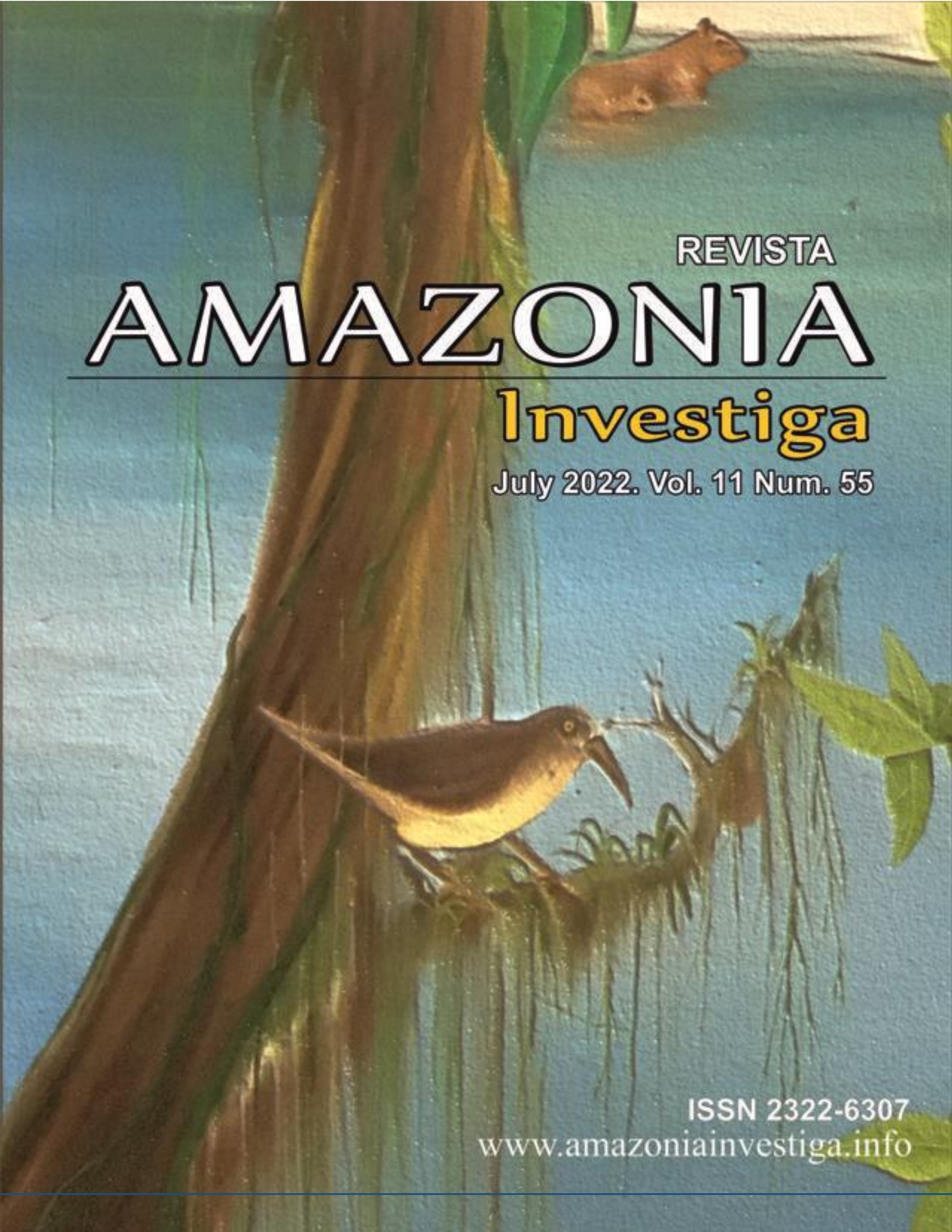

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Editorial

In memory of outstanding Ukrainian legal scholar and teacher Vasyl Yakovych Tatsiy

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On September 28, 2022, at the age of 83, the outstanding Ukrainian legal scholar, Doctor of Law, Professor, Academician of the National Academy of Sciences of Ukraine and the National Academy of Legal Sciences of Ukraine, Honored Worker of Science and Technology of Ukraine, Hero of Ukraine, full holder of the Order Prince Yaroslav the Wise, laureate of the State Prize of Ukraine, long-term rector of Yaroslav Mudryi National Law University and president-organizer of the National Academy of Legal Sciences of Ukraine Vasyl Yakovych Tatsiy passed away.

This is a great loss not only for the staff of Yaroslav Mudryi National Law University, but for the whole of Ukraine. Vasyl Yakovych Tatsiy was one of those people who devoted their talent and life to the development of legal education and science in Ukraine, their integration into the European system of education and science.

Vasyl Tatsiy was born on January 13, 1940 in Poltava in a family of employees. He began his career in 1957 and until 1959 worked as a turner in the Poltava locomotive depot. He got his higher education degree at Kharkiv Law Institute (KhLI), graduating in 1963. After graduating from the institute, from 1964 to 1966, he held the positions of assistant prosecutor of the district and prosecutor of the department for supervision over the consideration of criminal cases of the Poltava regional Prosecutor's office.

In 1966, Vasyl Tatsiy became a post-graduate student of Kharkov Law Institute, after graduating the course in 1969 he took the position of senior lecturer at the same institute, and in 1972 became an associate professor and deputy dean of the full-time faculty of the KhLI. In 1973, he was appointed the Vice-rector for scientific work, and he held the position until 1987, when, as a result of elections, he became the Rector of Kharkov Law Institute, which is currently called Yaroslav Mudryi National Law University.

Under his leadership, Yaroslav Mudryi National Law University has become one of the most authoritative higher educational institutions in Ukraine, a real center for the training of highly professional lawyers, on which not only Ukrainian universities, but many European universities keep an eye.

Vasyl Yakovych was a recognized organizer of higher legal education in Ukraine. His contribution to updating and improving its content, introducing advanced teaching methods, deepening the integration of education, science and legal practice is significant. Vasyl Yakovych made an invaluable contribution to the development of the rule of law in Ukraine, the improvement of the legislative process and law enforcement practice.

As a member of the Constitutional Commission, he participated in drafting the Constitution of Ukraine in 1996, was the Chairman of the working group of the Cabinet of Ministers on the development of the Criminal Code of Ukraine in 2001. Vasyl Tatsiy is the author of more than 800 scientific works, including about 60 monographs and textbooks; he was a member of dozens of working groups and commissions for the development of the national legal system, an Honorary doctor of 9 Ukrainian and foreign universities.

From 1993 to 2016, Vasyl Tatsiy was the President, and since 2016 - the Honorary President, Advisor to the Presidium of the

National Academy of Legal Sciences of Ukraine, created on his initiative and with his direct active participation.

Many facts of his biography confirm the extraordinary personality of Vasyl Yakovych, his outstanding organizational talent, high efficiency, responsibility for the assigned work and his dedication. Purposefulness, responsibility, professionalism, humanity were the motto of his whole life. More than 30 years as a rector is the proof that Vasyl Yakovych Tatsiy was not just an authority in the legal world, but he was also a whole era of humanism, courage, hard work. He was a creator of historical events in the life of the University and Ukraine.

As it is known, the social weight of a teacher is in his students. And Professor Vasyl Yakovych Tatsiy had a huge number of students. Several generations of lawyers call him their teacher. Hundreds, if not thousands of specialists belong to his school. During his extremely wide and inspired pedagogical activity, he brought up a big number of famous jurists who successfully continue the work of their teacher. Among them are many well-known scientists, doctors of sciences, professors, world famous and recognized legal practitioners.

For many years Professor Tatsiy V.Ya. was the editor-in-chief of the collection of scientific articles “Bulletin of the National Academy of Legal Sciences of Ukraine”, the executive editor of the collection of scientific papers “Problems of Legality”, the chairman of the scientific council of the journal “Pravo Ukrainy” (“Law of Ukraine”), a member of the editorial board of the journal “Bulletin of the Prosecutor's Office”, the scientific journal “Amazonia Investiga”, etc.

Vasyl Yakovych lived an interesting, rich, productive life and was awarded many well-deserved awards and prizes. Among them: the title of Hero of Ukraine with the award of the Order of the State, the full cavalier of the Order of Prince Yaroslav Mudryi (V d. - 1st d.), the Order of Merit II and I degrees, the Certificates of Honour of the Verkhovna Rada of Ukraine and the Cabinet of Ministers of Ukraine, the Order of “the Sign of Honour”, two medals “Honoured Worker of Science and Technology of Ukraine”, laureate of the State Prize of Ukraine in the field of architecture and the State Prize of Ukraine in the field of science and technology, the Vladimir Vernadskyi Prize, the Yaroslav Mudryi Prize. He was awarded numerous public, church and government awards from other states. He was the State Counselor of Justice of the 1st class, honorary citizen of Poltava, Kharkiv and Kharkiv region.

Our university community will always remember Vasyl Yakovych Tatsiy as a person with an uncompromising civic position; the outstanding scientist and talented teacher, who combined high professional qualities with spiritual warmth; a wonderful organizer who united people around him. We will remember his benevolence, open smile, selfless friendship, wise advice, countless good deeds and his honestly lived life.

Vasyl Yakovych’s inexhaustible vital energy, his love for others, commitment to the chosen cause will forever remain in our hearts, and his life path and significant legacy will be an example for future generations of jurists, scientists and educators.

The outstanding legal scholar and teacher Vasyl Yakovych Tatsiy will be forever remembered!

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Influence of the digital space on suicidal behavior of adolescents

ВПЛИВ ЦИФРОВОГО СЕРЕДОВИЩА НА СУЇЦИДАЛЬНУ ПОВЕДІНКУ ПІДЛІТКІВ

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Abstract

With the Internet now firmly established as the main medium of communication in today's world, studying the effect of its various aspects on the behavior of minors is now more relevant than ever.
This article provides arguments in favor of the need to study the phenomenon of cybersuicide among adolescents in light of the rising number of suicides among children in many countries in recent years, including Ukraine.
The aim of this article is to study the role of the digital space, namely the Internet, in the reinforcement of suicidal ideation and intentions among children and, ultimately, in driving them to suicide.
To achieve this goal, a number of general and special research methods for understanding social realities were used, to ensure objectivity and accuracy of obtained data, which was all the more important given the nature of the subject.
The dangers of the pre-suicidal state (pre-suicide) were examined, including from a medical perspective. Particular attention was

Анотація

У зв'язку з тим, що Інтернет став головним каналом сучасного спілкування дослідження різних аспектів його впливу на поведінку неповнолітніх є вельми актуальним питанням.
У статті обґрунтовано доцільність вивчення феномену кіберсуїциду серед підлітків, оскільки останніми роками в багатьох країнах, у тому числі й в Україні, спостерігається збільшення кількості самогубств серед дітей.
Ціллю статті є дослідження впливу цифрового середовища, зокрема Інтернету, на посилення суїцидальних думок, намірів та, зрештою, на схиляння дітей до вчинення суїциду.
Для досягнення мети дослідження було використано сукупність загальнонаукових та спеціально-наукових методів пізнання соціальної дійсності, що дозволило забезпечити об'єктивність та достовірність отриманих даних, з огляду на специфіку об'єкта та предмета дослідження.
У статті розглянуто небезпечність передсуїцидального стану (пресуїциду), у тому числі з медичної точки зору. При цьому увага

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paid to behavioral tendencies common among adolescents.
The authors arrived at the conclusion that the digital space can both trigger suicidal thoughts and intentions in adolescents with its content and facilitate their committing suicide through "support" or even encouragement from online friends.
The authors stress that related content children post on social media can help discover whether they have been having suicidal ideation. Arguments are given in favor of the need for parents, teachers, and psychologists to monitor said content to be able to provide timely psychological help, including via the digital space.

Key words: Internet, cybersuicide, adolescents, self-harm, suicide, digital space.

приділена особливостям поведінкових проявів, характерних для підліткового віку.
У своїй роботі автори дійшли висновку, що цифрове середовище з одного боку, своїм контентом підштовхує підлітків до суїцидальних думок, намірів, а з іншого, – сприяє скоєнню ними суїциду, завдяки «підтримці» або, навіть, схилянню з боку віртуальних «друзів».
Автори наголошують, що відповідний контент, розміщений на особистих сторінках підлітка в соціальних мережах може допомогти у виявленні суїцидальних намірів дитини. Доводиться необхідність контролю за такою інформацією з боку батьків, педагогів, психологів для організації психологічної допомоги, у тому числі з використанням цифрового середовища.

Ключові слова: Інтернет, кіберсуїцид, неповнолітні, селфхарм, суїцид, цифрове середовище.

Introduction

The Internet has become an integral part of the life of modern society in general and children in particular. The digital space has great potential for facilitating the development and self-realization of a child's personality. Digital libraries and museums, teaching, informational and entertainment websites allow today's school students to download e-books, music, photos, etc. Children use technology for communication and leisure. In a word, the Internet is a part of life for them, and the virtual world it offers – their means of socializing. The Internet's importance in everyone's life was only boosted by COVID-19 lockdowns.

Social networks such as Facebook, Twitter, Instagram and others – readily accessible communication platforms – allow people to maintain their social connections and thus fight loneliness, and it's just as true for lower age demographics. Social media are now firmly and permanently integrated into our everyday life, so much so that a person without social media is a rarity today. It is mostly online, within the virtual space, that adolescents are socially active these days.

While the digital space offers countless benefits, neither can we ignore its negative aspects. Thus, children in a number of European states, including Ukraine, as well as in the United States, China, and Japan often withdraw into the virtual world because of their addiction to gadgets and the Internet. Every day younger generations spend over 5 hours in the digital space on average, and some children are always online (Kulyk, Lubenets, Kulakova, & Naumova, 2020). Secondly, as a result of being constantly online, they run a greater risk of encountering dangers that exist in the virtual world, from cyber violence and fraud to drugs and encouragement to commit suicide. The Internet, with children as its active users, is among the most popular channels for the spread of these destructive ideas.

The rising virtualization of our lives through the use of digital technologies is having an impact on the human psyche (especially among children), resulting in the emergence of new phenomena (e.g. Google amnesia, Facebook depression, etc.). Social relationships have been affected as well. We now have such new concepts as "stranger friend," "virtual friendship," "virtual love" as well as new kinds of online dangers and risks like "cyberbullying," "sexting," "grooming," "cybersuicide," etc. This multitude of social relations has given birth to all sorts of online communities, including destructive ones, which promote murder or suicide and pose a real threat to everyone involved in them, including children. A number of new terms have appeared in the English language to define these phenomena, and they are now used universally, and not just in academic circles. Among these terms are cybersuicide (internet suicide), online suicide, webcam suicide, net suicide packs, digital self-harm, parasuicide, etc.

Cybersuicide, or internet suicide, refers to the conception and/or realization of suicidal ideation through various channels of communication online (Birbal et al., 2009). Webcam suicide is suicide committed in front of a webcam. One of its forms is online suicide, or deathcasting, which involves streaming one's death online. Examples of such suicides have been covered in the media (Walker, 2014) and in academic literature (Phillips, Diesfeld, & Mann, 2019). Net suicide packs are group suicides by users that met on the Internet (Rajagopal, 2004). Digital self-harm, or parasuicide, is any non-lethal self-damaging act committed with the express intent to inflict bodily injury or death. Parasuicide (self-harm) includes both fatal suicide attempts as well as actions with a low risk of death, such as cutting or causing other harm to yourself (Comtois, 2002). Fake suicide is simulated or staged suicide.

As we can see, there are many types of online suicidal behavior, but the problem is much broader than it seems and includes both suicide as an act and suicide as a subject of discussion, with the latter potentially capable of driving users to perform certain actions, or of encouraging or discouraging suicidal thoughts.

The goal of this article is to study the role of the digital space (communication medium), specifically the Internet, in the reinforcement of suicidal thoughts and intentions among children, and, ultimately, in their decision to commit suicide.

