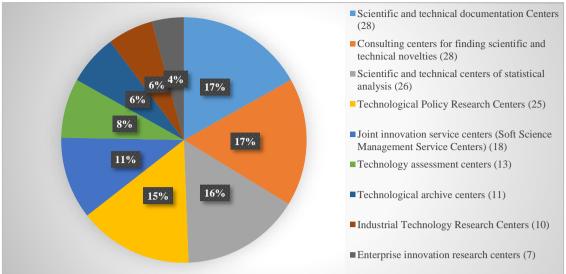


Fig. 2. Organizational structure of provincial institutions of scientific and technical information of the People's Republic of China

The analysis of the organizational structure of the regional institutes of NTI allows us to determine the main functions of these institutions: implementation of information support for the scientific and technical development of their provinces based on the formation of local databases reflecting the industrial profile of the territories, as well as databases of scientific, expert-analytical, statistical. patent, scientometric, archival, marketing information. Thus, the majority of NTI Institutes of the provinces play an important supporting role in the creation of regional innovation systems, providing informational and mediating support to subjects of production and the introduction of technical and technological innovations.

But in the conditions of the exponential rate of increasing flows of digital scientific and technical information and the economic backwardness of China's poor regions, there is a need to reorganize the NTI network of the PRC by integrating it into the National Scientific and Technological Platform for the Management of Scientific Research Projects and Innovations at all levels — from national to regional and local. The model of this platform proposed by the specialists of the National Institute of NTI of China is open, integrated with the latest big data processing technologies, which is capable of information monitoring of all processes of a scientific and technical project's life cycle: from planning, realizing, evaluating effectiveness, advertising of results, and implementing and distributing through transfer technologies. The service potential of the system should be aimed at scientific research institutions and their employees, project managers and decisionmaking subjects in the entire digital environment of scientific research.

The reorientation of the regional component of the National NTI system from scientific and technical business to scientific and technical management will allow engineering thinking to be built into every link of the process of information support for the discovery and implementation of innovations, and the introduction of artificial intelligence tools into decision-making support processes. construction of a unified and open national scientific and technological management platform aims to increase the efficiency and effectiveness of the implementation of scientific projects through the unification of information resources, avoidance of duplication. optimization of scientific and technological planning management systems interregional, interdepartmental, interbranch and interdisciplinary levels. This will make it possible to implement integrated management of science and technology at the state level, integrate the industrial chain, the chain of innovation and capital, and form an open, secure, unified, interactive, fully functional, and effective platform for information support and innovation support.

On the way to building this integrated platform, Hubei Research Institute of NTI plans to provide comprehensive and multi-level information support for technological innovation, producing services for the provincial government, various research and business structures, and focus on creating an effective business support system that will combine the source the cultivation of modern scientific and technical thinking, a scientific and technical center for public service, a center for the promotion of industrial innovations, and a center for scientific and technical communication.

Among the urgent tasks of all provincial NTI institutes are the unification on a single digital platform and the corporate use of resources for innovation and entrepreneurship to provide services such as the sharing of equipment, innovative ideas and creativity, authoritative expert assessment, and the transformation of scientific and technological achievements into real economically profitable projects. The priority tasks are also creating a systemintegrated platform for joint work for all members of the China Science and Technology Association, intensifying data management processes, implementing an integrated work scheme for the Smart Association of Science and Technology and the Smart Society, constructing a digital scientific information platform for the Smart Association for Science and Technology, which will allow more efficient extraction of knowledge based on automated processing of large data sets. This will significantly increase the accuracy and efficiency of the processes of searching, obtaining, analyzing, and using the intellectual resources of the National NTI system of the People's Republic of China.

In the conditions of a complex and tense international political situation, guaranteeing the access of Chinese researchers to big data plays an indispensable role in increasing the efficiency of scientific research and producing innovations, which are the basis of the development of the national economy. The Documentation and Information Center of the Chinese Academy of Sciences, as a national-level institution that provides state guarantees of user access to consolidated resources of scientific and technical information, initiated the creation of a scientific and technological platform of big data based on the aggregation on its basis of strategically important databases from the leading sectors of the economy. Innovative information products and services produced by the Center based on the big data platform should become a new engine of scientific discoveries and innovations in the field of knowledge management.

In the digital society, researchers find an increasing demand for prompt access to relevant research information and active research interaction. Effective and qualified information support is necessary at all stages of the creation of additional value of technological innovations:

from fundamental research and their applied implementation to marketing intelligence on the demand for innovative ideas from consumers. The production of innovations is significantly hampered by scattered and isolated data sets, in which it is difficult to extract new knowledge. This necessitates a fundamental restructuring of the activities of scientific and technical information services based on their use of the latest big data management technologies.

Thus, with the support of the Chinese Academy of Sciences, specialists of its Documentation and Information Center created a series of intelligent service products "Hui" for scientists. These products are developed based on the "Big Data Science and Technology Platform" of the Documentation and Information Center of the Chinese Academy of Sciences under the new model of knowledge discovery and scientific research. This series of products are intended for the category of scientists who embody the modern paradigm of knowledge discovery with the help of artificial intelligence capable of computing big data. Scientists of the Center solve the problem of overcoming the dispersion and isolation of big data in the field of science and technology, which significantly reduces the possibility of objective assessment of the value of knowledge and the effectiveness of scientific research. In the conditions of China's development of the digital economy, the need for radical modernization of the traditional architecture of searching for relevant information, which is currently offered to users by the majority of regional NTI centers, is extremely overdue.

Such modernization is more effective based on corporate cooperation of the subjects of the development of the digital communication space in the field of the state system of scientific and technical information. The National Scientific Library of the Chinese Academy of Sciences, in cooperation with the Central and Regional Institutes of Documentation and Information, including Lanzhou, Wuhan, Chengdu, etc., created a Cloud platform for the monitoring of scientific technical and information (http://stmcloud.las.ac.cn/). It is a specialized knowledge service platform designed for advanced research groups, academic library librarians, and strategic intelligence analysts, providing prompt and relevant industry information retrieval. The platform is based on the processing of data generated by specialized Chinese and foreign institutions in various fields of knowledge. The website of the platform automatically collects. evaluates.



describes, systematizes, and publishes significant achievements in the scientific and technical field, scientific research reports, information on funding sources and budgets of leading research projects of scientific institutions, etc. The platform allows for information monitoring of the latest scientific and technical developments in leading fields of knowledge and helps to quickly inform researchers about the emergence of scientific and technological innovations, search for information about partners and competitors, timely identify key achievements and promising vectors of development in a certain field of activity, justify breakthrough scientific and technological solutions.

An important component of the portal is the consolidation of information on the most industrial important projects, including nanotechnology, water pollution control. broadband mobile communication, food and nutrition, prevention of complex diseases, genetically modified organisms, renewable resources, creation of new medicines, air pollution control, etc. Another infrastructure subsystem of the portal is the domain information platform of the Chinese Academy of Sciences, which combines six of the most powerful networks: the energy information network, production information network, materials biosafety intelligence network, ocean intelligence network, Yangtze River basin information network, optoelectronic industry information network. The convenient interface of the portal allows you to track the latest news in the scientific and technical field, inform specialists about them promptly, and implement the production of personalized and proactive information products and services.

According to the results of the content analysis of the resource content of the websites of the provincial NTI Institutes, it was established that from the point of view of creating corporate platforms that reflect the directions of regional innovative development, only five provinces (Beijing, Tianjin, Hebei, Shaanxi, Zhejiang) implement such projects. Unfortunately, the ratio of the number of such platforms, which allow linking technological and scientific data at the level of several provinces, is still extremely insufficient, which is illustrated in Fig. 3.

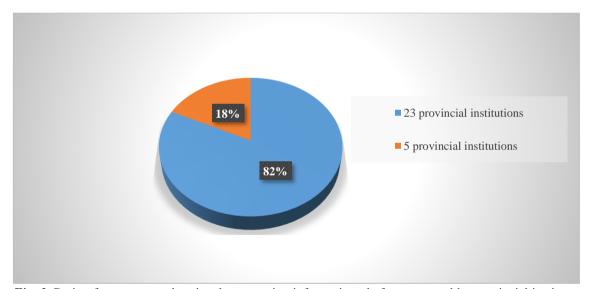


Fig. 3. Ratio of corporate and regional aggregation information platforms created by provincial institutes of NTI of the People's Republic of China.

In particular, the corporate platform of the cloud of scientific and technological service innovation, created by the Zhejiang Institute of Scientific and Technical Information, combines the information resources of scientific research institutes, and high-tech enterprises and consists of 5 cities and 6 district service platforms. Such cooperation of city and district institutions contributes to the spread of innovations and savings of all types of resource potential of the region. The "Beijing-Tianjin-Hebei" innovative

platform of scientific and technical resources was jointly created to meet the information needs of local enterprises, which contributes to the improvement of the efficiency of industrial development. This platform combined the information and service potential of such powerful institutions as Beijing-Tianjin Research Institute, Jinghe Research Institute, Handan Branch of Beijing Academy of Sciences, Beijing-Tianjin-Hebei Research Institute Alliance, and Beijing-Tianiin-Hebei Research Institute

Intellectual Property Application Alliance to boost technology transfer and generate profits of more than 700 million yuan. The Alliance established scientific and technical cooperation with 329 institutions in 57 countries and regions of the world, launched the Zhongguancun Global Alliance of High-Tech Analytical Centers, created the International Training Center for Scientific and Technical Cooperation "One Belt and Road" and actively integrated into the global innovation network.