Methodology

To achieve this goal and accomplish the tasks this entails, the authors made use of general and special research methods. Thus, the logical and semantic method was used to determine terminology associated with cybersuicide among minors; formal logic was used to define the social origins of the cybersuicide phenomenon among children as well as the effect of the digital space on the behavior of adolescents; sociological and statistical methods were used for the analysis of collected empirical data and official statistics; the psychological method helped determine the characteristics of children susceptible to suicidal ideation (or suicidal behavior); and the sorting and summarizing method was used to formulate conclusions and general assessments as well as recommendations on how to improve child suicide prevention and stop the promotion of suicide-related ideas among underage Internet users.

Literature Review

The issue of child safety in the digital space has been on the agenda of numerous institutions, especially in recent years, including international organizations, researchers from various fields of knowledge, law enforcement agencies, media, and public organizations of all levels.

Legal regulation of online relations and information security of Internet users, including children, were studied in the works of Zolotar O. (2018), Nashynets-Naumova A. (2017), Lesko N. (2017), Prypkhan I. and Artemovych I. (2014). The main risks and dangers of the digital space were examined by Vasylevych V. (2013), Garkusha Yu. (2021), Kulyk K. (2016), Osipenko A. and Solovyov V. (2019), Richardson H. (2020), Rimer J.R. (2017). Suicide among children was studied by Baume C., Cantor C.H. and Rolfe A. (1997), Becker K. (2004), Birbal R. et al. (2009), Phillips J.G. et al. (2019), Dunlop S.M., More E. and Romer D. (2011), Lee S.Y. and Kwon Y. (2018), Klyuchko E. (2014), Lubenets I., Tolochko G. and Naumova I. (2020), Soldatova G., Chigarkova S., Drenyova A. and Ilyukhina S. (2019) and others. Thus, this article draws on the works of both national and foreign researchers.

Plenty of research has also been done in regards to the Internet's impact on children's behavior, including suicidal behavior, which once again demonstrates the relevance of this subject today.

Results and Discussion

Global statistics show that in the 15-19 age group, suicide is the second most common cause of death among girls (after pregnancy and childbirth complications) and the third most common among boys (after traffic accidents and interpersonal violence) (Bega, 2019). Moreover, the number of such incidents involving adolescents is rising. Thus, according to the U.S. Centers for Disease Control and Prevention, the number of suicides among children aged 10-14 has tripled over the past decade. Ukraine, where the suicide rate is twice as high as in the EU, is no exception here (Mori, 2021).

Ukraine's Unified State Register of Pretrial Investigations reports 97 suicides among children in 2018, 111 in 2019, and 123 in 2020. In 2021, 150 children committed suicide in the first six months alone (Kovalevska, & Gribanova, 2022), which is more than during the entire previous year. It should be mentioned that official statistics include only completed suicides, not suicide attempts, of which there is over a hundred for every completed suicide in the age group under 25. Completed suicides make up only 1% of suicide attempts among adolescents, although one should keep in mind that every such attempt threatens the child's life.

When studying the issue of suicides among adolescents, we must remember that adolescence is accompanied by numerous physical, emotional, social, and psychological changes in the child. Unfulfilled (for various reasons) expectations, whether academic, social or family-related, could lead to feelings of rejection, loneliness, and profound dissatisfaction with life. Meanwhile, the lack of life experience, low resistance to stress and high emotionality make it difficult for children to approach the problems they face rationally. When things go badly at school or at home, the resulting developments and stress often make adolescents overreact, since physical and hormonal changes in their body cause emotional instability, irritability and low self-esteem.

Statistics show that 11% of adolescents under 18 suffer from depression-related disorders, girls more than boys. The risk of depression increases with age. Depression, anxiety, and behavioral disorders are among the leading causes of illness and disability among adolescents. Failure to address mental issues in adolescence may not only have negative effects that could manifest even in adulthood, but may also cause suicidal ideation in childhood. According to the World Health Organization, major depressive disorder is the leading cause of disability in the 15-44 age range as well as one of the leading causes of death in this age (Ministry of Health of Kirov Oblast, 2022; WHO, 2021).

At the same time, about 80% of adolescents who committed suicide had symptoms of PTSD or displayed violent and aggressive behavior. Many suicide attempts also result from abuse, humiliation, e.g. bad experiences in school, bullying (cyberbullying), interpersonal conflicts with a romantic partner, etc. (World Health Organization, 2006, p. 7).

Communication-related risks which many adolescents face also play a major role in the aggravation of pre-suicidal behavior. This is especially true for aggressive communication, ranging from rude, negative and cruel messages online to extreme and traumatic cyberbullying – systematic and deliberate aggression against someone incapable of defending themselves. Among the most dangerous and damaging risks that have become commonplace in recent years is the disclosure of intimate, defamatory, offensive, and degrading information, obscene offers, and sex-related violence online. This includes sexting (intimate correspondence); grooming (winning a child's trust for the purpose of sexual relations and exploitation); sexual blackmail – threatening to make the victim's intimate photos public to extort additional photos, videos, or sexual favors; revenge porn – disclosing intimate images and videos without the consent of the person featured in them, posting ads saying that the victim offers sexual services, etc. (Soldatova et al., 2019, p. 12).

It's worth mentioning that revenge porn is not yet criminalized in Ukraine, while in a number of other countries (France – Art. 226-2-1 of the Criminal Code, UK – Art. 33 of the Criminal Justice and Courts Act, 2015, Canada – Art. 162.1 of the Criminal Code, 1985 and others) it is a criminal offense.

The above-mentioned risks can be encountered when communicating via chats, messengers (WhatsApp, Telegram, Skype, etc.) social networks (Facebook, Twitter, etc.), dating sites, forums, and blogs. Virtual violence makes adolescents experience stress and depression because of their inability to solve a problem. In this state, in order to overcome emotional and psychological pain, fear, feelings of helplessness and loneliness, children sometimes direct their aggression against themselves, often using information on ways to inflict harm that they find on the Internet. Self-destructive behavior which manifests itself in intentional infliction of physical damage to oneself, one's own body, is called self-harm.

One example of this is the Blue Whale death group (more on them below) whose members make cuts on their bodies. Photos of such cuts have been showcased in numerous media outlets and Internet forums, which only serves to increase the popularity of these groups among adolescents.

The Internet has been a fertile environment for the spread of self-harm-related information, further contributing to the rising interest for this practice. Studies say, 87% of psychiatric patients with a history of self-harm saw images of self-cutting online, at the age of 11 on average, before they started doing it themselves (Soldatova et al., 2019, p. 114).

Soldatova G. and her co-authors (2019, p.p. 109-110) note in their work that most adolescents and young adults have seen content related to self-destructive behavior on multiple occasions. Two-thirds of the respondents have seen such content online, 65.9% of them have encountered advice on how to commit suicide, and 72.5% have seen content on ways to inflict physical damage and pain on themselves. Most frequently such content draws the attention of 15-17-year-olds (75%). After the age of 18, the interest gradually weakens (68%).

Thus, there is a whole number of factors that could drive an adolescent to commit suicide (resentment, loneliness, feeling misunderstood, death of a loved one, lack of parental attention, problems at home, fear of punishment, romantic problems, pregnancy, revenge, imitation, need for attention, etc.), and it’s often exacerbated by alcohol and drug abuse, Internet addiction, being stigmatized when reaching out for help, as well as the availability of means of committing suicide. Under these circumstances, the digital space, including online news sites, social media, suicide-themed sites, and other similar online platforms and content can play a major role in reinforcing an adolescent’s suicidal ideation.

The importance of information technologies and the Internet in today’s society cannot be denied. The digital space has become part of almost every aspect of our lives, from health care to education and leisure. Suicidal behavior is no exception here, as it has also changed under the influence of the Internet, especially among adolescents who are its most active users.

It should be noted that so-called “suicide clubs” have existed since ancient times and in many eras. However, unlike their predecessors, contemporary suicide communities:

- are considerably more numerous;
- have no geographical boundaries and are not bound to a particular place;
- allow any person of any age to join (with some rare exceptions) (Klyuchko, 2014, p. 69).

As mentioned above, cybersuicide is something that exists in many countries. It emerged with the advent of the Internet and continues spreading online. The term cybersuicide in relation to suicide and its propaganda on the Internet was proposed back in 1997 by Pierre Baume and his co-authors in their work “Cybersuicide: the role of interactive suicide notes on the internet.” Ria Birbal and co-authors (2009) point out in their work “Cybersuicide and the adolescent population: challenges of the future?” that cybersuicide is associated with websites that lure in vulnerable members of society and teach them how to inflict self-harm and commit suicide. The ease of access to the Internet and the speed at which information travels online facilitate the spread of such propaganda, drawing the attention of adolescents.

Numerous studies of the influence of the virtual space on suicidal behavior among adolescents and young adults have shown that the Internet often contributes to the risk of suicide among children due to their impressionability, suggestibility, emotional volatility, their ability to feel and experience everything more vividly, their tendency toward conformism and imitation, weak critical thinking, egocentric aspirations, and impulsive decision-making. Dunlop S. and co-authors (2011) arrive at this conclusion in their study “Where do youth learn about suicides on the Internet, and what influence does this have on suicidal ideation?” after establishing empirically that suicide-themed discussion forums and other online platforms significantly strengthen young people’s suicidal ideation.

Moreover, it’s easy to find content on the Internet that promotes suicide and provides instructions on how to do it, and it’s just as easy to find forums and chat rooms dedicated to the discussion of suicide as well as to join so-called death groups, the users of which promote and develop suicidal ideas and plans. After all, children usually seek in the virtual world that which they have been unable to find in the real one, among people closest to them, namely support (a death group member admitted as much (Kovalevska, Gribanova, 2022)· Many of the victims simply don’t stand a chance with their virtual “friends” and online audience urging them on, openly encouraging their thoughts of suicide.

19-year-old Abraham Biggs from Florida announced his plans to commit suicide on a bodybuilding forum in 2008 and streamed it live over a webcam. He said he was considering death by overdose. His post sparked a mixture of concern, jokes, and encouragement. About 1,500 people watched for 11 hours as Abraham was dying from a drug overdose. With 1,500 witnesses, only 4 attempts were made to help him (by looking up contact details of Miami police to make a phone call or send them an email). However, by the time authorities were notified, the boy had already been dead (Phillips et al., 2019).

James G. Phillips and his co-authors describe cases involving online suicides in their work "Instances of online suicide, the law and potential solutions" (2019) and say that the Internet allows users to create their own suicide content, with the audience watching suicidal behavior (e.g. death leaps or other life-threatening acts), commenting on it and discussing it while the person streams the event online or takes selfies of their death. The authors noted a rising number of suicides involving jumpers who decided to end their life after watching related content on the Internet. They cite the tragic deaths of Dylan Yount in San Francisco, United States, and Shaun Dykes in Derby, UK, which were accompanied by audience reactions on Twitter, Facebook, Flickr, Yelp, and YouTube. In both of these cases, the victims felt there was no going back for them. In Dylan's case, online comments and anonymous voices from the crowd gathered below were urging him to jump as he was standing on the ledge (Phillips et al., 2019).

In light of the above, we can say that the virtual environment, on one hand, can induce suicidal thoughts in a person (through the influence of suicide-related content online), and on the other hand, can drive a person to suicide through "support" and encouragement from a virtual audience (influence of virtual contacts). Thus, Internet platforms such as Instagram, Twitter, YouTube, Facebook, Skype, WhatsApp, and Telegram serve as a tool for people with suicidal ideation for finding like-minded individuals and forming groups, as well as a tool for encouraging others to commit suicide.

Particularly relevant in this regard is the work of S.Y. Lee and Y. Kwon "Twitter as a place where people meet to make suicide pacts" (2018). The authors monitored Korean tweets containing the term "suicide pact" on Twitter. After 43 days of research, they found 1,702 tweets posted by 551 users who sought to make a suicide pact. Many of the tweets contained detailed contact information, including the user's city, gender, age, preferred method of communication, and preferred gender of the partner. This study demonstrates that social networks such as Twitter are popular venues for finding partners for a suicide pact (Lee & Kwon, 2018, p. 21).

An example of the second aspect of the Internet's role, i.e. encouraging suicides, is the suicide of a 16-year-old girl from Malaysia (2019) who took her own life after doing a survey on her Instagram page, asking whether she should go on living. According to the police, at one point 69% of the votes were in favor of her death. A similar tragedy happened to 14-year-old London schoolgirl Molly Russell who took her own life in November 2017. Before her death, she was reportedly browsing posts on social media related to self-harm, depression and suicide (BBC News, 2019).

So why does online communication, often with complete strangers that could be on the opposite side of the globe, have such a powerful effect on young Internet users?

To answer this, we should consider children's personal space in real life and the virtual one, which, in our opinion, Galina Soldatova demonstrated very well in her work (2017). We can see that the child's personal space offline and online is not the same – it gets rearranged.

Table 1.
Comparison of the child's personal space offline and online

Real life	Virtual life (online environment)
Me	**Me**
Family	Friends
Friends	"Stranger friends" (online friends)
Acquaintances	Acquaintances
Adults	Family
Strangers	Adults

As the table shows, FRIENDS take center stage in the child's personal space online. Acquaintances, who in real life are just one position below friends, give way to online friends, who are essentially strangers, while family (parents and siblings) and professional help (adults) trail behind.

We believe, this rearrangement occurs due to a desire to build new social connections, which is much easier done in the anonymous Internet environment, especially for a shy teenager with difficulties in communication and interpersonal relationships. When faced with a crisis and unable to find support among those closest to them, children try to find the understanding and comfort they need in the virtual space, where all they have are virtual friends that act in accordance with with their own interests, moods and perspectives. It's all too easy for such friends to click "death" in a survey, and adolescents in a pre-suicidal state are highly sensitive to such things and often perceive them as a call to action.

To clarify: pre-suicide is the period between the onset of suicidal ideation and the attempt to act on them. During this time, the person experiences constant depression, dark thoughts, and growing dissatisfaction with their living conditions (Klyuchko, 2014, p. 69).

The 11th revision of the International Classification of Diseases (ICD-11) has suicidal ideation under code MB26.A. It involves suicide-related thoughts and ideas, from merely thinking that you would be better off dead to making complex plans to take your own life (ICD-11 for Mortality and Morbidity Statistics, 2022).

Thus, people having such thoughts, including adolescents, require medical help as it is extremely difficult to deal with this problem on your own.

The content that members of suicide clubs post on their social media shows that they suffer from depression and loneliness. This makes them particularly suggestible and susceptible to dark moods, which is characteristic of the pre-suicidal period (Klyuchko, 2014, p. 69). Most people at this stage try to draw the attention of others to their plans and problem by talking or posting about their wish to die on their social media or other Internet platforms. When adolescents post about it or do streams for other members of death groups, they seldom hear any objections. On the contrary, the audience usually supports their intentions in every way by sharing how and where it would be best to commit suicide, etc. Their encouragements are accompanied by recommendations of various thematic attributes: music, books, videos, pictures, etc. This normalizes suicide in the eyes of adolescents, making them think they "get" something that most others don't.

It must be said that information technologies can also be used for combating suicidal ideation and preventing suicide (e.g. hotline websites that provide psychological help online), but they are not as popular as they should be.

We agree with James G. Phillips and his colleagues who said in their 2019 work that social media also provide the means for desperate people to draw attention to their suffering. The problem is though that pre-suicidal people who announce their plans to commit suicide online are very likely to see approval, not objections, or end up in a death group, especially when you are young and vulnerable. Administrators of these groups often find new members by discovering their dejected posts on the Internet.

Unfortunately, in recent years Ukraine has also seen a growing number of death groups – online communities, usually on social media, in which adolescents play a kind of "game" that involves performing various traumatic tasks (like cutting your hand with a blade and recording it on video). It starts with the group administrator giving members from 13 to 50 tasks (the number is up to the administrator), but the ultimate goal is to goad children into committing suicide on camera. According to the police, the administrators then sell these videos on the Internet or on DarkNet (Parkhomenko, 2019). This is how Blue Whale, Red Owl, Quiet Home, Run or Die, Wake Me Up at 4:20 and other death groups operate. Cybersuicide has become a trend among minors. The peak of the popularity of suicide games among Ukrainian adolescents was recorded in late 2016 - early 2017. Back then, Ukrainian cyber police discovered about 1,000 death groups (TSN, April 25, 2017). In early September 2019, media reported a new kind of death groups, now in the form of anime communities, with administrators encouraging children to commit suicide using anime (Japanese animation) images. The psychological tricks here are similar to those used by the Blue Whale administrators.

A survey we conducted among students of secondary schools shows that 81.8% of them are aware of the existence of death groups. The percentage of girls who know about such groups is slightly higher than that of boys (85.4% and 77.2%). The older the children, the more informed they are in this regard (75.8% among 12-year-olds and 86.4% among 17-year-olds). 16% say they have received offers to participate in extreme games while talking on social media. What is particularly concerning here is that 8.4% are willing to take part in such games while another 7.9% say they might consider it. This latter group, in our opinion, could be convinced to try it with professional psychological manipulation (Lubenets, 2020, p. 185).

Just like death groups, Internet challenges have become a popular form of entertainment among adolescents on social media that can lead to irreparable harm to the health and even life of a child. Challenges are a genre of Internet videos in which an influencer performs a certain action, records it on video, and uploads it, and then challenges friends or followers to do the same.

The most dangerous recent challenges include:

- fire challenge;
- tripping jump challenge;
- skull-breaker challenge;
- tide pods challenge;
- Momo suicide game;
- choking/fainting/pass-out challenge;
- blackout challenge;
- outlet challenge;
- Drake - “In My Feelings” challenge;
- pass out prank, shocking games, etc. (Osvita, 2021).

Displaying such acts on the Internet puts underage users at risk, since imitative suicidal behavior among adolescents stems from their tendency to copy the patterns of behavior they see around them, such as in the actions of people in their circle (friends, family, acquaintances), events covered by media and on the Internet, stories popular among teenage subcultures, etc.

As we have already mentioned, adolescents are highly suggestible, which explains cases of mass suicide. The phenomenon when a suicide widely covered by media or depicted in a popular book or film is followed by a wave of emulative suicides is referred to as the Werther effect, or Werther syndrome. This phenomenon was described in 1974-1975 by David Phillips, American sociologist from the University of California, San Diego, who studied the wave of emulative suicides that happened in Europe in late 18th century shortly after the publication of Goethe's popular novel *The Sorrows of Young Werther* (Kashcheyeva, April 15, 2016).

It should be mentioned that death groups and some of the challenges became popular mainly due to coverage by the media, including Internet media, and influencers, as well as through active discussion on social media among teenagers. Thus, it’s not just the content circulated among these death groups that is dangerous, but also the content about them, about the way they operate (including pictures and videos on this subject) – such information is no less dangerous to children in a pre-suicidal state. In its Resource for Media Professionals, the WHO stresses the danger of making suicide-related content easily accessible. Journalists are advised to adhere to certain rules when covering suicides:

- don’t glorify or romanticize death;
- don’t publish photos and suicide notes;
- don’t give specifics regarding the method, circumstances, or location of the suicide;
- don’t try to sensationalize suicides; avoid expressions like “epidemic of suicides,” etc.;
- avoid covering high-profile suicides, especially where celebrities are involved;
- don’t use religious or cultural stereotypes in descriptions (World Health Organization, 2006, p. 20; World Health Organization, 2017; Garkusha, 2021).

The need for these rules is illustrated in Katja Becker’s work “Internet chat rooms and suicide” (2004), according to which the number of suicides increases in proportion to the number of outlets that cover it and the duration and popularity of the coverage. The author also stresses that suicide-related news are especially likely to cause new suicides among adolescents. Therefore, the rules for covering suicide-related events are necessary for the prevention of new suicides.

At the same time, we should not forget about the positive applications of the digital space, particularly for providing online assistance to adolescents experiencing personal crises, depression, or pre-suicidal state, or to those who recently attempted suicide. In some cases, online help could be even quicker and more effective than regular one. According to adolescents that have tried to commit suicide, it’s easier for them to speak about their suicidal intentions on the Internet than face-to-face or on the phone. The darkest thoughts often visit them at night, and even though they desperately need someone to talk to in these moments, to unburden themselves, most of them don’t want to wake their parents up or scare them with such conversations. This is why online consultations appeal to children more (Proulx, 2021).

Psychologists also believe that children who survived a suicide attempt could benefit from helping their peers deal with similar issues. Knowing that they were there for someone, that they were able to share some advice could help them overcome their own problems. It’s the principle of helping yourself by helping others at work.

As for parents, rather than criticizing children for spending too much time online, it’s better to ask them what platforms they like and what kind of content they are interested in. This will help establish a real connection with the child, start a conversation about their problems, and possibly discover or prevent suicidal intentions.

Conclusion

To sum up, cybersuicide and related phenomena appeared with the invention of the Internet, which to this day is used as a tool for promoting suicidal behavior, including among adolescents.

Analysis of national and foreign studies on the impact of the digital space on adolescent suicidal behavior shows that suicide-related discussion forums, chats, and other Internet platforms serve to strengthen suicidal ideation and may ultimately drive a child to suicide.

The ease of access to the Internet and the rate at which information is shared online facilitate the promotion of suicide, drawing in adolescents who are among the most active Internet users. Active promotion of suicidal behavior on social media, messengers, forums, and other Internet platforms, as well as the ability to generate your own suicide-related content or become part of a "support" group – all this makes cybersuicide fashionable among adolescents. Propaganda of destructive behavior and suicidal ideas often relies on gamification, as in the case of Blue Whale, Red Owl, Wake Me Up at 4:20, and other death groups.

Since the media, including online media, play a significant role in the growing popularity of suicidal behavior, WHO guidelines for media professionals should be made mandatory by introducing a mechanism that would allow holding journalists responsible for violating these guidelines without violating freedom of speech.

Given how many different motives there can be for committing suicide, the content that adolescents post on their social media should be considered a potential indicator of suicidal or quasi-suicidal tendencies. This requires special attention for these adolescents from their parents and teachers, both in the context of providing psychological assistance and for facilitating and monitoring children's cyber socialization and media security (Shchetinina, 2018).

An important thing to remember is when adolescents join suicide groups in the virtual world, they are actually looking for support. Therefore, we must organize and promote 24/7 online psychological help for children that are going through a crisis. Also, since in the virtual world adolescents mostly socialize within a circle of online "friends," the key component of suicide prevention is their family's attention, love, and involvement in their lives. Ultimately, many adolescents feel very lonely in the digital space.

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Ações político-sociais frente à COVID-19: colaboração e produção de produtos tecnológicos

Political and social actions towards COVID-19: collaboration and production of technological products

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Resumo

Objetivo: Descrever ações de uma entidade de Enfermagem no combate à pandemia da COVID-19 na Amazônia brasileira Métodos: Estudo descritivo do tipo relato de experiência a partir de pesquisa documental por meio de documentos contemporâneos utilizando como ferramentas as mídias sociais e apreensão dos significados e atitudes, realizado no período de agosto a dezembro de 2020 e analisado por meio da Teoria da Atividade. Resultados: Foram identificadas ações relativas à produção de quatro produtos tecnológicos para proteção individual, produção de artefatos e divulgação de informações. Considerações Finais: As ações foram planejadas considerando o cenário particular da região, assim como as necessidades inerentes ao acesso geográfico, abrangência tecnológica e a partir da formação político-social prevista na formação e atuação em enfermagem usando o recurso de interações colaborativas para efetividade das ações.

Palavras chave: Pandemias, COVID-19, Enfermagem, Colaboração Intersetorial, Produção de Produtos.

Abstract

Objective: Describe actions of a nursing entity in the fight against the COVID-19 pandemic in the Brazilian Amazon. Methods: Descriptive study of the type of experience report from documentary research through contemporary documents using social media and apprehension of meanings and attitudes, conducted from August to December 2020 and analyzed through the Theory of Activity. Findings: Actions related to the production of four technological products for individual protection, production of artifacts and dissemination of information were identified. Final Considerations: The actions were planned considering the scenario of the region, as well as the needs inherent to geographic access, technological scope and from the political-social training provided for in nursing education and performance using the collaborative interactions resource for the effectiveness of the actions.

Keywords: Pandemics, COVID-19, Nurses, Intersectorial Collaboration, Product of Products.

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Introdução

Em janeiro de 2020, a Organização Mundial da Saúde declarou o surto iniciado em Wuhan na China como uma emergência de saúde pública com consequências internacionais, sendo posteriormente declarada como uma pandemia. Esse cenário de morbimortalidade se repetiu em vários países e representa o maior desafio à saúde do século XXI (Full et al, 2020; Phelan et al, 2020; WHO, 2020; Giovanella et al., 2021).

Como resposta foram adotadas pela Organização Panamericana de Saúde (OPAS) diretrizes provisórias de prevenção e controle quando da suspeita de infecção pelo novo coronavírus a partir da recomendação a obrigatoriedade do uso de Equipamentos de Proteção Individual (EPI's). Inicialmente, percebeu-se a característica da rápida transmissão do vírus, novas variantes, a imperícia de autoridades sanitárias e a escassez de insumos para o enfrentamento da pandemia em virtude da oferta e a procura mundial por medicamentos, álcool gel, respiradores e EPI's, gerando o desabastecimento e agravando o caos sanitário (Full et al, 2020; Albuquerque & Ribeiro, 2020; Estrela et al., 2020; Concepción et al, 2021).

Outrora, o novo coronavírus trouxe incertezas e dúvidas sobre suas manifestações e forma de combate e, no caso do Brasil, as condições socioeconômicas e os processos de vulnerabilidades como déficit de acesso da população tem sido elementos em destaque (Albuquerque & Ribeiro, 2020; Estrela et al, 2020; Goes et al, 2020). Observou-se que a medida que a disseminação global do vírus foi crescendo identificou-se estratégias como da necessidade de adaptação da gestão das equipes que estavam à frente desse processo e das rotinas dos serviços o que subsidiou novas organizações e rotinas das equipes de saúde nos diversos setores (Concepción et al, 2021; Araújo et al., 2021; Lazzari et al, 2022; Fernandez et al., 2021).

No Brasil cadeias de suprimentos regionais foram uma alternativa na escassez na escala global, corroborando que as estratégias de produção local diminuíram o impacto do déficit de suprimento e das recomendações como proposta pela OPAS. E, diante dessa necessidade, intervenções práticas voltadas ao combate à COVID-19 são necessárias. Por isto, torna-se fundamental subsidiar com tutorais o aprendizado para a produção destes artefatos e a socialização do conhecimento aos profissionais de saúde que estão na linha de frente, bem como de usuários (Fernandez et al, 2021) de instituições com acentuada vulnerabilidade à COVID-19, como instituições asilares.

Neste cenário, que o terceiro setor formado pelas organizações sem fins lucrativos prestadoras de serviços de utilidade pública, foram protagonistas com um conjunto de atividades voluntárias desenvolvidas em favor da sociedade. Foram ações que desenvolveram a competência social evidenciado por meio das ações universitárias durante a pandemia o que vai ao encontro das ações efetivadas pela entidade (Nasi et al., 2021).

Por lidar com um fenômeno de grande magnitude, essas pandemias também afetam o comportamento humano, a organização social, a vida cotidiana e as relações de respostas atribuídas pelas pessoas à sua resolução e confronto, assim como os profissionais de saúde envolvidos (Perencevich, et al, 2020). Em paralelo, algumas iniciativas de grupos sociais surgiram, como as ações humanitárias de enfrentamento a COVID-19 que revelam redes de solidariedade mediadas pelas Tecnologias Digitais de Comunicação e Informação (TDCI) a fim de sensibilizar indivíduos e grupos. O uso destas tecnologias vem sendo apontando como parte do processo da cultura cibernética e de aceleração de produção e publicações potencialmente utilizada no percurso de enfrentamento da pandemia (Lévy, 2010; Teixeira et al, 2021; Celuppi et al, 2021).

No contexto da escassez de equipamento de proteção individual, o que levou a reutilização e improvisação (Godoy et al, 2020), a associação desenvolveu ações através de seus membros, diretoria e os departamentos que a compõem, e elaboraram o projeto "ABEn Pará no combate à pandemia de COVID-19", que teve o propósito de construir uma rede de colaboração para produção de artefatos de proteção, distribuição de insumos e uso de tecnologias leves. O objetivo desta investigação é descrever ações de uma entidade de Enfermagem no combate à pandemia da COVID-19.

Referencial Teórico

O este estudo é baseado na Teoria da Atividade Histórico-Cultural (TA) e pelos processos posteriores na sua revisão (Vygotsky, 1978; Engestron, 2001). A TA foi iniciada por Vygotsky, seguiu-se por três gerações e contitui-se por ações mediadas por artefatos e por ações que envolvem individuos e sociedade. Ao longo das gerações observou-se que a unidade de analise antes focada nos individuos, é superada na segunda geração pelo conceito de atividade e das relações entre os indíviduos e suas comunidades. A terceira geração possibilita ir além, inserida questões quanto a diversidade cultural e das redes de interação (Lemos et al, 2013). As interações observadas pelos estudos de Ergestron (2001) possibilitaram entender como as mediações são importantes para alcance de um objetivo.

Nestes termos, a escolha desta teoria baseou-se nas multiplas ações para enfrentamento observadas no percurso da pandemia. Nos primeiros anos, em adição, as instituições de educação e de representatividade de profissões constituiu-se como promotoras de ações articuladas para combater o avanço da COVID-19, com destaque para os profissionais de Enfermagem. As mobilizações para ações e estratégias identificadas envolveram as universidades, iniciativa privada e setores governamentais, que envolveram varias áreas de conhecimento, com destaque para a área de saúde (Santiago et al, 2022; Stralen et al, 2022).

Ressalta-se que no Brasil, o profissional de Enfermagem possui entidades de classes que regulam o exercício profissional, que zela pelo pela qualidade e serviços prestados por estes profissionais a partir de legislações do Conselho Federal de Enfermagem (COFEn). Em paralelo, há organizações sem fins lucrativos, que tem cárater cultural, científico e político que congrega profissionais, faculdades, escolas e cursos, regida e regulamentada por estatuto nacional da Associação Brasileira de Enfermagem (ABEn). Logo, destaca-se a importância de registrar ações destas entidades para melhoria da qualidade de vida da população e sobretudo para articulações entre os diversos setores da sociedade.

Metodologia

Estudo descritivo do tipo relato de experiência, realizado por meio de pesquisa documental de. Foi realizado por meio de registros de mídias sociais oficiais da entidade via página Faceboook, sendo possível identificar títulos, períodos, acessos e métricas. Usou documentos contemporâneos e apreensão dos significados e atitudes, levando em consideração aspectos culturais e históricos (Engestron, 2001). As ações foram realizadas no período de março a dezembro de 2020 por meio de atividades mediadas por TDCI. Participaram membros de uma seção da ABEn da região Norte. A divulgação e publicização das ações ocorreu a partir de abril de 2020 por meio da implementação das mídias sociais iniciadas em março de 2020 para fins de comunicação entre os profissionais, estudantes e demais interessados. A fonte de dados foram o acervo e as métricas do Facebook. Os membros da entidade tiveram como suporte para transmissão o StreamYard.

A inclusão dos documentos foi mediante o registro realizado nos canais oficiais da seção da entidade. Foram excluídos os registros teste e aqueles que não faziam parte do projeto sobre a temática central. A análise dos documentos utilizou os apontamentos da Teoria da Atividade (Engestron, 2001). Considerando que há aspectos históricos envolvidos com contexto da ação e por meio de interações mediadas pelas TDCI.

O trabalho não necessitou de autorização do Comitê de Ética considerando que se trata de um estudo documental. No entanto, resguarda-se os demais princípios éticos de uma pesquisa.