#### Conclusions

Thus, the analyzing information services of the state system of NTI of the People's Republic of China and the vectors of their transformations allows us to state that at the current stage, this system is being modernized into a digital industry of aggregation of innovative knowledge, production processes of which are based on artificial intelligence technologies capable of extracting knowledge as a result of analytical processing of primary and secondary information resources. Among the breakthrough projects of the development of China's information industry is the development and application of Smart Knowledge Service ecosystems, which function based on big data management, which is carried out by artificial intelligence. In the advanced regional institutes of NTI of the People's Republic of China, service departments have been created, which, with the help of intellectual means of information analysis, acquire explicit and hidden knowledge, which is the basis of the development of technological innovations.

Among the strategic plans for improving the information industry of the People's Republic of China is developing a national research center for designing new-generation artificial intelligence technologies, which should investigate the economic and social consequences of using this phenomenon; acceleration innovative constructing research centers of breakthrough technologies and their forecasting platforms; creating a national scientific and technical information center of big data, which will allow integrating relevant business resources and big data resources into the chain of management of national plans in the field of science and technology. Priority attention is planned to be paid to improving the quality of information services in the five most promising breakthrough industries of the national economy: biomedicine, cars powered by new types of energy, intelligent manufacturing, the latest materials, and information technologies. At the level of individual provincial NTI Institutes, it is

necessary to intensify the development of corporate platforms that combine information resources and services of powerful industrial enterprises, research institutions, universities, and scientific libraries. This will contribute to the formation of regional science and technology clusters, increase in generation productivity, and the introduction of scientific and technological innovations, which is especially important for the development of the economies of China's poor provinces.

### Bibliographic references

- Baiyang, L., Gang, L., Shiyun, W., & Hanmey, C. (2020). Scenario Extension: From Sci-Tech Information to Sci-Tech Services. Library and information Service, 64(1), 64-69. Retrived from https://www.lis.ac.cn/CN/abstract/abstract23319.shtml (in Chinese).
- Chen, X., Liu, Z., & Ma, C. (2017). Chinese innovation-driving factors: regional structure, innovation effect, and economic development—empirical research based on panel data. The Annals of Regional Science, 59, 43–68. https://doi.org/10.1007/s00168-017-0818-5
- Chzhylian, H. (2022) The main development stages of the information industry in the People's Republic of China. Bulletin of the Kharkiv State Academy of Culture, 61, 17–29. https://doi.org/10.31516/2410-5333.061.02
- Defang, H. (2007). Some Considerations on the Development Strategy and Approach to China's S&T Information Service. Journal of Information Science, 4, 483-487. Retrieved from https://acortar.link/ijGElB (in Chinese).
- Hannas, W.C., & Chang, H.-M. (2022) Monitoring foreign science and technology through open sources. CSET. Retrieved from https://cset.georgetown.edu/wpcontent/uploads/CSET-Chinas-STI-Operations.pdf
- Huld, A. (2022). "Eastern Data, Western Computing" – China's Big Plan to Boost Data Center Computing Power Across Regions. Retrieved from https://acortar.link/lwFTt9
- Jialin, G., & Zhang, Ch. (2007). The Review and
   Outlook for Scientific and Technological
   Information Undertaking of China.
   Information Science, 25(1), 1-7. Retrieved from
  - https://qikan.cqvip.com/Qikan/Article/Detail?id=23617806. (in Chinese).
- Jianxun, Z. (2019). Reflection on the Development of the Scientific and Technical



- Information Industry Based on the National Science and Technology Management Platform. Journal of the China Society for Scientific and Technical Information, 38(3), 227-238. https://doi.org/10.3772/j.issn.1000-0135.2019.03.001. (in Chinese).
- Jing, W., Qingmei, T., & Chuan, H. (2006). Analysis for the System Function of S&T Service Industry Science of Science and Management of S. & T, 6, 37-40. Retrieved
  - https://gikan.cgvip.com/Qikan/Article/Detail ?id=22130685 (in Chinese).
- Li, Q., Liu X., Zhang, Zh., & Deng, A. (2021). Design and Application of Ecological System of Intelligent Knowledge Service Based on AI-An Example of Building of Intelligent Service Platform of National Science Library, CAS. Library and Information Service, 65(15), 78-90. Retrieved from https://www.lis.ac.cn/CN/10.13266/j.issn.02 52-3116.2021.15.010
- Li, X., & Guan, B. (2017). Construction of the Regional Service Platform for Knowledge Sharing of Scientific and Technological Information Advances in Computer Science Research. 647-650. 75. https://doi.org/10.2991/mcei-17.2017.137
- Shelestova, A., Solianyk, A., Bachynska, N., Novalska, T., & Kobieliev, O. (2021). Libraries of pedagogical institutions of higher education on social media. Amazonia 10(47), 197-206. Investiga, https://doi.org/10.34069/AI/2021.47.11.20
- Shilin, M., Shmotkin, O., Chernysh, R., Konyk, T., & Botvinkin, O. (2022). Formation and formulation of state policy to

- ensure national security: theoretical and legal Amazonia Investiga, aspects. 11(57), 152–161.
- https://doi.org/10.34069/AI/2022.57.09.16
- Xin, Yi, Li, P., Yang, Yin, Ch., & Jiao, R. (2022). The Construction of an Innovation-Oriented Intelligent Service System for Scientific and Technological Information Takes Integrated Service Platform of Scientific and Technological Information in Shaanxi Province as an Example. Computer and Development, Technology 32(9), 80-187. https://doi.org/10.3969/j.issn.1673-629X.2022.09.028 (in Chinese).
- Xisheng, H. (2022). Historical Contribution and Transformation Development of Scientific and Technological Intelligence Work in China in the New Era. Information Research. Retrieved 55-61. https://sns.wanfangdata.com.cn/perio/getFull text?articleId=qbts 2022 8, https://doi.org/10.3969/j.issn.1005-8095.2022.08.008 (in Chinese).
- Yan, L. (2022). Research on the Ability and Strategy of Provincial Scientific and Technical Information Institutions in Serving Science and Technology Think Tanks in China. Think Tank: Theory & Practice, 7(1),
  - https://doi.org/10.19318/j.cnki.issn.2096-1634.2022.01.10. (in Chinese).
- Zhou, X., Chen, Y., Ch., & Zhan, Lu. (2019). Research on the Development Process and Law of Scientific and Technical Information Career in China. Scientific Information Research. 1(1). 13-28. https://doi.org/10.19809/j.cnki.kjqbyj.2019.0 1.002. (in Chinese).

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# Peculiarities of translation of comparative constructions in English-language popular science discourse

# Peculiaridades de la traducción de construcciones comparativas en el discurso de divulgación científica en lengua inglesa

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#### **Abstract**

paper examines The the grammatical phenomenon of comparative constructions in English on the examples of popular science discourse. The linguistic phenomenon of comparative constructions is analyzed in terms of correlation with the word order and sentence combination features and in a comparative way in the context of English/French. The chosen methodology made the following scientific hypotheses: comparative constructions are endowed with correlations with causal word order; the main types highlighted are: locative construction with subtypes, admission construction, and conjunction construction; such constructions are widely repeated in different languages belonging to different groups. This study goes beyond classical theoretical grammar robotics in a number of important aspects. A more detailed classification is presented: we distinguish between two types of constructions a primary comparative construction

#### Abstract

El trabajo examina el fenómeno gramatical de las construcciones comparativas en el idioma inglés utilizando ejemplos del discurso científico popular. Se analiza el fenómeno lingüístico de las construcciones comparativas desde el punto de vista de la correlación con el orden de las palabras y características de la combinación de oraciones y de forma comparativa en el apartado de la lengua inglesa/francesa. La metodología elegida permitió siguientes hipótesis científicas: las construcciones comparativas están dotadas de conexiones con el orden causal de las palabras; los principales tipos seleccionados: construcción de ubicación con sus subtipos, construcción de llegada y construcción de conexión; tales construcciones se repiten ampliamente en diferentes idiomas pertenecientes a diferentes grupos. Esta investigación va más allá de los trabajos clásicos sobre gramática teórica en una serie de aspectos importantes. Distinguimos entre dos tipos de construcciones: la construcción

<sup>&</sup>lt;sup>150</sup> PhD in Philology, Associate Professor of Foreign Philology, Translation and Professional Language Training Department, Faculty of Economics, Business and International Relations, University of Customs and Finance, Ukraine.



Ph.D. in Philology, Associate Professor of the Department of Translation, Applied and General Linguistics, the Faculty of the Ukrainian Philology, Foreign Languages and Social Communications Volodymyr Vynnychenko Central Ukrainian State University, Kropyvnytskyi, Ukraine.

<sup>&</sup>lt;sup>147</sup> Ph.D. (Philology), Associate Professor, Associate Professor Foreign and Ukrainian Philology Department, Faculty of Digital, Educational and Social Technologies, Lutsk National Technical University, Ukraine.