Resultados e discussão

Foram analisados 04 produtos e a partir deles suas descrições. As ações foram realizadas de forma voluntária, pelos associados da entidade de classe e demais organizações de ensino superior, serviços de saúde e entidades sociais por meio de interações mediadas por TDCI. Permitiram o desenvolvimento de quatro produtos tecnológicos que foram resultados das estratégias utilizadas no projeto de combate à COVID-19 como observado no Quadro 1. Foram desenvolvidos três tutoriais de acordo com o objetivo e destino do material produzido, conforme o Quadro 2. Quanto aos webinários científicos foram abordadas 19 temáticas ao total, disponíveis em formato virtual, realizadas no período de abril a junho de 2020, conforme exposto no Quadro 1.

Quadro 1.
Descrição dos produtos produzidos como estratégias no combate a COVID-19.

Produto	Descrição	Quantitativo*
Protetores faciais *(face shields)*	Produção artesanal e doação de protetor facial ajustável de Acetato Filme de Poliestireno Cristal, fita de Espuma vinílica acetinada e elástico (Baseado na Resolução RDC 356)	3.500 unidades
Máscaras de uso não profissional	Produção e doação de máscaras artesanais de uso não profissional (Baseado na Resolução RDC 356)	500 máscaras
Webinários	Webinários científicos com convidados e moderadores de diferentes regiões do país debatendo os temas relacionados a pandemia da COVID 19	19 Webinários / 93 Convidados e moderadores / 23.712 visualizações
Tutoriais	Divulgação de protocolos técnicos para iniciativas de multiplicação de produção de protetores e mascaras	02 sobre produção de protetores faciais e 01 sobre produção de máscaras faciais

Fonte: Autores, 2022

Quadro 2.
Descrição dos produtos produzidos como estratégias no combate a COVID-19.

Produto	**Tutoriais**	**Protetores faciais**	**Máscaras artesanais de uso não profissional**
Objetivo	Orientar sobre a técnica utilizada na construção de face shields e máscara artesanal.	Construir uma barreira/anteparo para proteção às gotículas e aerossóis.	Aprender o passo a passo para produzir máscaras
Destino	Profissionais e estudantes da área da saúde, técnicos de enfermagem, idosos e familiares e comunidade em geral.	Unidades de Saúdes e de Pronto Atendimento, Hospitais e Instituições de Longa Permanência para Idosos (ILPI)	Idosos de Instituições de ILPI

Fonte: Autores, 2022

Quadro 3.
Descrição das ações como estratégias no combate à CoVID-19 via Facebook

Mês	**Tema**	**Instituições envolvidas**	**Público-alvo**	**Comentários/ visualizações**
Abril	Apresentação do projeto	1	Profissionais, estudantes, técnicos da área da saúde e comunidade em geral	63 / 570
	Tutorial para produção de protetores faciais	3		41/ 1900
	Paramentação e desparamentação	3		188/ 1200
	Tutorial para produção de máscaras de uso não profissional	3	Profissionais, estudantes, técnicos da área da saúde, ILPI, ou Atenção Básica. Idosos, familiares, cuidadores e comunidade em geral.	39 /631
	Cuidado a pessoa idosa na prevenção da COVID-19 no contexto domiciliar e de ILPI	2		177 / 2100

	Processo de Trabalho do Enfermeiro frente à pandemia da COVID-19.	5	Profissionais, estudantes, técnicos da área da saúde, e comunidade em geral	291/ 1500
	Processo de Trabalho do Enfermeiro frente à pandemia da :COVID-19.	5	Profissionais, estudantes, técnicos da área da saúde e comunidade em geral.	291 /1500
	Pluralidades amazônicas: qual o novo desafio frente à pandemia?	7		323 / 2600
	Formação em Enfermagem em tempos de pandemia da COVID-19.	6	IES, Instituições de ensino técnico, professores e alunos de enfermagem e comunidade em geral.	503 / 1000
	Cuidados paliativos à pessoa idosa em tempos de pandemia	6	Gestores, profissionais da saúde, profissionais da área da geriatria e gerontologia, idoso, cuidador, estudantes da área da saúde e técnicos de enfermagem e comunidade em geral.	364 / 1300
	Atendimento à pessoa idosa na Atenção Básica frente à pandemia da COVID-19	6		434 / 1800
Maio	Processo de Enfermagem no contexto da COVID-19: compromisso social na identificação de necessidades e uso de linguagem padronizada	4		176 / 1200
	Enfermagem em foco: de Florence Nightingale ao contexto da COVID-19	7	Gestores, profissionais, estudantes e técnicos de enfermagem, IES e técnico de enfermagem e comunidade em geral.	434 / 1800
	Financiamento da Atenção Básica, Iniquidades da Amazônia e Pandemia: Novos Rumos?	7		129/1300
	Organização e Enfrentamento dos Povos da Amazônia Frente a Pandemia da COVID-19	6	Gestores, profissionais, estudantes e técnicos de enfermagem e área da saúde, IES e técnico de enfermagem, comunidade ribeirinha, povos indígenas e comunidade em geral.	158 / 1400

Junho	Processamento de produtos respiratórios para a saúde em tempos de Pandemia da COVID-19	4	Setor hospitalar, gestores, Profissionais, estudantes, técnicos da área da saúde; IES e técnico de enfermagem e comunidade em geral.	221 / 1361
	Experiências Vivenciadas: como interagir e dar continuidade no cuidado à pessoa idosa a partir do uso de tecnologias virtuais?	4	Gestores, profissionais, estudantes e técnicos área da saúde, profissionais da área da geriatria e gerontologia, idoso, familiar, cuidador e comunidade em geral.	151 / 914
	Lições Aprendidas com a imunização durante a pandemia da COVID-19	4	Gestores, profissionais, estudantes e técnicos da área de saúde ou enfermagem e comunidade em geral.	107 / 349
	Tecnologias em tempos de pandemia	5		64 / 434
	Urgência e emergência frente à pandemia	5		132/500

Fonte: Autores, 2022

A crise sanitária global, exigiu a adoção de intervenções para o controle da transmissão do vírus e enfrentamento dos impactos (Full et al, 2020; Albuquerque & Ribeiro, 2020). Entre as medidas, incluem o isolamento de casos; o incentivo à higienização das mãos, à adoção de etiqueta respiratória e ao uso de máscaras faciais artesanais; distanciamento social, proibição de eventos e atividades que promovam aglomerações. A sustentabilidade e a efetividade destas medidas visaram proteger a população, especialmente os mais vulneráveis e assim garantir a sobrevivência (Albuquerque & Ribeiro, 2020). Era necessário, portanto, inciativas institucionais de apoio e promoção, descritas através da produção, doação e orientações como das ações identificadas no Quadro 1.

Neste sentido iniciativas mediadas por tecnologias e que fomentassem a interações sociais foram identificadas como possibilidades de ações entre pares, atividades observadas em contextos históricos como das pandemias (Vygotsky, 1978; Engestron, 2001). Tais iniciativas tornaram-se essenciais, pois com a pandemia estabelecida, fábricas de máscaras cirúrgicas e outros EPI's, concentradas na China, foram fechadas o que contribuiu para a escassez crítica desses produtos de interesse mundial (Full et al., 2020; Albuquerque & Ribeiro, 2020). Em contrapartida, o Centro de Controle e Prevenção de Doenças - CDC recomendou o uso de máscara de tecido para o público geral (Nasi et al., 2021). A disponibilização para orientação, produção e distribuição de máscaras de tecido gerou uma mobilização de instituições e comunidades diante da demanda para contenção dos casos, o que vai ao encontro das medidas adotadas pela entidade conforme o Quadro 2.

Destaca-se que os protetores faciais não requerem materiais especiais para a fabricação e as linhas de produção podem ser reajustadas rapidamente, como ocorreu com várias empresas, incluindo *Apple, Nike, GM e John Deere*, que aderiram à produção de protetores faciais. Produzidos a partir de material artesanal, em geral podem ser reutilizados, higienizados e contribuem na barreira contra aerossóis nos quais podem estar presentes microrganismos como os vírus, impedindo que quem usa toque no próprio rosto (Nasi et al., 2021). Esta tem sido a alternativa mais viável para os serviços de saúde e até os demais serviços do segundo setor e/ou setor produtivo.

Como medida de ação social e política, reitera-se que a entidade de Enfermagem fundada em 1926 teve seu primeiro estatuto social aprovado em 1944. É uma associação de caráter cultural, científico e político que congrega profissionais de Enfermagem de nível superior e técnico. Sua seção promotora das ações tem registro de fundação no ano de 1950 e tem se articulado socialmente com outras instituições a fim de realizar as finalidades da associação quanto às questões político-sociais. Por uma perspectiva sociointeracionista a ação promovida pela entidade enfatiza a importância desta como mediadora para o desenvolvimento dos produtos tecnológicos, despertando seus membros e provocando por meio das mídias sociais dinâmicas para ações políticas e solidárias (Vygotsky, 1978; Engestron, 2001).

Percebe-se que o momento histórico e a função da entidade alinham-se sobre o papel do Enfermeiro diante da COVID-19. E, por meio das entidades de classe e os movimentos políticos que sustentam a formação em Enfermagem, contribui-se para o desenvolvimento do profissional em vários âmbitos, inclusive fortalecendo uma atuação acadêmica politizada (Vendruscolo, 2018). Ademais, o atual cenário sanitário tem evidenciado problemas sociais e sobretudo do impacto da pandemia nos trabalhadores de enfermagem inclusive pelo déficit de insumos (Albuquerque & Ribeiro, 2020; Perencevich et al., 2020) o que corrobora para a necessidade destas instituições para com os movimentos de solidariedade, inclusive para combater episódios de desmonte do Sistema Único de Saúde por uma perspectiva política (David et al, 2021).

Embora a implementação de medidas preventivas e políticas tenha sido destroçada pela atual conjuntura dos representantes políticos na esfera federal a partir de discursos negligentes e medidas sanitárias tardias (David et al., 2021), a contramão, estas entidades têm buscado esclarecer sobre a COVID-19 para além dos profissionais de saúde, de modo voluntário e buscando evidências científicas para construção dos produtos. Ressalta-se que a logística considerou os grupos prioritários, mapeamentos das entidades com maior necessidade para receberem os *face shields* e as máscaras de uso não profissional, por meio de redes institucionais, o que favoreceu o engajamento nas redes como demonstrado no Quadro 3, o que representa um dos pilares da instituição (Vendruscolo, 2018).

Já sobre os temas propostos apresentados por meio dos webinários e mediados pela TDIC, constatou-se que apresentaram potencial para viabilizar a formação continuada e alcançar profissionais de grupos e espaços geográficos diversificados, o que potencializa funções e iniciativas para o desenvolvimento profissional, haja vista as mediações instrumentalizam os profissionais para o intelecto e ações político-sociais (Vygotsky, 1978; Engestron, 2001). Além disso, permitiu a informação interdisciplinar, interação virtual e mostrou a divulgação científica como instrumento para informações sobre a condição de trabalho em Enfermagem (Barbosa et al., 2021). Corroboraram, portanto, para que os temas propostos fossem diversificados e alcançassem um público-alvo de diversas categorias de enfermagem, saúde e de grupos específicos como proposto pela entidade de classe para fins de formação (Vendruscolo, 2018).

As estratégias adotadas pela instituição descentralizaram a informação e a participação de profissionais de saúde a partir do cenário geográfico da região por meio da interação de diversidade de instituições (Quadro 3). Constatou-se mais uma vez, que TDIC têm sido um meio profícuo para compartilhar informações e atenuar o impacto da pandemia no contexto educacional e de saúde e evidenciado a interação como importante em processos que articulam entre entidades e indivíduos que dela participam (Barbosa et al., 2021; Engestron, 2001).).

Já os webinários que visavam a socialização da informação tiveram suas limitações, e, apesar de conseguirem evidenciar o lugar de fala dos profissionais que trabalhavam na linha de frente da COVID-19 e ter ressignificado as redes sociais como uma ferramenta de trabalho por meio de várias frentes, apresenta-se limitada pela desigualdade no acesso e para democratização da informação pela internet (Barbosa et al., 2021). Para além disso, em função do formato *"live*" que depende do sinal de internet no momento da transmissão, a instabilidade em alguns momentos foi um fator limitante para dialogar com grupos em situação de vulnerabilidade social.

Entre outros elementos é necessário destacar as condições de desigualdades da Amazônia que são perceptíveis por meio das condições espaciais que vivem tanto os profissionais de saúde como dos demais grupos, o que aumentou a vulnerabilidade à dispersão da COVID-19 (Concepción et al., 2021). Contribui para isto as limitações de acesso a estas tecnologias em territórios das populações amazônicas o que vem potencializar as desigualdades digitais nestes grupos em função do déficit do acesso aos serviços da internet, deixando notório desigualdades históricas envoltas a problemas de ordem geográfica e de populações específicas no Brasil corroborando para as desigualdades digitais e de saúde.

Uma das dimensões do trabalho da enfermagem é o Agir Politicamente (Kalinowski & Cunha, 2020), nesta dimensão se enquadra o processo de trabalhos das entidades de classes da enfermagem como a ABEn. O protagonismo desta entidade que é a mais antiga da enfermagem no Brasil reforça suas finalidades estatutária que é a articulação com os setores da sociedade em defesa da vida, dos direitos sociais e da saúde. O Projeto contribuiu pelo meio digital com a ampliação do alcance de informações seguras e necessárias sobre a pandemia, assim como divulgar formas alternativas e urgentes de produção de máscaras e protetores faciais (*face shields*).

O alcance deste projeto por meio das redes sociais da entidade demonstra a capilaridade social que ela tem. O agir politicamente com base científica foi um diferencial em meio a falta de alternativas e um contraponto ao perigo do negacionismo científico, infelizmente propalado pela gestão atual do governo federal. Outrora, apoiado nas ideias de Vygotsky (1978), Engestron (2001), por uma perspectiva sócio-histórica e cultural identifica-se como atividades realizadas dentro destas entidades organizadas torna-se uma práxis evidenciada pela pandemia.

Conclusões

A experiência retratou as ações para captação de recursos para produção, distribuição de artefatos e informação para proteção e prevenção contra a pandemia da COVID-19, bem como das estratégias para diálogo sobre a pandemia a partir dos diversos cenários e especialidades em Enfermagem. Demonstrou como o uso de TDIC para difusão das informações teve um impacto positivo para a instituição que alcançou visibilidade nacional e fortaleceu seu papel social previsto em seu estatuto. As plataformas digitais, de acesso público à diversidade de temáticas pode ser acessada em tempo real ou postergado, tornou-se um espaço dinâmico e acessível sendo um mediador essencial para um movimento importante de solidariedade para com os pares e de resposta à tardia ação das autoridades sanitárias. Logo, ficou evidente que as práticas colaborativas pelo uso da TDIC tornaram-se estratégicas para a efetivação dos objetivos de instituições de classe de Enfermagem, pois amplificam tanto a visibilidade da profissão como da participação de seus membros associados e demais profissionais de Enfermagem que estão no enfrentamento da emergência em saúde pública. Além disso, urge a necessidade de articulações de ordem político-social pela Enfermagem para que a categoria ocupe espaços de protagonismo e deliberação contribuindo para o fortalecimento do Sistema Único de Saúde e das políticas estratégicas para enfrentamento e organização em situações em que a saúde global esteja em pauta.

Nesse estudo, as limitações foram em duas dimensões: operacionais e tecnológicas relacionados a falta insumos para confecção dos protetores faciais e as limitações de deslocamento em virtude do contexto geográfico amazônico e as dificuldades com a tecnologia remota de alguns membros associados.

O relato enfoca em práticas colaborativas a partir de entidades de classe e como estas podem ser potencializadas por meio do uso de TDCI diminuindo as barreiras geográficas, tecnológicas , demonstrando que iniciativas de cunho político e social devem ser construídas ao longo da formação, a partir da competência em comunicação, e processo de trabalho da equipe de saúde e em rede de apoios. Apresenta os uso de recursos de comunicação para a formação do profissional de saúde a partir de especialidades e participação de autoridades, mostrando a possibilidade de descentralização da informação.

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Lexical combinations of contemporary British military fiction: lexical-semantic and stylistic features

Лексичні сполучення у текстах сучасної британської військової прози: лексико-семантичні та стилістичні особливості

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Abstract

This article focuses on the lexical-semantic features of the language means of contemporary British military fiction. Despite the sustained philological attention to fictional texts of different genres, the relative disregard of the lexical patterning in fiction on military themes stands in need of scrutiny. In order to account for all the lingual and extralingual factors influencing the process of fictional text composition, this article takes a philological approach and conducts an integrated analysis – combining linguistic and literary-theoretical perspectives – of the lexical patterning of contemporary military fiction. Our aim is to establish the main lexical-semantic and stylistic peculiarities of the dominant lexical combinations in contemporary British fiction with macro-, meso- and micro-inclusions of military themes. Functions of the thematic lexicon connected with the war topic are more obvious in the literary texts with macro- and meso-inclusions of military themes. However,

Анотація

Статтю зосереджено на лексико-семантичних особливостях мовних засобів у текстах сучасної британської воєнної прози. Незважаючи на постійну увагу філологів до художніх текстів різних жанрів, недостатньо уваги приділено лексичному моделюванню у художніх творах на воєнну тематику, що потребує ретельного вивчення. З метою врахування усіх лінгвальних та позалінгвальних чинників, що впливають на процес творення художнього тексту, у цій статті застосовано філологічний підхід і проведено комплексний аналіз – поєднання лінгвістичних та літературно-теоретичних засад – лексичних моделей сучасної воєнної художньої прози. Мета дослідження – встановити основні лексико-семантичні та стилістичні особливості домінантних лексичних сполучень у сучасній британській художній прозі з макро-, мезо- та мікровкрапленнями воєнної тематики. Функції тематичної лексики, пов’язаної з темою війни,

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their role in the texts with micro-inclusions of military themes is quite significant as well: the details of the military environment and phenomena serve as a means of establishing a close connection between the reader and the storyworld; recollections of the war period echo in the plot line of the characters, reflecting its destructive consequences even long afterwards.

Keywords: interpretation, lexical combinations, lexical-semantic space (LSS), literary and pragmatic stylistics, military fiction (MF), thematic lexicon.

чіткіше виявляються у художніх текстах із макро- та мезовкрапленнями воєнної тематики. Проте їхня роль у текстах із мікровкрапленнями військової тематики є не менш значущою: деталі воєнної дійсності та явищ слугують засобом встановлення тісного взаємозв'язку між читачем і художнім світом; спогади про воєнний час відлунюють у сюжетній лінії персонажів, відображаючи її руйнівні наслідки навіть довго після завершення.

Ключові слова: інтерпретація, лексичні структури, лексико-семантичний простір (ЛСП), літературна та прагматична стилістика, воєнна проза (ВП), тематична лексика.

Introduction

The use of lexical units and their combinations is highly dependent on lingual and extralingual (historical, cultural, social, political) factors. Since such units, thoroughly selected by the author, influence interpretation of the literary text, most scholars agree on the relevance of conducting a deep study of lexical-semantic and lexical-stylistic peculiarities, as well as pragmatic orientation of literary texts (Al-Hindawi and Saffah, 2019; Angermuller, 2014; Black, 2006; Chapman and Clark, 2014; Hickey, 1993; Warner, 2014).

The popularity and actualization of war themes in literary genres of the beginning of the 21st century is predetermined by urgent global problems of the recent decades. Offering mediated, symbolic reactions to concrete social pressures, military plots in fiction are enormously popular among contemporary authors and, consequently, in scholarship (Barlow, 2000; Bergonzi, 1993; Cobley, 1995; Kaiter, 2016; Sarma, 2001; Smith, 2000). This article contributes to the study of means of explication of military topics in fiction (including different levels of their realization). It offers a complex analysis of lexical combinations in the lexical-semantic texture (which is often referred to as the lexical-semantic space of the text in the Eastern European school of linguistics) of the contemporary British military fiction (hereafter *MF*) and their lexical-semantic peculiarities, defining the literary text as a highly organized semantic unity. It should be noted that by contemporary British military fiction here we understand the texts written at the beginning of the 21st century (2000-2021), whereas Russian invasion of Ukraine in February 2022 is definitely going to have a peculiar impact on further works of fiction and will need to be analyzed as a separate group of texts.

Questions of the Study

This study seeks to answer the following questions:

1) What are the main lexical-semantic and stylistic peculiarities of the dominant lexical combinations in contemporary British military fiction?
2) What is their role in the texts with macro-, meso- and micro-inclusions of military themes?

The scientific novelty of the work lies in the systematization and generalizing of the dominant lexical combinations and their features in the lexical-semantic space of the contemporary British military fiction in terms of complex linguistic and literary tradition understanding.

The study would hopefully add to the literature by shedding light on further study of the latest British military fiction, in particular: new peculiarities of the British military fiction influenced by the recent Russian full-scale invasion of Ukraine; scientific comparison of the British military fiction texts of the beginning of the 21st century and the texts written after the dramatic events of February 24th, 2022. Findings of this research are likely to be useful for the deeper study of the lexical-semantic space of the text, its threefold expansion (semantic, thematic and associative) from the complex approach which includes both linguistic and literary-theoretical perspectives.

Theoretical Framework

Lexical-semantic space of the text and interpretation of its lexical units

The lexical-semantic organization of the text structure has been under close scrutiny in numerous philological approaches: text linguistics (Halliday and Hasan, 1976), lexical semantics (Geeraerts, 2009; Jeffries, 2014; Mills, 2005), communicative linguistics (Gee, 2010a; 2010b), literary stylistics (Hope and Wright, 2005; Shen, 2014; Toolan, 2013), pragmatic stylistics (Black, 2006; Warner, 2014).

In contemporary Anglophone theory, philological studies are increasingly focusing on the problems of semantic structure, lexical-semantic content and interpretation of the encoded meaning of the text (Angermuller, 2014; Geeraerts, 2009). In Eastern European theoretical tradition, these issues are often referred to as the lexical-semantic space of the text, which can be defined as an organized system of lexical units and their combinations, united on the basis of a common theme and conceptual meaning and representing a certain conceptual sphere (Antipina, 2015, p.4; Popova, 2011, p.115). Within the lexical-semantic approach, analysis of the structure in which the word is contextualized is highly important for the interpretation of its meaning (Simon-Vandenbergen and Aijmer, 2008, p.21).

One of the main tasks of linguistics is to analyse how the meaning is encoded in language, investigating to this end the peculiarities and models of lexical combinations (Fischer-Starcke, 2010, p. 34). Language of the fictional text constitutes a distinct area of linguistic study because lexical means of a fictional text construct a storyworld as a frame of reference and thus usually carry an implicit significance, not peculiar to them in other spheres of language use (Black 2006, p. 152). Thus, the notion of meaning of lexical combinations is closely related to the notion of context and the process of interpretation. Meaning of a fictional text and of its separate lexical combinations is actualized only in the context: "Conversational implicatures … are rooted in the situation in which they occur, and must be interpreted taking the context into account" (Black, 2006, p. 25). Context, as we stress in this article, also includes the author and the reader who, in their distinct pragmatic positions, are active participants in construction of meanings arising from the situation.

We agree with J. P. Gee (2010a, p. 67) that no matter which part of the context influenced our interpretation of the text, "there is always the possibility of considering other and additional aspects of the context, and these new considerations may change how we interpret the utterance". The same piece of the text can be interpreted differently by different people, and even by one person while re-reading the same text. Furthermore, a typical interpretation of lexical combinations, or "figured world" (Gee, 2010a), varies depending on different social and cultural experiences of readers involved (Black, 2006, p. 153; Fischer-Starcke, 2010, p. 35; Gee, 2010a, pp. 70-71; Geeraerts, 2009, p. 220; Jeffries, 2014, p. 79; Mills, 2005, p. 123; Tanskanen, 2006, p. 21).

Thus, a reader is an active participant in the process of cocreation of text's meaning: "As texts are contextually underspecified, they need a practical instance – the reader – whose interpretive capacities and contextual knowledge need to be mobilized in the production of meaning" (Angermuller, 2014, p. 140). In this way, the reader deals with a complex heterogeneous phenomenon, namely, discourse. We follow M. Hoey's (2001, p. 11) definition of the text as a result of a purposeful interaction between a writer and a reader, and the process of this interaction is called discourse.

As follows, the lexical-semantic space (hereafter, LSS) is a unique form of the text comprehension, which evokes a continuous contest between the author's and the reader's meanings due to which it is frequently modified. Analysis of the LSS in the semantic structure of the fictional text contributes to a detailed understanding of lexical combinations used by the author, their semantic content and pragmatic effects on the reader.

British military fiction of the beginning of the 21st century

A work of fiction is an excellent way of representing reality by language means. Created in the author's consciousness, it is a unique phenomenon reflecting the author's points of view, ideas and individual style. Today British literature involves variety of trends, a significant part of which is still postmodernism. The lexical-semantic structure of a postmodernist text has been studied by Alegre, 2001; Head, 2002; Hidalgo, 2005; Lindas, 2013; Malcolm, 2002.

In the context of conflicts and social upheavals in the recent decades across the world, war remains one of the most popular themes in fiction of the beginning of the 21st century. Consequently, the British MF as a manifestation of an individual author's vision and outlook becomes an object of interest of different linguists (Barlow, 2000; Cobley, 1995; Hart, 2015; Kaiter, 2016; Sarma, 2001; Smith, 2000).

Methodology

The notion of lexical-semantic space enables analyzing of the lexical units and combinations of the text as a complex arranged system. All the lexical units compose a single semantic entity and are selected by the author in order to achieve his / her intention and create specific effects on the reader. This choice influences the reader's reception and interpretation of the literary text. Therefore, a philological approach is necessary if we are to account for a wider context (discourse) of a fictional text under research, as well as analytically integrate lingual and extralingual factors influencing the process of its creation (Gavins and Lahey, 2016; Geeraerts, 2009; Jeffries, 2014; Mills, 2005; Paltridge, 2006; Salkie, 2001).

This research includes some elements of pragmatic-stylistic analysis. Since all the lexical units and strategies are used by the author with a definite aim, pragmatic-stylistic approach enables a deeper analysis of the fictional discourse than literary stylistics or pragmatics taken separately (Black, 2006; Caink, 2014; Chapman and Clark, 2014; Hickey, 1993; Hoey, 2001; Warner, 2014). In its anthropocentric orientation, pragmatic stylystics focuses on the strategies and techniques of the author who uses peculiar stylistic devices, on their effect on the reader, taking into account the extralingual context and on the reader's interpretation of the meaning of the fictional text as well as separate lexical-stylistic means and structures (Chapman and Clark, 2014, p. 6; Warner, 2014, p. 364). Thus, pragmatic stylistics opens up new insights into the processes of composing of fictional texts, the author's choice of certain lexical means and the effect they produce on the reader.

However, besides pragmatic orientation (understood here in a broad sense as a necessary attention to the text's contexts of production and reception), a philological approach remains a guiding one throughout the analyses that follow. While the linguistic analysis of lexical combinations in fictional texts yields incomplete or one-sided results, the philological approach integrates linguistic and literary-theoretical perspectives which enables us to study lexical combinations in a fictional text as inseparable from its social and historical bases as well as author's intentions as highly influenced by the social, extralingual context. Benefits of such approach are quite obvious in fiction on military themes, since their micro-inclusions frequently penetrate the texts of other genres and themes. The philological approach contributes to a deeper immersion into the literary discourse, taking into consideration the whole context and extralingual factors.

Results and Discussion

Contemporary British fiction

In this research talking about contemporary British fiction we aim first of all at studying lexical-semantic and stylistic peculiarities in the texts of postmodernist character. Postmodernist fiction of the end of the twentieth century and at the beginning of the twenty-first organically emerges from the philosophic modernist fiction, which is reflected in the works by P. Ackroyd (1993; 1997), J. Barnes (1990a; 1990b), J. Fowles (1985; 1997), I. McEwan (2002; 2004). Consequently, its peculiarity is philosophical overtones and reliance on literary tradition. A distinct feature of British postmodernism is its sustained interest in history, both of Britain and the world in general (Alegre, 2001, p. 18; Hidalgo, 2005, p. 82; Kaiter, 2016, p. 204; Lindas, 2013, p. 30; Malcolm, 2002, p. 6). This partly accounts for the frequent appearance of the war theme in contemporary novelistic prose. D. Malcolm identifies such distinct features of fiction of the 1980s and 1990s:

a fascination with history, with historical events and processes both in the distant past and more immediate (sometimes very immediate) past; an interest in settings abroad, outside the British Isles, or in characters and experiences from outside that geographical area; a considerable prominence of genre mixture; and metafictional interests (Malcolm, 2002, p.6).

For as long as war existed, writers have been trying to understand it, to transfer its horrors from the battlefield into the narrative. Contemporary British MF, in particular, focuses on the recent wars. The recent research of the winners of the Walter Scott prize (an award for historical fiction) found out that the events of World War II became "the most fertile ground" (Barry, 2017) for the novels. Analysis of the whole range of texts, submitted for the award during 8 years of its operation (650 texts in total), demonstrated that the events of 38% of these texts took place in the 20th century. World War II was chosen as the setting for 14%, while World War I – for 9% of the submitted texts. I. Robertson (British writer and chair of Historical Writers' Association) describes war as "rich dramatic territory": "Aside from the massive all-consuming drama of the war itself, it also put everything into flux. Individuals were confronted with complex moral questions while the world shifted and spasmed around them" (Barry, 2017). What exactly forces contemporary authors to appeal to the past and the theme of war in particular?

Lexical-semantic space and stylistic features of contemporary British military fiction

Certainly, such pressing problems as global warming and international conflicts catch the writers' attention, but interest in the past remains strong both on the thematic and formal levels. For instance, D. S. Mitchell in his *Cloud Atlas* (2004) uses typical for the 21st century imitation of the previous literary styles and devices (Kemp, 2007). A distinct feature of the contemporary British novel is its ambiguity and polysemy of meaning (Kaiter, 2016, p. 206; Lindas, 2013, p. 30). Due to such flexibility, contemporary fiction can combine experiences of different social classes, generations, nationalities and literary projects – from realism to experimentalism (Alegre, 2001). Use in the literary text of such elements as letters, diaries, photos affirms the author's desire to convince the reader in the accuracy of the depicted events (Cobley, 1995, p. 107).

The storyworld is composed by the author according to his / her imagination and views and is supposed to produce a certain effect on the reader. Fictional text is thus a manifestation of the individual author's style, the reflection of reality and, at the same time, of the fictitious, imaginative world of the author (Gavins and Lahey, 2016; Gee, 2010b). Y. Ho (2011, pp. 118-141), studying the possible implicit meanings and the effect of the dominant lexical-semantic combinations in a fictional text, focuses his / her attention on the excessive or deliberately diminished use of certain lexical units.

The lexical units are arranged in the textual space in such a way that, taken together, they ensure its compositional unity. On the whole, the lingual organization of the lexical-semantic space of the fictional text is observed on two levels: lexical (surface) and semantic (deep) levels. The same meaning can be amplified with the help of different lexical means and combinations. The semantic level covers the sense encoded by the author, which is the materialization of the individual author's conception of the world, and the reader's interpretation of the text. It can be represented in the Fig. 1:

Semantic level
1) The author's choice of the theme, idea, encoding of the meaning
2) The reader's interpretation of the literary text

Lexical level
1) The author's choice of certain lexical means, devices and techniques that express his / her idea and outlook (explicitly or implicitly)
2) Producing of a certain effect on the reader

Figure 1. The structure of the lexical-semantic space of the literary text. Source: own.