<sup>&</sup>lt;sup>148</sup> PhD in Pedagogics, Associate Professor of the Department of Theoretical and Applied Linguistics State University "Zhytomyr Politechnic" Ukraine.

<sup>149</sup> PhD in Philology, Associate Professor, Ivano-Frankivsk National Technical University of Oil and Gas, Institute of Humanities and Public Administration, Department of Philology, Interpreting and Translation Studies, Ukraine.



secondary one, where the comparison parameter is conveyed by both the expressed predicate and the locative type. The study reveals a number of new universals: no language lacks a degree marker and a standard comparison marker, and almost no language lacks a standard marker, even if an asymmetric comparison degree marker is present. It is also found that there is a whole variety of comparative constructions than is represented in typological theoretical grammar and that quite a few languages do not fit into any of the types described.

Keywords: comparative construction marker, predicate type, locational type, causal word order.

#### Introduction

Studies concerning comparative constructions abound, whether they deal with different dimensions of comparison or focus exclusively on certain aspects. This is true, for instance, of works on so-called comparative equations and similarities. Among the studies elaborated, some take an areal orientation or a more or less extended typological perspective, while others focus on a particular language. Sometimes they are grouped into grammatical currents, whose peculiarity may be to present languages not hitherto described, with or without an oral tradition, or, in any case, languages for which the field of comparison has hitherto been little or no explored. All these contributions prove to be valuable sources of information, improving our knowledge of the syntax and semantics of the processes involved in the expression of comparison. In scholarly works dealing with the question of comparative constructions in English, scholars have touched on the coordination and subordination of sentence parts. It is often difficult to distinguish coordination from subordination (Suhrob & Vasila, 2022). Sometimes scholars suggest parsing construction as syntactically coordinated and semantically subordinated or vice versa. Croft (2022) gives an analysis of comparative correlatives (CC) in English. In this respect, the work aimed to conduct a comparative analysis in the English/French context, because they belong to different groups and the results seem to be novel. In French, comparative constructions as syntactic coordination are even more inconsistent than in English, because, unlike in English, the use of conjunctions is possible here. The aim of the paper draws out the objectives: to analyze the arguments showing that semantic subordination

comparativa primaria y la construcción secundaria, donde el parámetro de comparación se expresa tanto por un predicado expresado como por un tipo de ubicación. El estudio reveló una serie de universales nuevos: ningún idioma carece de un marcador de grado y un marcador estándar de comparación, y casi ningún idioma carece de un marcador estándar incluso cuando hay un marcador de grado presente. También se encuentra que existe toda una variedad de construcciones comparativas de las que se representan en la gramática teórica tipológica, y que bastantes lenguas no encajan en ninguno de los tipos descritos.

Palabras clave: marcador de construcción comparativa, tipo predicativo, tipo locativo, orden causal de las palabras.

does exist, which in turn indicates that syntax is not the same in the two languages; to examine the internal structure of each sentence, finding the initial phrase, and then move on to the construction itself. Given this argument, it can be shown that in English there is also syntactic subordination. In French, according to Ivorra Ordines (2020), there are two possible types of sentence parsing with comparative constructions: one asymmetrical, similar to English, the other more like a coordinated construction. Even more interesting is the HPSG analysis based on the notion of comparative construction (which allows the grouping idiosyncratic or not strictly non-compositional properties) (Balatchi, 2020). This approach allows, on the one hand, to take account the properties that constructions inherit from other languages and their specificities; on the other hand, to indicate what is common between two languages and specific to each language in particular (Prescod & Jeannot-Fourcaud, 2020).

#### Theoretical Framework or Literature Review

The characterization of the types of comparative constructions involved in the linguistic expression of comparison is a polemical issue. In this work, we pay special attention to studies describing the morphological, syntactic, and semantic influences on the languages involved in their genesis and pointing out the identities or differences of different language groups. In general, to compare is to mentally perform a certain operation on broadcast objects. For philosophers, the comparison is the operation by which two or more objects are brought together in a single act of thought in order to reveal similarities or differences (Jackiewicz & Pengam, 2020). For psychologists, it is a perceptual or logical activity indicating the identification of differences and similarities (Marcuse, 2020). For linguists, it is the intellectual act of combining two or more animates, concrete or abstract inanimate of the same nature to highlight their similarities and differences (Spaëth, 2020). Among these very similar definitions, let us solidarize with the idea that comparison is a cognitive operation, which consists in comprehending together with the mind several (usually two) objects, comparing them to see what their similarities and differences are. Comparison requires a common ground, which conditions the very possibility of mentally approaching the objects we wish to compare. This is called tertium comparationis (Hohaus & Bochnak, 2020). The need for such a common ground is illustrated by a correlative pattern constructed using two types of correlated grammatical markers (Beck, 2019). On the one hand, a parameter marker indicating an unequal degree or equality between two corresponding magnitudes of a value. On the other hand, a comparison marker, introducing a contracted sentence, usually elliptical and reduced to a comparison (Bowler, 2020). Comparison can operate at any level of categorization if the comparators share the property (Mueller, Nicolai, Petrou-Zeniou, Talmina & Linzen, 2020). Sometimes the structure of a comparative is incomplete and sentence requires reconstruction from context. Thus, comparisons can be a single entity duplicated under a variable point of view (temporal or otherwise): the entity is compared to itself, viewed in a certain way in two different mental spaces (Bochnak, Bowler, Hanink & Koontz-Garboden, 2020).

Beck (2019) analyzes comparative constructions as conditional, where the first sentence functions as a condition and the second as a consequence. In contrast to prior analyses, the author proposes to consider not the comparison between the first and second clauses, but the consequence between the two comparisons. More precisely, he analyzes each initial comparison as a quantifier, which may refer to individuals, degrees, times, or possible worlds, but always in pairs. In such an analysis, however, there is a comparison in every sentence, but with an implicit term. This explains why it is not possible to introduce an explicit comparison term or a complement of dimensions (Rett, 2020). In this aspect, Hoffmann (2019) suggests that syntax reflects this impossibility by assuming that the place of the comparison term is exactly what the initial elements occupy, such as in English or German. For example, the

warmer would have the same syntactic structure as three degrees warmer. 3 moments where the first sentence is interpreted as conditional, the second sentence is the semantic head of the whole, and we understand that this is what determines its polarity. In French, such a contrast can be constructed by means of repetition due to negative polarity: A plus vite le médecin travaillera, plus vite il n'aura plus personne à voir, et sa secrétaire non plus.

Chircu (2020) looks at the internal structure of constructions comparative in Romance languages in terms of their syntactic relations. If the interpretation of comparative constructions resembles that of conditional sentences, one should ask whether from a syntactic point of view the first sentence resembles a hypothetical contractual sentence. For English, in both cases it would express the impossibility of the future. but not for French. In both languages, the hypothetical contractor is movable, and the order of contracting is fixed in the construction (Haruta, Mineshima & Bekki, 2020). Hoffmann (2020) argues that in a hypothetical system, the main may be ordered or interrogative sentences. Goldberg & Approach, C. A. C. G. M. (2020), in perspective where syntactic necessarily reflects the interpretation, propose to analyze the first part of a comparative construction as a relative (without background), as an assistant to the second part (which has the status of a semantic load carrier). It is worth noting Romero (2019)who considers comparative constructions as movable. hypothetical contractual sentences that do not prevent the main sentence from having its own modalities. In English, there are possible cases of dependency at a distance with semantic blocking because of these limitations (Zhan & Traugott, 2020).

### Methodology

The methods chosen for the work were observation, complex comparative analysis of syntactic structures of units on the examples of English and French, the method of typological analysis, the method of thematic classification, and quantitative processing of scientific literature related to the topic of work. The study presents a comparison of identity and difference (symmetry/asymmetry) between comparative constructions of two languages belonging to different language groups. In its canonical action, the symmetry/asymmetry scheme is a correlative scheme between a predicate parameter and a comparative construction. We understand the following types of comparison in the key to the



extended paradigm, which corresponds to the ontological category of homogeneous elements. We analyze the schema of comparative constructions that can abolish the possibility of relative quantification by establishing heterogeneity between comparisons. distinguish two types of comparative constructions: primary and secondary (denying the existence of a real comparator and resorting to the comparator "paragon"). Both have the effect of comparative construction on the syntactic parameter.