Postmodernist outlook is characterized by the wide use of such lexical stylistic devices as irony, allusions, quotations, epigraphs, metaphors, metonymy, similes (Clayton, 2012; Cobley, 1995; Head, 2002; Hidalgo, 2005; Lindas, 2013; Shapoval, Bakhov, Mosiichuk, Kozachyshyna, Pradivlianna and Malashchuk-Vyshnevska, 2022; Wagner, 2010; Wells, 2008). Their use in the text aims at producing of a special effect on the reader. The reader in a postmodernist epoch becomes an active co-author of the meaning of the text (Hoey, 2001, p. 24; Jeffries, 2014, p. 55; Levchenko, Lubov, Varenikova and Torkut, 2021, p. 104-105; Lindas, 2013, p. 16), as the text becomes oriented towards an intellectual reader who will be able to read between the lines and to perceive the hidden ideas and motifs. As E. Black states: "Literature exists to interest us; if it fails in that, we have no motivation to read" (2006, p. 157). Thus, the lexical-semantic space of the contemporary British MF can be generalized in the Fig. 2:

Thematic level:
war horrors, holocaust, concentration camps, broken person’s fate, love, loneliness, childhood

Lexical level:
pastiche, retrospection, descriptions, irony, allusion, quotations, metaphors, metonymy, similes, symbols

Semantic level:
the devastating influence of war on a person’s everyday life and his / her inner state

Figure 2. The lexical-semantic space of the contemporary British military fiction. Source: own.

Hense, the distinct feature of the British MF of the beginning of the 21st century is considerable attention to the past. By depicting (or simply mentioning) war, today’s authors induce us to think about its influence on a person’s everyday life and propose the ways of overcoming its consequences. The popularity of military themes in the latest fiction texts is predetermined by the war and conflict actions taking place nowadays. Besides, the interest of readers towards military themes is rapidly growing as the result of Russian cruelty which simply overwhelmed every conscious person all over the world. Thus, from the pragmatic-discourse and anthropocentric points of view, the study of these fictional prose texts is extremely relevant given their lexical-semantic peculiarities. A complex philological approach makes it possible to conduct an integrated analysis of the lexical-semantic space of contemporary MF, taking into account all the extralingual factors influencing the process of a literary text production.

Dominant lexical combinations and their lexical-semantic features in contemporary British military fiction

Contemporary fiction is characterized by the phenomenon of genre diffusion – “the coexistence of widely diverging novelistic genres” (Alegre, 2001, p. 18). Similarly, MF usually combines elements of different genres and the war theme is observed on different levels: from being the text’s dominant theme to its micro-inclusions via simple mentions or references in passing.

A common theme is the basis for the general classification of the texts which may differ significantly in many other aspects (Brinker, 1993, p. 22). Thus, in this article we generalize the contemporary British MF into 3 main groups: fictional texts with the dominant war theme (macro-inclusions of war theme), with partial inclusion of war theme (meso-inclusions) and with micro-inclusions of war theme.

The first group consists of the texts focused mainly on the horrors of war itself, such as holocaust, concentration camps, person’s fate broken by war: for instance, J. Boyne’s *The Absolutist* (2011), J. Boyne’s *The Boy at the Top of the Mountain* (2015), J. Boyne’s, *The Boy in the Striped Pyjamas* (2006), K. Ishiguro’s *The Buried Giant* (2016). The second group of texts only partially raises the topic of war and is to a great extent a combination of different genres, such as historical and philosophic novel (I. McEwan *Atonement* (2002)), social-psychological (J. Harris *Five Quarters of the Orange* (2002)), family-social (K. Atkinson *Life After Life* (2013)), A. S. Byatt *The Children’s Book* (2010)), fantastic war novel and so on. They are frequently characterized by a retrospective element: the recollections of the past, of war and people lost in it, as in J. Harris’s *Five Quarters of the Orange*. Lack of seriousness and use of irony (peculiar to postmodernism) can be found in *Atonement*:

‘What I did was terrible. I don’t expect you to forgive me.’[Cecilia:] ‘Don’t worry about that,’ she said soothingly, and in the second or two during which she drew deeply on her cigarette, Briony flinched as her hopes lifted unreal. ‘Don’t worry,’ her sister resumed. ‘I won’t ever forgive you’ (McEwan, 2002, p. 261).

This novel is also characterized by orientation towards historiographic metaliterature, relativity, polysemy, proposing several perspectives on one event. Contemporary authors tend to use the technique of description (Cobley, 1995, p. 99), for instance the description of London life during World War II (K. Atkinson *Life After Life* (2013)). Fictional texts with the micro-inclusions of war theme are concentrated on other topics, such as relations between people or having the courage to face the past (D. S. Mitchell *Cloud Atlas* (2004), S. Waters *The Little Stranger* (2009)). The recollections of war, subordinated to other, major textual themes, demonstrate the way war penetrates into our life and becomes invisibly present in it, as, for example, in the following passage:

Food was her nostalgia, her celebration, its nurture and preparation the sole outlet for her creativity. The first page is given to my father's death – the ribbon of his Légion d'Honneur pasted thickly to the paper beneath a blurry photograph and a neat recipe for black-wheat pancakes – and carries a kind of gruesome humour (Harris, 2002, p. 14).

These texts are characterized by a great number of metaphors. *Cloud Atlas* by D. S. Mitchell, being extremely symbolic, would be one striking example of this group of fictional text relating to war.

A peculiar feature of postmodernism, particularly in the last two decades, is its deep attention to the history and the past. The 'new historical novels' of postmodernism, despite using historically accurate toponyms, often change historical figures or the events themselves drawing attention to the fiction as artifice (Han and Wang, 2014, p. 135; Lindas, 2013, p. 27). Since contemporary literature is characterized by the mixture of different styles, genres, points of view, temporal distortion (Alegre, 2001, p. 18; Lindas, 2013, p. 19), the authors often rely on the technique of collage to ensure the cohesion of narrative and compositional structure. They destroy the linearity of the narrative creating the effect of plurality and relativity of the world comprehension (Nicol, 2015, p. 69).

These writers, demonstrating their own author's figured world, frequently tend to enter into a dialogue with the reader, to address him / her personally. Such a dialogue usually has a form of a game (Clayton, 2012, pp. 2-4; Ward, 2003, p. 31). The author chooses this strategy in order to involve the reader into the process of co-imagining of the events or their foreseeing in the narrative, as in:

I know what you're thinking. You wish I'd get on with the story. It's the only story about the old days that interests you now; the only thread in this tattered flag of mine that still catches the light. You want to hear about Tomas Leibniz. To have it clear, categorized, ended. Well, it isn't as easy as that (Harris, 2002, p. 17).

The multiple use of irony in the text also appeals to the reader and focuses his / her attention on the problem emphasized by the author (Lindas, 2013, p. 26), for instance: "And that's the end of the story about Bruno and his family. Of course, all this happened a long time ago and nothing like that could ever happen again. Not in this day and age" (Boyne, 2006, p. 215).

Irony in the narration about war can be frequently observed in the contemporary British MF. In this way the author accentuates its absurdity (Sarma, 2001, p. 212), or the absurdity of treating war only as something elevated and patriotic by young people, who did not completely understand what exactly it was going to bring into their lives. Parody in contemporary literary text is often connected with the technique of pastiche, i.e. the combination of different styles, genres, narratives and stylistic devices, each of which is of great significance in the text production (Clayton, 2012, pp. 6-7; Morey, 2015, p. 82). Parody and pastiche often can be tightly interlaced in the text, making it impossible to draw a distinct boundary between them.

The lexical combinations and strategies used in British MF, their lexical-semantic features and effects on the reader can be summarized in the following way (see Table 1):

Table 1.
Lexical combinations and their lexical-semantic features in contemporary British military fiction. Source: own.

Lexical combinations and strategies	Their lexical-semantic features
the choice of war theme	is connected with the instability in the modern world; induces to fall into thinking, to ponder over the influence of war on a person's everyday life
micro-inclusions of the war theme in the text	demonstrate the way war penetrates into our life and remains invisibly present in it
orientation towards historiographic metaliterature; parody	induce to reinterpret a well-known plot
irony	emphasizes the absurdity of war
dialogue with the reader (often in a playful way)	involves the reader into the process of co-imagining of the events or their foreseeing in the narrative
proposing several perspectives on one event	gives the reader the possibility to analyse the situation by him- / herself and to decide which side to take
temporal distortion, collage, retrospection	create the effect of plurality and relativity in the world comprehension
fragmentation, pastiche	undermine the author's 'authority'; create the feeling of relativity
photographic models, descriptions, detalisation	create the effect of accuracy of the narrative
mystery or a secret	intrigues and induces to search for the truth
prompts and hints	enable the reader to investigate the numerous secrets of the heroes by him- / herself
symbolism	induces the reader to fall into thinking
open ending	induces to imagine the possible variants of the plot development
allusions, quotations	create the feeling that everything in our life constantly circulates and repeats
epigraphs	create the associative background, express the main theme or idea of the text
original metaphors, metonymy, similes	render the horrors of war to the full extent, induce to prevent similar disasters in the future
repetitions	emphasize a certain problem or idea of the author
stylistic convergence	creates the expressiveness, accentuates the author's opinion

On the whole, the choice of the war theme by the author is usually determined by the war events (contemporary or past). The way of its verbal explication in the literary text expresses the author's world perception, his / her attitude to the instability in the world. The choice of the lexical means is predetermined by social factors: the potential reader, social context of interaction, theme of the literary text and the author's aim. Thus, in MF lexical combinations are thoroughly selected according to the author's intention to create a powerful effect on the reader: to render to the full extent the horrors of war and to appeal to the mankind for peace and harmony in society. Since the text is always something more than simply linear sequence of phrases, it is essential to define it as a structural entity. The unity of the LSS of the contemporary British MF is ensured by lexical and stylistic means that manage to create one semantic entity.

Conclusions

To sum up, the peculiarity of British military fiction of the beginning of the 21st century is a different degree of the war theme representation, which can be observed at the levels of macro-, meso- and micro-inclusions in the outline of a literary text. The popularity of military themes in the latest fictional texts is predetermined by the military and conflict actions taking place nowadays. Interpretation of the literary texts and their general influence on readers are highly dependent on the lexical units, thoroughly selected by the author in accordance with his / her intention. Thus, a philological approach made it possible to take a new look on the contemporary literary text and the processes connected with its production, in particular: to establish the main tendencies of lexical-semantic actualisation of the war theme in contemporary British MF with macro-, meso- and micro-inclusions of military themes; to conduct an integrated analysis of the lexical combinations in the lexical-semantic space of contemporary MF, their lexical-semantic features and effect on the reader, taking into account all the extralingual factors influencing the complex process of a literary text construction.

The use of the lexical combinations nominating military realia and actions aims at the reproduction of the distinct picture of the war and post-war period. By depicting war, or simply mentioning it, contemporary authors induce us to ponder over the influence of war on the everyday life, offering ways of addressing a psychological trauma. The author's choice of the war theme is characterized by a few prominent leitfmotifs: to provide a reflection on the perniciousness and absurdity of any war, to make an appeal to the mankind to prevent a similar disaster in the future, demonstrating vivid examples of the past. The use of the philological approach in the analysis of the lexical-semantic structure of the text opens new horizons for further examination of the contemporary British military fiction. Since the war theme is extremely growing in its popularity nowadays this research seems to be useful in the further study of the fictional texts with elements of military themes written after the Russian full-scale war on the European continent started.

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Sharing unreviewed research data: Problems and prospects

Обмін нерецензованими дослідницькими даними: проблеми та перспективи

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Abstract

This paper highlights the results of the survey of Ukrainian scientists on the exchange of unreviewed research data with other scientists, and their motivation to use and disseminate unreviewed research data. By "research data" we mean both processed (summarized in the form of text data, tables, figures, infographics, etc.) and unprocessed information collected by researchers due to experiments, observations, simulations, through surveys or in other ways, or generated from available information. A questionnaire was distributed in different Facebook groups for scientists ("Ukrainian Scientific Journals" "Ukrainian Scientists Worldwide", "Pseudoscience News in Ukraine", "Scientific Conferences and Publications", "Academic Virtue and Plagiarism", "Higher School and Science of Ukraine: Disintegration or Blossoming?", "Ukrainian cuisine of scientific publications") and through university networks. Results from 736 respondents demonstrated awareness and attitudes about data sharing, advantages, and disadvantages of data sharing for scientists. Most of the respondents don't trust the results of scientific research published in

Анотація

У цій статті висвітлено результати опитування українських науковців щодо обміну нерецензованими дослідницькими даними з іншими вченими та їхньої мотивації використовувати й поширювати нерецензовані дослідницькі дані. Під «дослідницькими даними» ми розуміємо як оброблену (узагальнену у формі текстових даних, таблиць, рисунків, інфографіки тощо), так і необроблену інформацію, зібрану дослідниками в результаті експериментів, спостережень, моделювання, за допомогою опитувань чи в інший спосіб, або згенеровану з наявної інформації. Анкету було поширено у фейсбук-групах для науковців («Українські наукові журнали», «Українські науковці у світі», «Новини псевдонауки в Україні», «Наукові конференції та публікації», «Академічна доброчесність і плагіат», «Вища школа і наука України: розпад чи розквіт?», «Українська кухня наукових публікацій») та через університетські мережі. Результати, отримані від 736 респондентів, продемонстрували ставлення до обміну даними, переваги та недоліки обміну даними

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sources other than peer-reviewed scientific journals. Only 34.7 % of the respondents use to publish their unreviewed research data. The reasons that can stop scientists from sharing research data are the following: problems with copyright protection, luck of time, fear to lose publishing opportunities, contradictions with the requirements of the journals, risk of misinterpretation, risk of losing leadership in the field of research, ethical norms violations, prejudice. Researchers, especially those who work at universities, highlighted lack of time for data sharing, because they teach and supervise students, conduct research, have administrative activities, participate in community services. Among the reasons for data sharing the scientists noted cooperation, formation of reputation, increasing the likelihood of being quoted, feedback from the scientific community, development of science, saving results to use in the future, etc. 30.9 % of the respondents indicated that they do not find anything that could motivate them to share research data. Meanwhile about 78.0 % of respondents are sure, that they need trainings in the field of data sharing.

Keywords: research data, data sharing, open science, peer review, repository, scientific journal, scientific communication.

для вчених. Більшість респондентів не довіряють результатам наукових досліджень, опублікованих у інших джерелах, окрім рецензованих наукових журналів. Лише 34,7 % респондентів публікують свої нерецензовані дослідницькі дані. Серед причин, які можуть стримувати вчених від того, щоб ділитися дослідницькими даними, такі: проблеми із захистом авторських прав, брак часу, страх втратити публікаційні можливості, суперечності з вимогами журналів, ризик неправильного тлумачення, ризик втрати лідерства в галузі досліджень, порушення етичних норм, упередження. Дослідники, особливо ті, хто працює в університетах, скаржилися передусім на брак часу для обміну даними, оскільки вони навчають і контролюють студентів, проводять дослідження, мають адміністративні обов'язки, беруть участь у громадській діяльності. Серед причин обміну даними науковці відзначили співпрацю, формування репутації, підвищення ймовірності цитування, зворотний зв’язок із науковою спільнотою, розвиток науки, збереження результатів для використання в майбутньому тощо. 30,9 % респондентів вказали, що вони не бачать причин, які могли б спонукати їх поділитися дослідницькими даними. Водночас близько 78,0 % респондентів упевнені, що їм потрібні тренінги з обміну даними.

Ключові слова: дослідницькі дані, обмін даними, відкрита наука, рецензування, репозитарій, науковий журнал, наукова комунікація.

Introduction

Information and communication technologies make it possible to disseminate research data on various platforms before it is published in peer-reviewed scientific journals and to involve users in the dissemination and discussion of scientific information.

There are a lot of different definitions of data sharing. In an open science data sharing is considered as making research data publicly available without any restrictions on reuse (Nielsen, 2009). N. PM and S. Saeed (2019) describe data sharing as “the practice of making data used for academic research available to other investigators” (p. 290). In general, it is making data available for people who have not generated them and preservation data for public to provide access for reuse (Zhu, 2020). According to W. Chawinga and S. Zinn, the concepts “data sharing” and “open data” have similar meanings (Chawinga, & Zinn, 2019). Data sharing is a purposeful effort to make raw data publicly available (Kaye et al., 2018; Ross, 2016). Such data help to create transparency, reproducibility, and drive further scientific researchers (Rowhani-Farid, Allen, & Barnett, 2017; Watson, 2015).