#### Results and Discussion

This study focuses on comparative constructions in English, in particular on the syntactic and semantic aspects related to the means that are used to explain the cognitive operation that is comparison. A comparison is a thinking act that can be considered universal, since it can be observed in any speaker, regardless of their language. This act comes from the need to combine and distinguish entities or actions in order to better conceptualize them by being aware of their similarities and differences (Beck, 2019). However, the linguistic operations used to express similarities and differences are not universal, as the existing literature on the subject shows. In English, syntactic asymmetry is clearly evident. In context, the primary and secondary comparison is possible. The context imposes a contractual relationship and allows different syntactic variants of comparative constructions (Table 1):

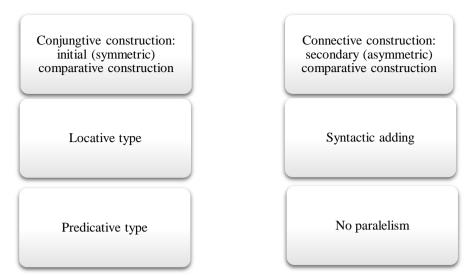
**Table 1.**Comparative constructions with possible subtypes widely repeated in different languages belonging to different groups

Example	Explanation		
1. It is important that the more Ann eats, the more she weights.	An auxiliary clause is not possible in the sentence Possible in the second sentence.		
2. I ask that the more Ann eats, the more she weights.	Inversion is usually forbidden in contractual sentences,		
3. I ask that the more Ann eats, the more she weight.	but it is possible.		
<ul><li>4. If I learn more, then I realise more.</li><li>5. Then I realise more if I learn more.</li></ul>	Here the argument against syntactic subordination is the fact that the order of the two sentences is fixed (for this interpretation).  The corresponding stiffness is possible in conditional structures.		
6. This is the type of question which the sooner you solve (it), the more easily you'll satisfy the colleagues up at corporate main office.  7. The colleagues up at corporate main offices are the	It is possible to extract the construction from each sentence separately.		
sort of folks who the sooner you solve this question, the more easily you'll satisfy.	With this extraction, the design seems artificial and incomprehensible.		

Source: Authors' own development

We propose to analyze the first sentence as a syntactic contractual (special type) in English. This analysis allows us to explain that sentences with the same initial comparative syntagmatic can act as contractual or ordinary, outside of comparative constructions. The second example of a comparative construction is a case where syntactic and semantic subordination go hand in hand. The third construction allows for the nonof compositional aspects comparative constructions, particularly the fact that the whole can appear independently while each sentence does not. The fourth example shows that

correlative constructions are binary structures of finite mode (i.e., indicative or contractive). The fifth construction is a subtype of correlative constructions. The sixth example shows that correlated phrases are analyzed as uncorrelated with immediate constituents (branches) denoted by a sign if they begin with a union. The seventh example shows that comparative constructions can include any number of constituents but containing the use of a union is less likely. A conjunctive sentence always allows it to appear in the same environments as phrases without conjunction (Figure 1).



**Figure 1.** *Symmetric and asymmetric comparative constructions.* Source : Authors' own development

Consequently, the constraints in comparative combustive constructions are provided by the joint use of features between the constituents. For native speakers, comparative constructions endowed with a syntagma are normal to perceive, while a native speaker of another language, e.g., French, subconsciously requires an additional restriction of syntactic parallelism, in particular concerning its withdrawal function because this language is inherent in the existence of complete syntactic parallelism, connected or not with lexical parallelism, between matrix and subject.

Very often the adventive elements present in the matrix and/or the contracting sentence question this absolute parallelism, however, this construction allows its semantic understanding, for the tendency to gradually disappear when the anaphoric elements are replaced, in the contracting sentence, by lexical components or when the contracting sentence contains an additional component to which no component in the matrix corresponds is logical for Romance languages.

# **Conclusions**

The contrastive analysis of comparative constructions in the English/French section showed that they are closer than one might assume at first sight, since both languages (being representatives of different groups) are based on asymmetric construction from a semantic point of view. They are also similar in that they involve a comparative phrase at the beginning of each sentence. But syntactically in English, they should be parsed as asymmetrical, with the first sentence as a contracting sentence (i.e., with the

function of syntactic addition), whereas in French there are two systems: some speakers analyze them as syntactically consistent with all the limitations of parallelism; while others analyze them as syntactically asymmetrical, with the first as a complement and a possible difference of mode. Therefore, one cannot claim that comparative constructions have the same syntax in all languages. A detailed analysis of the data provides a distinction of (at least) two possible types of syntax. The model of asymmetric comparative constructions can show both what is specific about these constructions, and what they have in common, with less peripheral constructions in English or with the same constructions in other languages. Prospects for further analyses are to find out whether the interpretation of comparative constructions is exactly the same when they belong to different syntactic types.

# **Bibliographic references**

Balatchi, R. N. (2020). (Meta) discursive markers and translation strategies: say so and let's say to the test of literary translation. CONCORDIA DISCORS DISCORDIA CONCORS: Researches into Comparative Literature. Contrastive Linguistics, Cross-Cultural and Translation Strategies. 137-149. 14 https://www.ceeol.com/search/articledetail?id=1039871

Beck, S. (2019). Comparison constructions. Semantics-Lexical Structures and Adjectives, 415. https://doi.org/10.1515/9783110626391





- Bochnak, M. R., Bowler, M., Hanink, E. A., & Koontz-Garboden, A. (2020). Degreefulness is the result of functional inventory, not a parameter. Handout from Sinn Bedeutung, 25.
  - https://personalpages.manchester.ac.uk/staff/ margit.bowler/Bochnak-et-al-SuB-25.pdf
- Bowler, M. (2020). Cross-linguistic variation in conjoined comparatives. In Sinn Bedeutung (Vol. 25). https://personalpages.manchester.ac.uk/staff/ margit.bowler/SuB25-Bowler-Handout.pdf
- (2020).THE ROMANTIC Α LANGUAGES BETWEEN UNITY AND DIVERSITY. Studies of the Babes-Bolyai University-Philology, 65(4), 7-8. https://www.ceeol.com/search/articledetail?id=906224
- Croft, W. (2022). Morphosyntax: constructions of the world's languages. Cambridge University https://doi.org/10.1017/9781316145289
- Goldberg, A. E., & Approach, C. A. C. G. M. (2020). Argument structure (Vol. 23, p. 59). John Benjamins Publishing Company.
- Haruta, I., Mineshima, K., & Bekki, D. (2020). Logical inferences with comparatives and generalized quantifiers. arXiv preprint arXiv:2005.07954. https://doi.org/10.48550/arXiv.2005.07954
- Hoffmann, T. (2019). English comparative correlatives: Diachronic and synchronic variation at the lexicon-syntax interface. Cambridge University Press. Doi: 10.1017/978II08569859
- Hoffmann, T. (2020). Marginal Argument Structure constructions: the [V the Ntabooword out ofl-construction in Post-colonial Englishes. Linguistics vanguard, 6(1). https://doi.org/10.1515/lingvan-2019-0054
- Hohaus, V., & Bochnak, M. R. (2020). The grammar of degree: Gradability across languages. Annual Review of Linguistics, 6, https://doi.org/10.1146/annurev-235-259. linguistics-011718-012009
- Ivorra Ordines, P. (2020). About the translation of stereotype comparisons according to construction grammar. The case of "alt com un sant Pau" in La plaça del Diamant and its translations. Linx. Journal of linguists from the University of Paris X Nanterre, 13. https://doi.org/10.4000/linx.3903

- Jackiewicz, A., & Pengam, M. (2020, July). A model for the study of emerging nominations. Notion of identification to grasp the modalities of semantic and discursive adjustment. In 7th World Congress of French Linguistics (Vol. 78, p. https://hal.archives-ouvertes.fr/hal-02942223
- Marcuse, H. (2020). Philosophy and critical theory. In Critical Theory and Society A Reader (pp. 58-74). Routledge.
- Mueller, A., Nicolai, G., Petrou-Zeniou, P., Talmina, N., & Linzen, T. (2020). Crosslinguistic syntactic evaluation of word prediction models. arXiv preprint arXiv:2005.00187.
  - https://doi.org/10.48550/arXiv.2005.00187
- Prescod, P., & Jeannot-Fourcaud, B. (2020). Study of comparative constructions. Open Journals. https://journals.openedition.org/etudescreole s/374
- Rett, J. (2020). Separate but equal: a typology of equative constructions. In Interactions of degree and quantification (pp. 163-204).
- Romero, C. (2019, March). Comparer pour intensifier: structures linguistiques et types de comparaison en français. In Comparaison (s) (Vol. 2019, pp. 355-382). JATEPress, Université de Szeged, Hongrie. https://shs.hal.science/halshs-02542006
- Spaëth, V. (2020). A laboratory of didactics of French as a foreign language: the direct method put to the test of otherness (1880-1900). French language, 208(4), 63-78. https://www.cairn.info/revue-languefrançaise-2020-4-page-63.htm
- Suhrob, E., & Vasila, K. (2022). Parts of speech sentence structure in english grammar. Galaxy International Interdisciplinary Research Journal, 10(7), 156-160.
  - https://www.giirj.com/index.php/giirj/article /view/2557
- Zhan, F., & Traugott, E. C. (2020). A study of the development of the Chinese correlative comparative construction from the perspective of constructionalization. Diachronica, 37(1), 83-126.
  - https://doi.org/10.1075/dia.18025.zha

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# Digital transformations in culture and art: new opportunities and challenges

# Transformaciones digitales en la cultura y el arte: nuevas oportunidades y retos

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Written by:

Kateryna Bannikova<sup>151</sup>

https://orcid.org/0000-0002-5696-1033

https://www.webofscience.com/wos/autor/registro/333156

Petro Fryz<sup>152</sup>

https://orcid.org/0000-0002-5950-6239

Web of Science: HTL-9783-2023

Nadiia Voronova<sup>153</sup>

https://orcid.org/0000-0001-7957-1655

https://www.webofscience.com/wos/author/record/D-4808-2018

Andrii Bondarenko<sup>154</sup>

https://orcid.org/0000-0002-6856-991X

https://www.webofscience.com/wos/author/record/ADW-9714-2022

Liudmyla Bilozub<sup>155</sup>

https://orcid.org/0000-0002-2384-827X

https://www.webofscience.com/wos/author/record/HGE-9878-2022

# Abstract

Digitalization covers all areas of social activity. For a long time, cultural and artistic life has been incorporating practical elements of the digital world into its arsenal, while traditionally leaving creative its components unchanged. Technologization, informatization, digitalization have been used at the stage of production or broadcasting of cultural and artistic content (digital culture, cultural technologies) since their introduction. However, the digital world is gradually beginning to claim the role of a direct creator of cultural elements. Such digital transformations in culture have become a relevant subject of research in the innovation cluster of this sphere of human activity. The purpose of the article is to search for new principles of the process of digitalization of the cultural and artistic cluster in the current conditions of development of the socio-cultural

# Resumen

La digitalización abarca todos los ámbitos de la actividad social. Durante mucho tiempo, la vida cultural y artística ha ido incorporando a su arsenal elementos prácticos del mundo digital, dejando tradicionalmente inalterados sus componentes creativos. La tecnologización, la informatización y la digitalización se han utilizado en la etapa de producción o difusión de contenidos culturales y artísticos (cultura digital, tecnologías culturales) desde su introducción. Sin embargo, el mundo digital poco a poco empieza a reclamar el papel de creador directo de elementos culturales. Tales transformaciones digitales en la cultura se han convertido en un tema relevante de investigación en el clúster de innovación de esta esfera de la actividad humana. El propósito de la investigación es encontrar los principios por los cuales se realiza la digitalización de la cultura y el arte en dos dimensiones clave: creativa y organizacional. El

<sup>155</sup> PhD in Art History, Assosiate Professor in the Department of Fine Arts and Design, Faculty of Ukrainian and Foreign Philology and Art History, Oles Honchar Dnipro National University, Dnipro, Ukraine.



<sup>&</sup>lt;sup>151</sup> PhD, Scientific degree: Candidate. Specialty: Sociological sciences. Head of People, Oxford Quantum Circuits Thames Valley Science Park Shinfield, United Kingdom.

<sup>&</sup>lt;sup>152</sup> PhD of Art Studies, Associate Professor Department of Vocal and Choral, Choreographic and Fine Arts, Faculty of Primary Education and Art, Drohobych Ivan Franko State Pedagogical University, Ukraine.

<sup>&</sup>lt;sup>153</sup> Doctor habilitated in Pedagogics, Docent, Professor of the Department of Philosophy, History, Social and Humanitarian disciplines faculty of humanitarian and economic education, SHEE "Donbas State Pedagogical University", Ukraine.

<sup>154</sup> PhD, Lecturer Department of Musical Art, Faculty of Music, Kyiv National University of Culture and Arts, Kyiv, Ukraine.



space. It is proposed to find the principles by which the digitalization of culture and art is implemented in two key dimensions: creative and organizational. These principles focus on the flexibility, dynamism and synergy of the cultural and artistic space in the context of digitalization. The research methodology is based on general scientific and cultural methods, as well as synergistic methodological principles. The results of the study indicate that cultural and artistic development in the digital environment is gaining qualitatively new opportunities in the organizational, technical. information, communication, and logistical aspects while demonstrating the potential ability to be realized in the creative segment. Thus, digitalization as a powerful global trend in the development of society shapes innovative trends in the cultural and artistic sphere. The author traces the prospects for synergy of the digital segment in the cultural environment with the actualization of innovative principles.

**Keywords:** cultural and artistic space, digital culture, digitalization, creativity, cultural innovation.

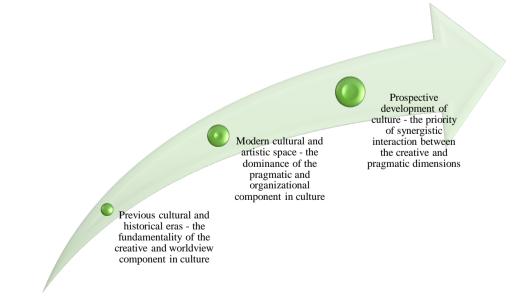
# Introduction

The digital era is a period of civilizational development in which competition in all spheres of social activity has become global (Hsu et al., 2018). Recently, competition has also become relevant for the cultural and artistic environment. If earlier cultural achievements were guided by such abstract principles as cultural trends, social preferences, and ideological overtones, today's

propósito del artículo es resaltar la flexibilidad, el dinamismo y la sinergia del espacio cultural y artístico en el contexto de la digitalización. La metodología de investigación se basa en métodos científicos y culturales generales, así como en principios metodológicos sinérgicos. resultados del estudio indican que el desarrollo cultural y artístico en el entorno digital está ganando cualitativamente nuevas oportunidades en aspectos técnicos, organizativos, información, comunicación y logística, al tiempo que demuestra la capacidad potencial de realizarse en el segmento creativo. Así, la digitalización como poderosa tendencia global en el desarrollo de la sociedad configura tendencias innovadoras en el ámbito cultural y artístico. El autor rastrea las perspectivas de sinergia del segmento digital en el entorno cultural con la actualización de principios innovadores.

Palabras clave: espacio cultural y artístico, cultura digital, digitalización, creatividad, innovación cultural.

cultural development is characterized by greater pragmatism. The creation and realization of cultural content dominates the demands of the consumer of a cultural product. Under such aggressive conditions, the development of the cultural and artistic environment is reoriented from the creative to the pragmatic dimension (see Figure 1).



*Fig. 1.* Reorienting the priorities of the cultural and artistic environment in today's world Source: Authors' own development.



The purpose of the article is to search for new principles of the process of digitalization of the cultural and artistic cluster in the current conditions of development of the socio-cultural space. The task of scientific research is to highlight the features of the digital format of artistic provision, which are expressed in the creative and organizational dimensions.

The research platform for the study was modern models of cultural and artistic creativity that use digitalization processes (as auxiliary elements or by completely basing the creative component on digital manifestation).

In contemporary studies of scientific and cultural discourse, one of the key issues is the role and status of digitalization in the cultural and artistic space of our time and the prospects for the development of this sphere of social activity. If we consider the present in culture, we should realize that elements of the digital world are the mechanisms that fuel the dominance of the pragmatic dimension of culture. Cultural achievements are gradually moving away from focusing on the standards of high art and spirituality, giving preference to a practically oriented understanding of culture. The culture of consumption prevails over the culture of creation, so digital resources are becoming more in demand. At the same time, such guidelines pose a threat of eliminating the moral and spiritual component and increasing the dependence of culture on material and technological component.

Digitalization has dramatically changed the balance of supply and demand in the consumption cluster (Cuomo et al., 2021). This process has not spared the cultural sphere, which is traditionally less dependent on the efficiency and productivity trends of the socio-economic segment. However, culture in today's globalized world is influenced (and sometimes pressured) by socio-cultural realities. The trend towards digitalization leads to the formation of trends in the digital space in the culture itself.

Among the research questions raised in the study of digital transformations in culture and art, theoretical, methodological, and practice-oriented guidelines that ensure the integration of cultural and artistic achievements into the digital space are actualized. The research proposes an analysis of flexibility, dynamism, and synergy as principles through which cultural and artistic activity correlates with the realities of the digital space. New tools of the digital environment and their obvious impact on creative activity, which

is a fundamental component of culture and art, are considered.

Having considered the problem of guidelines that dictate the conditions for the development of a cultural and artistic cluster in the context of digitalization, the next step in the study was to consider the human dimension of cultural digitalization. The digital space unites all participants in cultural and artistic life: creators of cultural heritage, consumers and connoisseurs of artistic products, and organizers of cultural life. The article proposes to consider the transformation of the positioning of all stakeholders in cultural and artistic activity. This aspect causes a lot of controversy and is key in discussion about the interaction of participants in the cultural space in the context of digitalization.

#### Theoretical Framework or Literature Review

Considering the experience and opportunities of digitalization of cultural and artistic life, it is necessary to clearly position these processes in the sociocultural space. Hsu et al., (2018) note the global transformations on a cultural and historical scale caused by digital innovations. At the same time, a scientific analysis was also conducted on local cultural clusters and their transformation under the influence of a digital resource. Lebid et al. (2021), analyzing the impact of digitalization on the musical cultural space, note that in this cluster, innovations are expressed organizational and technical terms. At the same time, the creative element remains vulnerable to innovative transformations. The article proposes guidelines for the functioning of cultural and artistic life as a response to the problem of culture's vulnerability to innovative pressure. Research activity in the field of digitalization and culture is mostly focused on the problem of using digital tools in the creation and broadcasting of cultural heritage. At the same time, the nature of the interaction between the digital and creative dimensions remains unexplored, which has become the leitmotif of the study.

The analysis of digital transformation in the field of culture is based on a review of studies of scientific and cultural discourse. The experience gained in the implementation of digital resources in the cultural and artistic space is also relevant (Camarinha-Mato et al., 2019).

Although digitalization has been integrated into the cultural and artistic environment for a relatively short time, digital gaps are already



being observed due to uneven audience coverage of cultural trends and innovations (Iivari et al., 2020). Therefore, the need for a holistic coverage of this problem in the scientific and cultural discourse is urgent and relevant. In this context, synergy is a principle that is designed to achieve this integrity in the cultural and artistic world. Digitalization is a tool capable of ensuring this synergy. It is noted that the issue of synergistic interactions in the cultural and artistic space is practically not raised in modern scientific literature, while at the same time requiring a thorough study.

One of the key elements under study is the interaction of digital and cultural space (Arrigoni et al., 2020). Fanea-Ivanovici & Pană (2020) study the digitalization of the cultural sphere in the context of shaping cultural consumption. In order to determine new interactions between digital and artistic spaces, it is important to understand the level of their potential autonomy in the contemporary cultural world. Nadkarni & Prügl (2021) worked on these issues. These ideas are in fact contradictory, but the discussion based on the question of the positioning and degree of autonomy of cultural, artistic, and digital space allows us to raise (and in some cases resolve) the status of interaction between these elements.

The study pays a lot of attention to the reaction of those involved in digital cultural and artistic achievements. In particular, Demirkan & Spohrer (2018) note that the level of perception of digital elements in the artistic sphere depends on both creators and connoisseurs. This approach allows us to prioritize the formation of experience in the digital art cluster and identify new perspectives for the use of digital resources. It is noted that the human dimensional aspect has not been adequately covered in the scientific literature for a long time. However, with the actualization of self-organizing elements in the scientific and worldview picture of the world, the subject of cultural and artistic life becomes a key player in the use of digital resources in this area.

In the methodological dimension, feedback from stakeholders of the cultural and artistic space on their reaction to the implementation of digital transformations is important. The format of forming digital project teams and implementing digital leadership training programs (Guinan et al., 2019), as well as the functioning of digital organizations (Loonam et al., 2018), seems promising. Such structural elements are designed to carry out analytical work on the dynamics and effectiveness of digital transformation in the cultural sphere.

Recent studies point to the prospects of creating an alternative global culture based on digital culture, the pop industry, and social demands (Kim, 2021). Ossewaarde (2019) emphasizes the need to update (at least) or transform (at most) the level of digital influence on cultural and artistic activities.

In the course of the research, the main dichotomies in the scientific and cultural discourse on the issue of digitalization of cultural and artistic life were identified. Firstly, the correlation between the demand for digital tools and the needs of cultural and artistic activity is indicated. The study positions digitalization as a tool for improvement, continuing its pragmatic and functional positioning in the scientific and ideological paradigm. At the same time, there is a radical positioning of digitalization, according to which the digital space replaces the creative dimension of the cultural and artistic environment. Prospects for further scientific research include structuring the digital arsenal in relation to the cultural and artistic space, taking into account the characteristics of cultural artifacts and the moral and creative specifics of participants in cultural life.

# Methodology

In contemporary cultural and artistic life, we can see the formation and development of sociocultural trends inherent in modern globalization. Similar to Industry 4.0, similar trends are emerging in the field of culture and art. In particular, the 4.0 paradigm is being actively implemented in the fashion cluster (Bertola & Teunissen, 2018) or music (Lebid et al., 2021). Such global paradigms allow us to analyze the peculiarities of the implementation of digital mechanisms in the most complete way. In this case, comparative and structural analysis is relevant, which defines the principles of the effectiveness of digitalization in modern industrial society in general, and in the cultural segment of fashion and style in particular. Kutnjak et al. (2019) note that "the cycle of hype new technologies affects industries differently from the moment a particular technology is introduced to the moment the technology reaches its full potential for use in real-world processes".

The methodology that is actualized in the proposed study is expressed in an algorithm that is related to both digital and artistic dimensions. In particular, considering the creative and organizational segments of digitalization in the

cultural and artistic sphere, we trace the following phases:

- a dynamic set of all available digital tools used in the creation of artistic works;
- professional selection of relevant, auxiliary, potentially useful, or elimination of harmful elements of the digital arsenal in the artistic sphere;
- selection of promising digital resources that will improve the process of creation and logistics of the cultural and artistic dimension.

Research activity in the field of digitalization of culture and art has two key dimensions: object (determines the direct involvement of digital tools in the creation of cultural and artistic artifacts) and subject (indicates the level of involvement of digital potential for cultural and artistic activity by the creator or consumer). This methodological structure meets the goals of scientific research on the creative and organizational principles of digitalization in culture and the guidelines that characterize the symbiosis of the digital and cultural and artistic space.

In accordance with the research methods used, it is emphasized that the collection of data for scientific research focused on the theoretical analysis of digitalization manifestations in cultural and artistic heritage and on the empirical level of perception of innovative changes in the cultural environment associated with the use of digital resources.

Digitalization has gained such popularization and support in modern society that it requires a systematic positioning of this process in the scientific and worldview picture of the world. Simply highlighting the principles of digital space functioning is not enough, since digitalization is not only a mechanism or a resource, but sometimes claims to be an alternative or a complete replacement for traditional forms of human activity. One of the methodological approaches to the scientific and cultural characterization of digitalization is the strategy of developing the digital world and integrating digital principles into all spheres of social activity. In the cultural segment, a strategic methodological guideline is proposed - Strategic Doing, which focuses on the practical

(production) components used in the digital dimension of culture (Jones et al., 2021).

As a rule, it is better to analyze the results of digital transformation on the basis of large-scale online cultural heritage platforms, such as Europeana and Google Arts & Culture (Pesce et al., 2019).

An effective methodological approach to the study of digital transformations is to create a conceptual framework (Isaksen et al., 2021). Two conceptual clusters are being formed, one of which specializes in the production of digital products that can potentially be used in the field of culture; the other focuses on the use of digital mechanisms to improve the efficiency of cultural experience transfer.

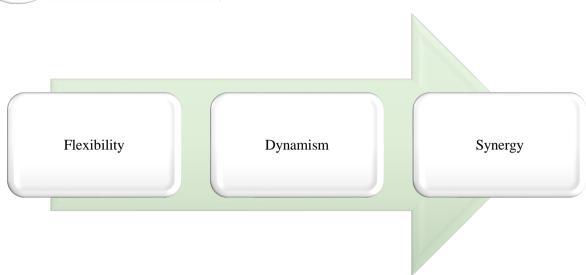
The digital potential of Big Data is essential for cultural and artistic transformation (Ardito et al., 2019). The ability to operate with large-scale data allows for the preservation of cultural experience (intellectual and aesthetic elements in digital form) and cultural heritage (cultural artifacts in digitized form).

#### **Results and Discussion**

One of the key results of the study was the structuring of theoretical, methodological, and practice-oriented guidelines for the integration of cultural and artistic activity into the digital space. The innovativeness of the digital arsenal makes it necessary to use qualitatively new methodological approaches to the organization of the cultural environment. The article considers promising guidelines that correlate digitalization with the creative and organizational dimension of culture.

The use of digital platforms has a clear innovation orientation in the creative cultural sectors (Scuotto et al., 2020). The feasibility of using digital products in the cultural sphere can be traced by comparing the effectiveness of digitalization in relation to material culture objects, and, at the same time, the difficulties with the digitalization of spiritual culture elements (Ranjan & Chaturvedi, 2022). The successful integration of cultural and artistic heritage into the digital space and the implementation of digitalization principles in the cultural environment can be ensured by appropriate theoretical, methodological, and practice-oriented guidelines (see Fig. 2).





*Fig. 2.* Guidelines for digital transformation in the field of cultural and artistic development. Source: Authors' own development.

Let's consider these guidelines in the context of the already existing effective experience of digitalization of cultural and artistic products or in the context of new digital opportunities in the artistic sphere.

One of the most important guidelines for improving the process of digital transformation in the cultural and artistic environment is the flexibility of stakeholders in this space (Demirkan & Spohrer, 2018). It is particularly important to emphasize that flexibility should be actualized on both sides of the participants who ensure the digitalization of the cultural and artistic space: both on the part of cultural figures and artists in the context of their perception of innovative digital formats in the cultural sphere, and on the part of technical support for digital resources where cultural content is created, distributed and broadcast.

One of the key aspects of the study of cultural digitalization is the practical implementation of these processes. Social and entertainment venues have been at the forefront of cultural and artistic institutions that have used digital mechanisms to improve their operations (De Bernardi et al., 2019). The transfer of active cultural venues to the digital space has significantly expanded their potential for reaching and attracting visitors. The tourism, hospitality, and entertainment sectors have demonstrated a significant revitalization of their activities using digital resources. Based on the results of these industries, other clusters of the cultural segment, especially those that focus on artistic and spiritual factors, have gradually been digitized. This is how the cultural environment is gradually moving to the digital

space. Obviously, the first to realize this reorientation were the segments of the materially oriented cultural sphere. The artistic and spiritual clusters of culture are incorporating digital potential into their arsenal much more slowly and to a lesser extent. These algorithms for realizing the digital potential in the cultural spheres only emphasize the flexibility of digitalization and the lack of stable conditions for its application in the cultural sphere. This approach is especially important for the creative dimension of cultural activity, where any restrictions or boundaries are perceived as particularly painful.