Open science movement requires researchers to share their data by depositing data sets in reliable sources, by providing metadata. The FAIR Principles focused on public accessibility, as well as on encouraging scientists to make information findable and reusable (Wilkinson, et al., 2016). European policy is based on the transformation of Europe into an area where open science is the new paradigm for carrying out research and to making the results freely available (Guedj, & Ramjoue, 2015).

There are a lot of ways of data sharing, including websites, cloud services, data journals, etc. (Bishoff, & Johnston, 2015, p. 11). Funding agencies, journal publishers, and open science movement also encourage to use data repositories, that help “to manage, share, access, and archive researchers’ data sets” (Uzwyshyn, 2016, p. 18).

With data sharing research data are available for: (a) researchers; (b) practitioners; (c) science communicators (scientific journalists); (d) members of the public (Paradis, et al., 2020). Some publishers such as Nature, Science, Elsevier, PLOS One requires authors to submit research data together with manuscripts.

There are general studies on research data sharing. S. Huh highlighted advantages of data sharing: promotion of reproducibility, ensuring scientific soundness. Data sharing saves resources because it helps to avoid the need to generate the same data (Huh, 2019). N. Paradis, M. Knoll, C. Shah, et al. also proved the correlation between data sharing on social media and the whole number of citations (Paradis, et al., 2020).

The aim of this study is to find out awareness and attitudes about data sharing among Ukrainian scientists, advantages, and disadvantages of data sharing for them.

Methods

A survey was developed and distributed online in September-October 2021 in Facebook groups “Ukrainian Scientific Journals”, “Ukrainian Scientists Worldwide”, “Pseudoscience News in Ukraine”, “Scientific Conferences and Publications”, “Academic Virtue and Plagiarism”, “Higher School and Science of Ukraine: Disintegration or Blossoming?”, “Ukrainian cuisine of scientific publications”, and through university networks.

Closed-ended and open-ended questions **were included in the survey.** The project of the survey was discussed in the Printing and Publishing Institute of the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute” (12 scientists discussed the survey). These researchers shared their attitudes about the questions. Their comments were considered. The final version of the survey was developed using the Google Forms. Then the survey was tested at the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute through university network (90 scientists tested it). The results of the survey were processed during October-November 2021.

Overall, 736 researchers answered the questions. 2.5 % of them were 25 years old or younger, 24.0 % were 26–35, 29.6 % were 36–45, 18.8 % were 46–55, 14.3 % were 56–65, and 10.8 % were above 65 years. 47.5 % of the respondents were male, 52.2 % were female, and the others preferred not to answer (0.3 %).

58.8 % of the respondents were PhD, 18.8 % Doctors of Sciences, 12.5 PhD students, 7.3 % researchers with no scientific degree, and the others were students (2.7 %). The representatives of the following scientific branches answered the questions: social communication (9.3 %), economics (8.9 %), chemistry (8.5 %), engineering (8.4 %), pedagogy (8.1 %), physics and mathematics (7.3 %), biology (6.2 %), medicine (5.9 %), agricultural sciences (5.7 %), history (5.5 %), philology (4.8 %), IT (4.7 %), jurisprudence (4.4 %), philosophy (3.8 %), geography (2.9 %), ecology (2.9 %), geology (2.7 %).

Findings

To the question “Where do you keep the intermediate results of your research?” the answers were following (the respondents could choose several answers): on a PC (93.2 %); on USB, external hard drives, etc. (62.5 %); in cloud services (56.3 %); in social networks for scientists (17.1 %); in repositories (14.5 %); on corporate servers (7.1 %); in handwritten version (3.5 %) (Figure 1).

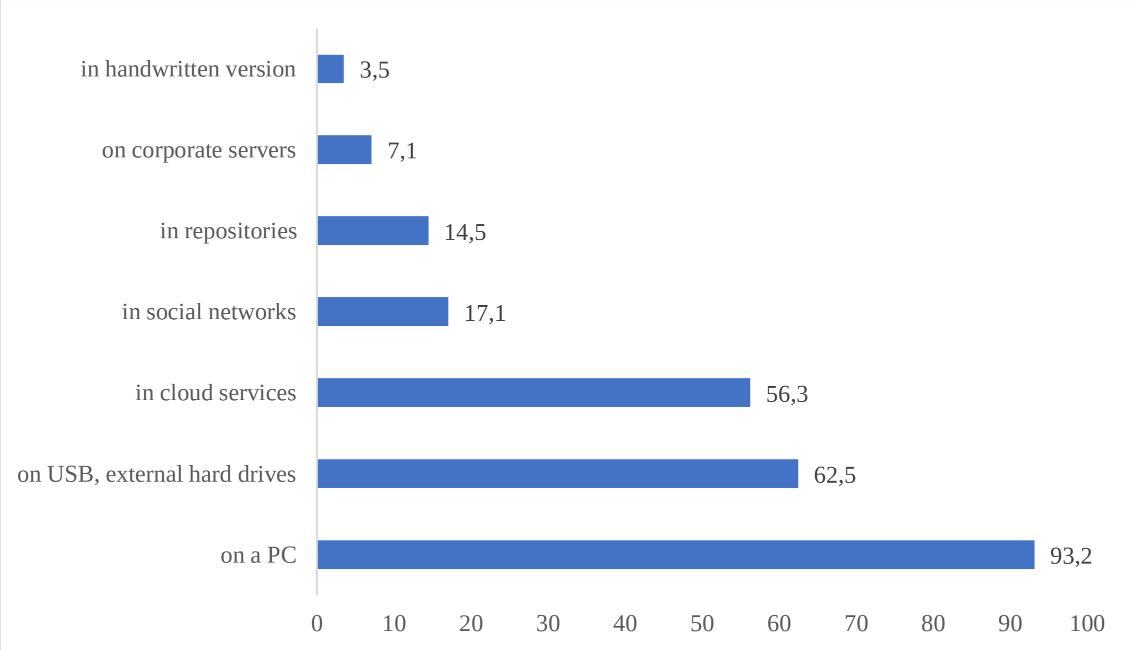

Figure 1. Percentage of the answers to the question "Where do you keep the intermediate results of your research?", %

To the question "Do you trust the results of scientific research published in sources other than peer-reviewed scientific journals?" 37.5 % of the respondents answered "yes". Meanwhile, 62.5 % of respondents do not trust unreviewed scientific content (Figure 2).

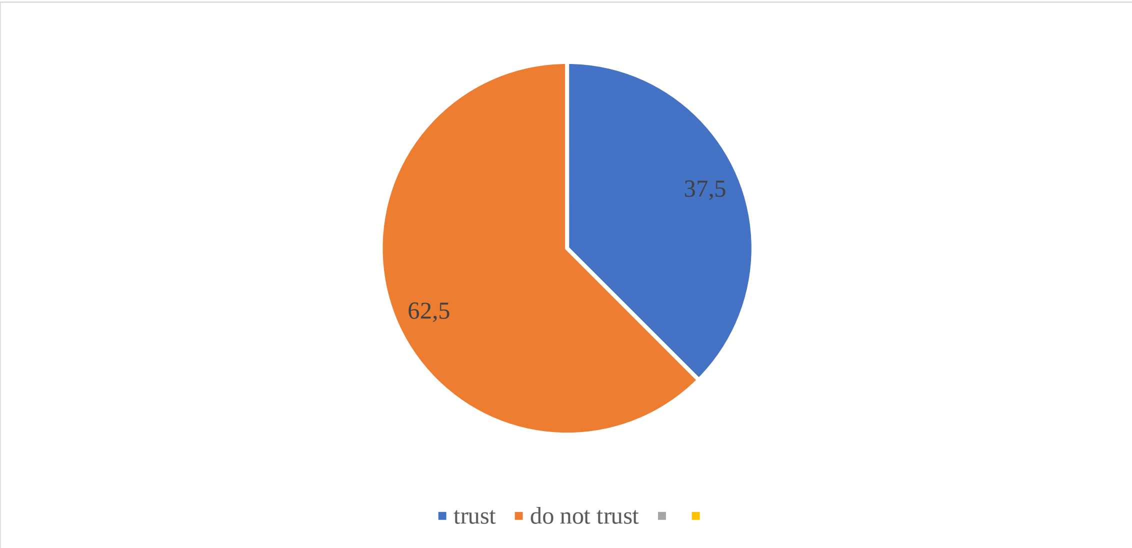

Figure 2. Level of trust to unreviewed scientific content, %

The sources trusted by the researchers are the following: repositories, Biorxiv, popular science media. In addition, some researchers have indicated that they trust the work of individual scientists, regardless of where they are published (for example, data posted on the personal websites), the results of scientists from institutions with good reputation, data that is widely used and cited by other scientists, data created in collaborations within international projects.

At the same time, the respondents were unanimous about the reasons why they do not trust research data, that have not been peer-reviewed: only peer reviewing makes it possible to "weed out" unreliable or low-quality data. Individual answers are the following: "high probability of data errors"; "different responsibilities of authors"; "lack of references does not allow to verify information"; "two scientists always know more."

Only 34.7 % of the respondents use to publish their unreviewed research data. In particular, they use social media for scientists (76.5 %), Zenodo (31.3 %), meetings (22.1 %), blogs (18.5 %), arXiv.org (17.3 %), Figshare (16.2 %), personal cites (12.2 %) (respondents could choose several possible answers or add their own) (Figure 3).

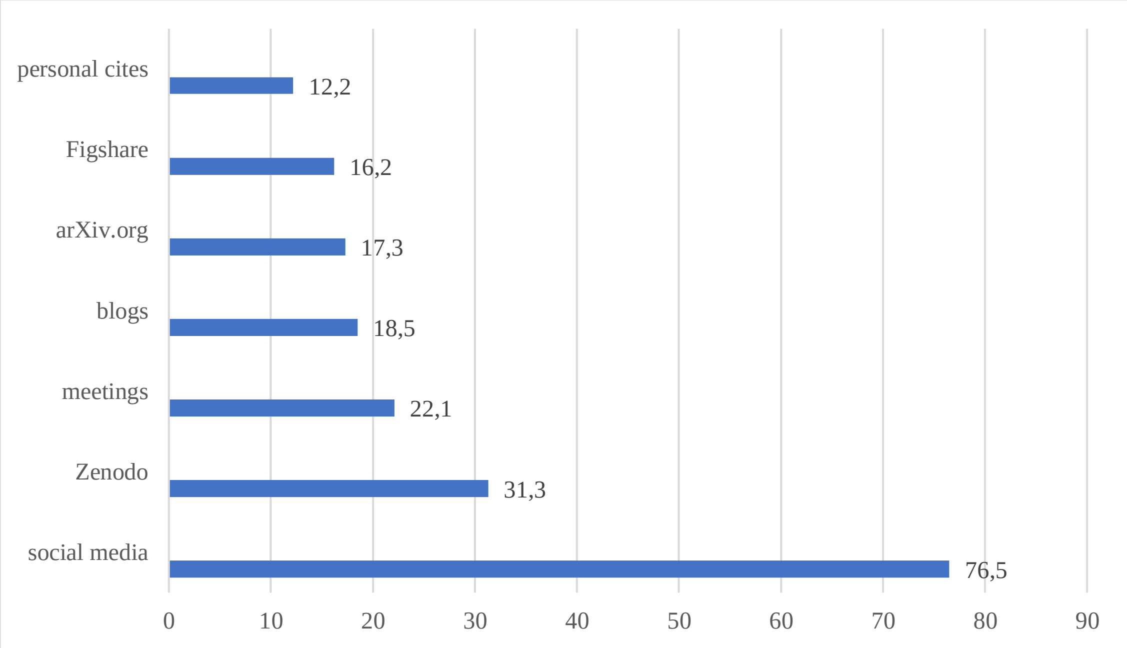

Figure 3. Sources where the respondents use to share their unreviewed research data, %

43.7 % of the scientists use unreviewed research data of other researchers to prepare their scientific publications from such sources as social media for scientists (81.2%), personal cites (62.6 %), blogs (60.5 %), arXiv.org (56.8 %), Zenodo (40.1 %), Figshare (35.6 %), meetings (29.2 %), reports on industrial exhibitions, producer reports (17.3 %) (respondents could choose several possible answers or add their own) (Figure 4).

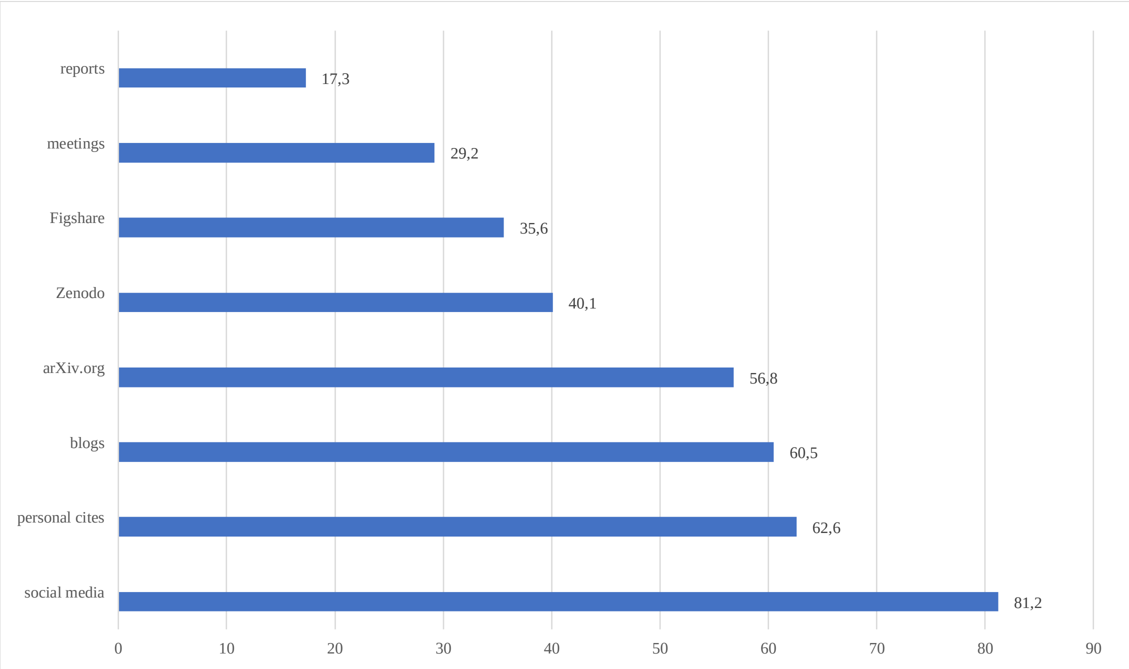

Figure 4. Sources from which 43.7 % of respondents use unreviewed research data, %

The most scientists from such fields as biology (50.3 %), chemistry (58.2 %), physics and mathematics (63.8 %) use to share their data. By contrast, psychologists (11.2 %), educational researchers (9.7 %) social communications (6.3 %) share their data less often. Some universities give support and trainings in data sharing, for example Igor Sikorsky Kyiv Polytechnic Institute.

About 70.0 % of the respondents lack awareness of what opportunities data repositories give. For example, the Zenodo repository is open to all scholars, regardless of the field of knowledge and sources of funding for their research. All deposits are stored in CERN Data Center. Every Zenodo deposit gets a DOI for free. Figshare allows to safely manage the results of own scientific research and make them visible, accessible, and cited.

To the question "What types of research data would you prefer if you were sure of its reliability?" the following answers were received: presentations (75.0 %), preprints (68.2%), infographics (51.2 %), databases (43.8 %), drawings (39.5 %), audio (12.5%) (respondents could choose several possible answers or add their own). Researchers agree that open data should be formatted, adjusted, and user friendly.

The most popular type of research data among respondents is preprint – scientific papers published in open sources for free access to a wide audience before publication in peer-reviewed scientific journal. Preprints help to initiate open discussion, get feedback from readers, comments, remarks that help to improve scientific work. Preprints also may serve as an early indicator of later academic impact. But there can be errors, inaccurate conclusions, general phrases, and they cannot be added to scientific reports (Paradis, et al., 2020).