An important guideline for the implementation of digital transformation in the cultural sector is dynamism, which is achieved through the renewal of digital potential almost online (Jafari-Sadeghi et al., 2021). Online art is a new format for its creation, which requires new tools in both creative and logistical terms. Digitalization is the optimal mechanism for both sides of artistic activity (creator and consumer) to achieve an effective result and create a quality cultural product.

In today's socio-cultural environment, a model of the intersection of the digital and cultural segments is being formed (Arrigoni et al., 2020). The synergistic potential of digitalization in culture and art is traced on specific examples of the interaction of these components. In particular, an important role is played by the issue of format and design of displaying cultural elements through digital resources. The quality of cultural content largely determines digital transformation strategies. Interesting and meaningful cultural elements enable digital

professionals to focus on the technical and media aspects of creating cultural content rather than on addressing the shortcomings of the cultural artifact itself.

The next research question of the study was to highlight the human dimension of the process of digitalization of culture and art. Since it is the human being as the creator of cultural and artistic achievements and the human being as a consumer or connoisseur of these achievements that forms the algorithms for their creation, preservation, dissemination, and evaluation, human dimensionality is a priority principle of the study of cultural digitalization. The human determines the role and status of digital influence on culture through normative and regulatory functions. At the same time, the rapid and uncontrolled development sometimes information and digital content poses a threat to the ability of humans to fully control the impact of digitalization on culture in the future. If we take into account the fact that cultural and artistic development is subject not only to scientific and rationalistic principles (which are much easier to structure and control), but also to moral and sensual dimensions (which have much more potential for chaos and manipulation), then any radical impact on artistic activity (and digital influence is undeniably such) should be thoroughly investigated in the scientific and cultural discourse. The current study is focused on actualizing the human dimension of the process of digitalization of culture and art, which will serve to control the impact of digital innovations on cultural development.

So, let's consider the conceptual dimensions of the digitalization of culture at the level of a human creator and a human consumer (connoisseur) of culture.

In the modern world, permeated by pragmatic principles, not only the aesthetic component of cultural achievements but also the practical level of culture is becoming an important factor. Fanea-Ivanovici & Pană (2020) focus on the concept of "cultural consumption". This term is most fully consistent with the implementation of digital culture, which improves all spheres of social activity (communications, social segment, economic and economic life) almost online. The entire socially-oriented cluster of modern civilizational development is correlated with the principles of accessibility and engagement. Digitalization provides all the opportunities to make cultural and artistic heritage accessible (both for creation and consumption) to all members of society. In addition, digital technologies have launched qualitatively new modes of cultural creativity based on the do-it-yourself principle, which is characterized by a certain impoverishment of cultural meanings and essences (Zebracki & Luger, 2019).

Nadkarni & Prügl (2021) conducted an analytical study on the spread of the digitalization process at the macro and macro levels. We are primarily interested in the human dimensional macro level of research. The result of the work was the formation of inductive thematic maps, which indicated the pace and intensity of digitalization. It should be noted that the segments of cultural and artistic life at this stage are significantly inferior to the socio-economic segment in terms of the level of digitalization. Therefore, it is worth further monitoring the correlation between the global and local spread of digitalization in the field of culture and art.

One of the human dimensions is the socialization of the process of digitalization of cultural and artistic life. Ossewaarde (2019), exploring the peculiarities of modern social theory, points to the need to update it, as there is a real threat of usurpation of the aesthetic and intellectual spheres. Technologization, informatization, and digitalization are the factors that can eliminate the aesthetic and intellectual potential of the modern worldview. Masking technological trends with the need to increase productivity and efficiency is a danger to the moral and spiritual dimension of culture. A simple mechanism for replacing the rational and aesthetic with digital resources is beneficial in organizational terms catastrophic in terms of potential consequences for civilizational development.

On the other hand, the growing influence of the digital dimension in human cultural life should not be ignored or rejected. Therefore, the best solution is to correlate the principles of the traditional cultural and artistic environment and innovative digital resources. It is only in synergistic methodological guidelines that further harmonious development of culture is possible. The interaction preserves the balance of and spiritual, creative material and organizational, which keeps culture from reaching critical levels of traditionalism and innovation.

If we look at digitalization structurally, we can distinguish two fundamental components:

technological and computing, and information and communication;



self-optimization and creation of sustainable environment (Zimmermann et al., 2018).

The research attempts to give digitalization of culture a priority status by all stakeholders of the cultural and artistic space. This process is facilitated by the use of synergistic principles that were applied in the study when considering the theoretical, methodological and practice-oriented support for digitalization in culture. Therefore, the use of digital tools has its own characteristics and algorithms for certain categories of cultural actors. In particular, for cultural creators, the autonomy of their own creative potential is important when using the digital arsenal. For consumers of cultural products, on the contrary, the digital ability to improve their broadcast, transmission, or distribution is a priority. Therefore, the synergistic principle in this case is a priority element in the process of cultural digitalization. Since synergetics is directly guided by the principles of self-organization, the human dimension is again fundamental in the proposed study.

The technological and information cluster is much less used in cultural life, especially at the stage of creating cultural elements. When the issue of the subjective dimension of culture is actualized, the synergistic processes of selforganization and the formation of resilience to permanent change become a priority for all stakeholders in cultural and artistic processes. At the individual level, the following factors of adaptation to digital transformation are proposed: awareness of the benefits of digitalization; perception of changes associated digitalization, development of the necessary skills to navigate the digital space; social association of digitalization with progress and development prospects (Trenerry et al., 2021). The acquisition of relevant digital skills is relevant for the educational sector (Abad-Segura et al., 2020). Digital skills are formed primarily when obtaining the appropriate educational level and are further implemented in all areas, including cultural and artistic.

No matter how much people who are close to creativity would like to abstract themselves from the realities of socio-economic or scientific and technological development, it is becoming almost impossible to do so in today's dynamic globalized society. One way or another, business models are gradually but surely (and most importantly, efficiently and effectively) gaining ground in the creative industries (Li, 2020). Over the past decade, digital technologies have proven to be effective in business strategies. Therefore, the use of digital resources in the cultural environment, which is becoming increasingly economically oriented, is growing rapidly. Creative industries are more actively integrating into the digital space, enriching their potential. In modern business strategies, creative and artistic spheres are already forming their own models of development in economic and socio-cultural life.

After all, the human dimension of digitalization requires clear structure and organization when it is integrated into the cultural and artistic space. Culture, unlike science or education, always needs additional corks in terms of orderliness and organization, as these elements are existentially lacking in cultural and artistic activities. Therefore, the study proposes to add the problem of the quality of the digital arsenal in culture and the systematization of the use of digital tools in this area as an element of streamlining the digitalization processes.

This is how a new generation of services is being formed in the socio-cultural dimension (Zaki, 2019). As culture is integrated into the general consumption paradigm, it becomes massive and accessible to everyone (both in terms of understanding and the practical possibility of accessing cultural heritage). Digitalization is a mechanism that can ensure this integration of culture into the global system of service consumption. Digital transformation is relevant for the cultural environment, as its advantages are time and resource savings (Alrawadieh et al., 2021).

At the same time, such an actualization of digitalization will require a clear and active protective action to protect the moral, spiritual, and aesthetic dimensions of culture and art. A promising task for the scientific and cultural discourse is to develop guidelines that would allow for the coordination and regulation of cultural development through the same digital resources. Given the power of the digital world, modeling a culture-preserving format for the development of a cultural and artistic cluster is a realistic prospect.

In the modern world, the issue of quality is a priority. However, in the cultural dimension, cultural heritage has rather relative qualitative characteristics. The article states the urgent need to preserve cultural artifacts in quantitative terms. This process is especially relevant for artifacts that are threatened with extinction. Digitization of such cultural objects is often the only solution to ensure their preservation for cultural heritage (Alvarenga et al., 2020).

The issue of digital space design in the cultural dimension is still under debate. Traditional technological interfaces are difficult to apply to the vast majority of cultural and artistic heritage, as they are more focused on information priorities (Preindl et al., 2020). At the same time, cultural and artistic elements require mainly the expression of meanings and moral and aesthetic dimensions.

Digitalization makes it possible to provide achievements support for artistic organizational, logistical, informational, and other aspects. In particular, the issue of copyright, intellectual property, and the subtleties associated with the legal status and maintenance of artistic elements remains an important problem today (O'Dwyer, 2020). The concept of digital rights prevents all potential threats of misuse of copyrighted content or artistic achievements. Thus, an artist or cultural worker does not spend additional efforts and funds, being able to concentrate exclusively on the creative part of their activities. This is how a promising aspect of understanding the role of the creative element of digitalization of cultural and artistic activity and its distinction from the organizational component is formed.

#### **Conclusions**

Thus, digital transformation is gaining global proportions in all areas of the socio-cultural space. The cultural and artistic sphere is also affected digital mechanisms. bv digitalization of culture is being implemented in two key areas: organizational and technological, and artistic and creative. The main task of the scientific and cultural community is to develop principles for introducing digital mechanisms into the cultural and artistic environment in order to maintain a balance between the material and technological and spiritual and aesthetic components of this sphere.

Guidelines for the digital transformation of culture are relevant: flexibility, dynamism, and synergy. Synergistic interaction is a fundamental priority of cultural development strategies in the context of global digitalization. In addition, synergistic relationships are designed to ensure the practical effectiveness of using a digital product in the cultural and artistic environment. The formation of cultural experience based on digital technologies can potentially become a guarantee of preserving cultural traditions and

developing new elements of cultural achievements.

#### Bibliographic references

- Abad-Segura, E., González-Zamar, M.-D., Infante-Moro, J. C., & Ruipérez García, G. (2020). Sustainable Management of Digital Transformation in Higher Education: Global Research Trends. Sustainability, 12(5), 2107. https://doi.org/10.3390/su12052107
- Alrawadieh, Z., Alrawadieh, Z., & Cetin, G. (2021). Digital transformation and revenue management: Evidence from the hotel industry. Tourism Economics, 27(2), 328-345.
  - https://doi.org/10.1177/1354816620901928
- Alvarenga, A., Matos, F., Godina, R., & Matias, J. (2020). Digital Transformation and Knowledge Management in the Public Sector. Sustainability, 12(14), 5824. https://doi.org/10.3390/su12145824
- Ardito, L., Cerchione, R., Del Vecchio, P., & Raguseo, E. (2019). Big data in smart tourism: challenges, issues, and opportunities. Current Issues in Tourism, 22(15), 1805-1809. DOI: https://doi.org/10.1080/13683500.2019.1612 860
- Arrigoni, G., Schofield, T., & Pisanty, D. T. (2020). Framing collaborative processes of digital transformation in cultural organizations: From literary archives to augmented reality. Museum Management and Curatorship, 35(4), 424-445. DOI: https://doi.org/10.1080/09647775.2019.1683 880
- Bertola, P., & Teunissen, J. (2018). Fashion 4.0. Innovating fashion industry through digital transformation. Research Journal of Textile and Apparel, 22(4), 352-369. https://doi.org/10.1108/RJTA-03-2018-0023
- Camarinha-Mato,. L. M., Fornasiero, R., Ramezani, J., & Ferrada, F. (2019). Collaborative Networks: A Pillar of Digital Transformation. Applied Sciences, 9(24), 5431. https://doi.org/10.3390/app9245431
- Cuomo, M. T., Tortora, D., Foroudi, P., Giordano, A., Festa, G., & Metallo, G. (2021). Digital transformation and tourist experience co-design: Big social data for cultural tourism planning. Technological Forecasting and Social Change, 162, 120345. https://doi.org/10.1016/j.techfore.2020.120345
- De Bernardi, P., Bertello, A., & Riad, S. S. M. (2019). Logics Hindering Digital Transformation in Cultural Heritage Strategic Management: An Exploratory Case Study



- Source: Tourism Analysis, 24(3), 315-327. https://doi.org/10.3727/108354219X155118 64843876
- Demirkan, H., & Spohrer, J. C. (2018).

  Commentary-Cultivating T-Shaped
  Professionals in the Era of Digital
  Transformation. Service Science, 10(1).

  https://doi.org/10.1287/serv.2017.0204
- Fanea-Ivanovici, M., & Pană, M. C. (2020). From Culture to Smart Culture. How Digital Transformations Enhance Citizens' Well-Being Through Better Cultural Accessibility and Inclusion. IEEE Access, 8, 37988-38000. doi:
  - https://doi.org/10.1109/ACCESS.2020.2975 542
- Guinan, P. J., Parise, S., & Langowitz, N. (2019). Creating an innovative digital project team: Levers to enable digital transformation. Business Horizons, 62(6), 717-727. https://doi.org/10.1016/j.bushor.2019.07.005
- Hsu, C.C., Tsaih, R.H., Yen, D.C. (2018). The Evolving Role of IT Departments in Digital Transformation. Sustainability, 10(10), 3706. https://doi.org/10.3390/su10103706
- Iivari, N., Sharma, S., & Ventä-Olkkonen, L. (2020). Digital transformation of everyday life How COVID-19 pandemic transformed the basic education of the young generation and why information management research should care? International Journal of Information Management, 55, 102183. https://doi.org/10.1016/j.ijinfomgt.2020.102 183
- Isaksen, A., Trippl, M., Kyllingstad, N., & Rypestøl, J. O. (2021). Digital transformation of regional industries through asset modification. Competitiveness Review, 31(1), 130-144. https://doi.org/10.1108/CR-12-2019-0140
- V., Garcia-Perez, Jafari-Sadeghi, & Couturier, J. (2021). Candelo, E., of Exploring the impact digital transformation on technology entrepreneurship and technological market expansion: The role of technology readiness, exploration and exploitation. Journal of **Business** Research, 124, https://doi.org/10.1016/j.jbusres.2020.11.020
- Jones, M. D., Hutcheson, S., & Camba, J. D. (2021). Past, present, and future barriers to digital transformation in manufacturing: A review. Journal of Manufacturing Systems, 60, 936-948. https://doi.org/10.1016/j.jmsy.2021.03.006
- Kim, J. O. (2021). BTS as method: a counter-hegemonic culture in the network society. Media, Culture & Society, 43(6), 1061-1077. https://doi.org/10.1177/0163443720986029

- Kutnjak, A., Pihiri, I., & Furjan, M. T. (2019).
  Digital Transformation Case Studies Across Industries - Literature Review. 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO), 1293-1298. doi: https://doi.org/10.23919/MIPRO.2019.8756
  911
- Lebid, Y., Sinelnikova, V., Pistunova, T., Tormakhova, V., Popova, A., & Sinenko, O. (2021). Organization of Qualitative Education of Music Students in the Conditions of Distance Education. Postmodern Openings, 12(3Sup1), 76-93. https://doi.org/10.18662/po/12.3Sup1/352
- Li, F. (2020). The digital transformation of business models in the creative industries: A holistic framework and emerging trends. Technovation, 92-93, 102012. https://doi.org/10.1016/j.technovation.2017. 12.004
- Loonam, J., Eaves, S., Kumar, V., & Parry, G. (2018). Towards digital transformation: Lessons learned from traditional organization. Strategic Change, 27, 101-109. https://doi.org/10.1002/jsc.2185
- Nadkarni, S., & Prügl, R. (2021). Digital transformation: a review, synthesis and opportunities for future research. Management Review Quarterly, 71, 233-341. https://doi.org/10.1007/s11301-020-00185-7
- Ossewaarde, M. (2019). Digital transformation and the renewal of social theory: Unpacking the new fraudulent myths and misplaced metaphors. Technological Forecasting and Social Change, 146, 24-30. https://doi.org/10.1016/j.techfore.2019.05.00
- O'Dwyer, R. (2020). Limited edition: Producing artificial scarcity for digital art on the blockchain and its implications for the cultural industries. Convergence, 26(4), 874-894.
  - https://doi.org/10.1177/1354856518795097
- Pesce, D., Neirotti, P., & Paolucci, E. (2019). When culture meets digital platforms: value creation and stakeholders' alignment in big data use. Current Issues in Tourism, 22(15), 1883-1903. DOI: https://doi.org/10.1080/13683500.2019.1591 354
- Preindl, R., Nikolopoulos, K., & Litsiou, K. (2020). Transformation strategies for the supply chain: the impact of industry 4.0 and digital transformation. Supply Chain Forum: An International Journal, 21(1), 26-34. DOI: https://doi.org/10.1080/16258312.2020.1716 633



- Ranjan, A., & Chaturvedi, P. (2022). Digital Technologies and the Intangible Cultural Heritage of the Rural Destination. In: Nadda, V., Tyagi, P., Singh, M., & Tyagi, P. (Eds). Disruptive Innovation and Emerging Technologies for Business Excellence in the Service Sector. 196-218. https://doi.org/10.4018/978-1-7998-9194-9.ch010
- Scuotto, V., Arrigo, E., Candelo, E., & Nicotra, M. (2020). Ambidextrous innovation orientation affected by the digital transformation: A quantitative research on fashion SMEs. Business Process Management Journal, 26(5), 1121-1140. https://doi.org/10.1108/BPMJ-03-2019-0135
- Trenerry, B., Chng, S., Wang, Y., Suhaila, Z. S., Lim, S. S., Lu, H. Y., & Oh, P. H. (2021). Transformation: An Integrative Review and Framework of Multi-Level Factors. Frontiers

- in Psychology. https://doi.org/10.3389/fpsyg.2021.620766
- Zaki, M. (2019). Digital transformation: harnessing digital technologies for the next generation of services. Journal of Services Marketing, 33(4), 429-435. https://doi.org/10.1108/JSM-01-2019-0034
- Zebracki, M., & Luger, J. (2019). Digital geographies of public art: New global politics. Progress in Human Geography, 43(5), 890-909. https://doi.org/10.1177/0309132518791734
- Zimmermann, A., Schmidt, R., Sandkuhl, K., Jugel, D., Bogner, J., & Möhring, M. (2018). Evolution of Enterprise Architecture for Digital Transformation. 2018 IEEE 22nd International Enterprise Distributed Object Computing Workshop (EDOCW), 87-96. doi: 10.1109/EDOCW.2018.00023



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