To the question "What can stop you from sharing research data before publishing it in peer-reviewed scientific journals?" we received the following answers (respondents could choose answer option or write their own answer): "I'm not sure about copyright protection, other scientists can use my data as "research parasites" (68.8 %), "I have no time" (65.5 %), "I don't need it" (43.8 %), "I'm afraid of losing publishing opportunities" (43.4 %), "I'm not paid for it" (37.5 %), "it contradicts the requirements of the journal, where I plan to publish my results" (31.8 %), "I'm afraid that the data will be misinterpreted" (31.3 %), "it is prohibited by grantor" (20.1 %), "I am afraid of losing leadership in my field of research" (18.8 %), "I'm afraid that using my data, other scientists will find mistakes" (12.6%), "I don't know how to do it" (12.5 %), "it would violate ethical norms" (7.3 %), "I have prejudice" (6.3 %) (Figure 5).

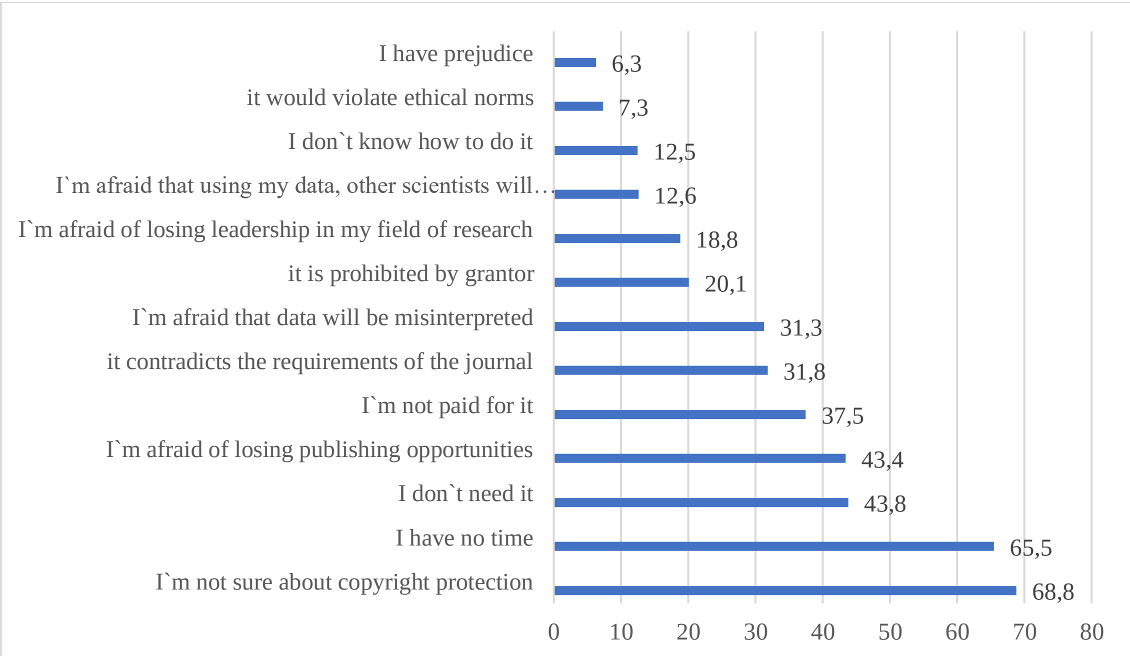

Figure 5. Percentage of the answers to the question "What can stop you from sharing research data before publishing it in peer-reviewed scientific journals?", %

Researchers, especially those who work at universities, highlighted lack of time for data sharing, because they teach and supervise students, conduct research, have administrative activities, participate in community services.

To the question “What would motivate you to share research data before their publication in peer-reviewed scientific journals?” we received the following answers (respondents could choose several options and suggest their own): “it allows to cooperate with other scientists” (56.3 %), “it contributes to the formation of reputation” (43.8 %), “it increases the likelihood of being quoted” (37.5 %), “it allows to get feedback from the scientific community” (31.3 %), “it stimulates the development of science” (21.7 %), “I can get not only more citations, but journalists and donors may know what I am doing” (21.3 %), “it increases the likelihood of publishing the results in peer-reviewed journals” (7.3 %), “it allows save my results to use in the future” (6.3 %). 30.9 % of the respondents indicated that they do not find anything that could motivate them (Figure 6).

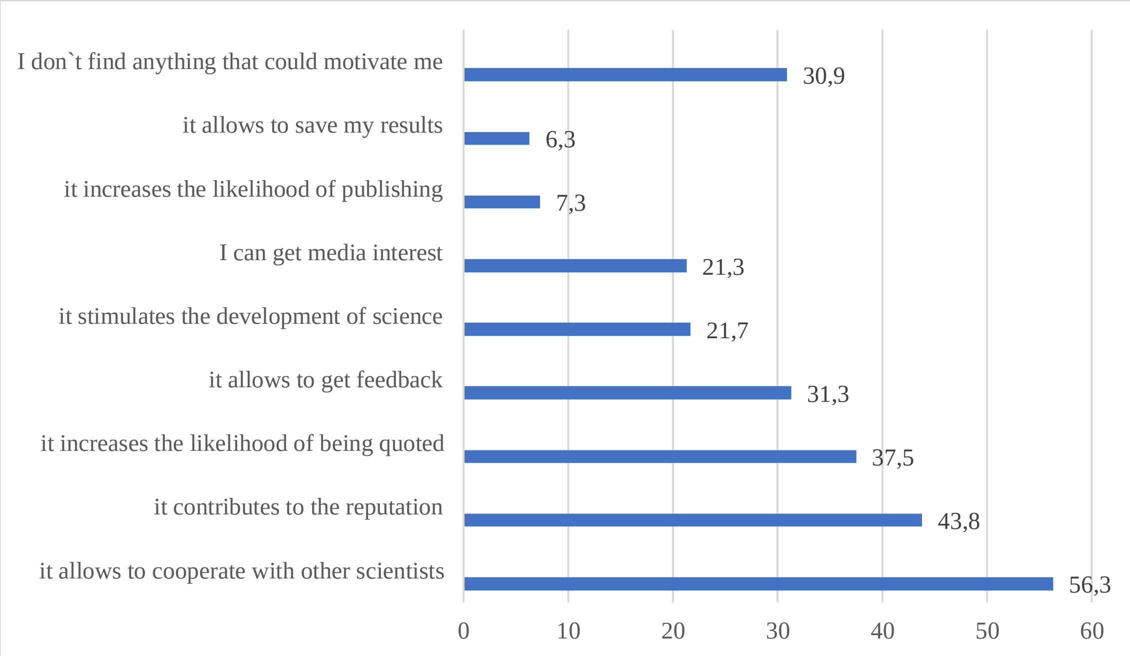

Figure 6. Percentage of the answers to the question “What would motivate you to share research data before their publication in peer-reviewed scientific journals?”, %

About 78.0 % of the respondents need trainings in several areas of research data sharing: creating metadata for research data (77.1 %); sharing data (74.6 %); the use of data repositories and open access (74.1 %); storing and backing up data (61.5 %); ethics and consent for data creation (62.2 %); copyright and intellectual property (58.4 %). Sharing their own experiences of disseminating unrealized research data, scientists also noted cases of violations of academic integrity.

Discussion

Through the exchange of research data, the quality of research can be improved and accelerated. Data sharing gives impetus to innovation based on existing datasets, helps generate new knowledge, and promote discoveries, formulate hypotheses, create new meanings by combining existing datasets, and test findings (Smith, & Roberts, 2016). It takes a lot of time and money to create research data. By reusing research data, we maintain the resilience of research systems. In this way, open data promote sustainable development (Gurin, Manley, & Ariss, 2015).

C. Borgman defines research data as “entities used as evidence of phenomena for the purposes of research or scholarship” (Borgman, 2015, p. 29). According to Martone et al., research data are primarily the results of empirical research on which scientific results and conclusions are based (Martone, Garcia-Castro, & Van den Bos, 2018).

In this study we define “research data” as data obtained by researchers as a result of observations, experiments, descriptions, measurements, modeling, etc. or summarized on the basis of existing data.

In line with Y. Zhu our results prove that scientists usually support the idea of data sharing, but don't like to make their own research data publicly available (Zhu, 2020).

We agree with W. Chawinga and S. Zinn that data sharing helps to prevent research fraud, for example falsifying methodologies. Data sharing allows independent researchers to re-analyse the data, that promotes research integrity (Chawinga, & Zinn, 2019).

Our results proved that more experienced researchers share data much more willingly than early career scientists. On the other hand, researchers in every age group may generate low-quality research data.

We can fully agree with D. Sayogo and T. Pardo, that negative trends and challenges for researchers in data sharing are a lack of time (Sayogo, & Pardo, 2013), and selfish, non-cooperative behavior (Hunt, 2019).

Many researchers do not share their research data, even those funded by sponsors who require to make such data publicly available (Volk, Lucero, & Barnas, 2014). Our survey also confirms previous results that scientists are afraid of misinterpretation of data and losing authorship and publishing opportunities (Aleixandre-Benavent, et al., 2020). At the same time, we found that Ukrainian scientists luck awareness about data sharing. Meanwhile, the practice of data sharing is repetitive: the authors who had such experience, tend to share data in the future (Zenk-Möltgen, et al., 2018).

Our survey illustrated good and bad practices of research data sharing among Ukrainian scientists. As C. Tenopir, N. Rice, S. Allard, et al., we consider as advanced practice storing research data in repositories; mediocre practice is archiving data in the personal cloud or on the server of the institution; and bad practice is using flash drive, computer, or paper for storing such data (Tenopir, et al., 2020). Our study confirms previous research that scientists still share research data via e-mail and memory cards or CDs (Koopman, & De Jager, 2016).

We fully agree that the problem of data quality assessment before research data publication is being updated (Luzi, Ruggieri, & Pisacane, 2019). This assessment could help the members of the scientific community improve his or her paper and save readers' time.

Our findings are consistent with prior research of S. Koslow about technical, economic, political, motivational, legal, and ethical barriers for data sharing (Koslow, 2002). The main barriers are ethical, especially if data are collected from children and young adults. Sharing some research data can harm people and offend them (Takashima, et al., 2018; Mbuagbaw, et al., 2017).

Moreover, sharing some types of data may be restricted or prohibited. It can also sometimes harm specific researchers, institutions or society as a whole (Research Data Alliance and The Committee on Data for Science and Technology, 2016). Our research confirms the need for training in several areas of data sharing. It is important to involve professionals in data management, research support departments, and libraries (Melero, & Navarro-Molina, 2020).

Conclusion

The results of the survey show that most of the researchers don't deposit scientific data in open-access repositories or have low level of data sharing. On one hand, many scientists worry about authorship. But, on the other hand, data sharing has some benefits: it helps in collaboration, increases confidence in findings and generate discussions among scientists. Data sharing contributes to the intensification and diversification of research, the establishment of scientific communication, helps to solve social problems and increases the level of understanding of science by citizens. So, it is important to provide support for research data sharing. An educational campaign is also needed about the importance of data sharing for collaboration, recognition, and proper citation.

As a result of a survey, it was found the positive effects of data sharing such as intellectual development, new publishing opportunities, etc. However, ethical problems were also revealed, such as violation the ethical norms of scientific communication.

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Diplomatic relations of Ukraine with the EU in the sphere of security and in relation to candidacy

Дипломатичні відносини України із ЄС у сфері безпеки та у відповідності до кандидатства

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Abstract

The aspiration of Ukraine to integrate into the European Union and the acquisition of membership in the EU is one of the priority directions of state policy, forasmuch as ensuring the country's full participation in the European and regional security system will create for Ukraine a reliable basis for its sustainable development and protection of national interests. The purpose of the research lies in substantiating the theoretical fundamentals and determining the practical recommendations regarding the diplomatic relations of Ukraine with the European Union in the field of security and in accordance with the candidacy. The general scientific and special research methods have been used in the academic paper, in particular, as follows: analysis, synthesis, scientific abstraction; analogies, comparison; statistical, graphic; generalization, systematization. The results of the research prove that Ukraine is capable of being an important partner of the

Анотація

Прагнення України інтегруватися до Європейського Союзу та набуття членства у ЄС являється одним із пріоритетних напрямів державної політики, адже забезпечення повноправної участі країни у європейській та регіональній системі безпеки створить для України надійне підґрунтя для її сталого розвитку та захисту національних інтересів. Метою дослідження є обґрунтування теоретичних засад та визначення прикладних рекомендацій щодо дипломатичних відносин України із Європейським Союзом у сфері безпеки та у відповідності до кандидатства. У статті використовуються загальнонаукові та спеціальні методи дослідження, зокрема: аналіз, синтез, наукова абстракція; аналогії, порівняння; статистичний, графічний; узагальнення, систематизації. Результати досліджень доводять, що Україна спроможна бути важливим партнером Європейського Союзу у сфері безпеки, що підтверджує її

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European Union in the field of security, which confirms its ability to protect the eastern borders from the aggression of Russia, the problem of which has become extremely acute on the European continent. Diplomatic relations of Ukraine with the European Union in the field of security and in accordance with the application are focused on the problems of military resistance to armed aggression and the annexation of Ukrainian territories, as well as on the search for effective ways of resolving the conflict. It has been proven that the European Union provides significant support to Ukraine in the field of strengthening its defence capabilities and ensuring its functioning (the amount of planned financial assistance amounts to 10 885 million US dollars). The necessity of forming a joint security and defence policy with the European Union on the basis of partnership and mutual guarantee of compliance with the principles of ensuring and maintaining security and peace has been revealed.

Keywords: European integration, diplomatic relations, security, international cooperation, Russia – Ukraine war, European Union.

здатність захистити східні кордони від агресії Росії, проблема якої на європейському континенті надзвичайно загострилася. Дипломатичні відносини України із Європейським Союзом у сфері безпеки та у відповідності до кандидатства сфокусовані на проблеми військового протистояння збройній агресії та анексії українських територій, а також на пошук ефективних шляхів вирішення конфлікту. Доведено, що Європейський Союз здійснює значну підтримку України у сфері зміцнення її обороноздатності та забезпечення функціонування (обсяги запланованої фінансової допомоги складають 10885 млн. дол. США). Виявлено необхідність формування спільної з Європейським Союзом політики безпеки та оборони на засадах партнерства та взаємного гарантування дотримання принципів забезпечення та підтримки безпеки та миру.

Ключові слова: євроінтеграція, дипломатичні відносини, безпека, міжнародне співробітництво, російсько-українська війна, Європейський Союз.

Introduction

The challenges and dangers accompanying the development of Ukraine as an independent and self-sufficient country lead to the emergence of a number of destabilizing factors, the most significant of which is Ukraine’s military resistance to the armed aggression of the Russian Federation. Russia - Ukraine war has created countless risks and threats to the national interests of Ukraine in the field of security and exacerbated the problem of establishing effective international cooperation with the aim of obtaining international support, supplying weapons, financing the needs of the state in order to preserve the lives of the population, the territorial integrity of the country and prevent the implementation of operational and strategic goals of the Russian Federation. It is obvious that the development of a full-scale war on the territory of Ukraine poses a significant threat to the security not only of Ukraine, but also of neighbouring countries that have already acquired membership in the European Union, and other countries of the world that are in diplomatic relations with both sides of the conflict. The existing format for ensuring security on the continent and in the whole world did not justify the expected hopes and turned out to be ineffective and resultless, which has manifested itself in the inability to influence the aggressor country in the framework of peace negotiations and reaching compromise solutions. As a result, we are observing large-scale destruction on the territory of Ukraine, tension in the situation in various countries of the world, the threat of a global food crisis, an increase in large-scale hunger, as well as an intensification of the processes of the development of terrorist activities. The issues specified require the search for effective ways of immediate solution, and the outlined topic of the study acquires special relevance.

The purpose of the research lies in substantiating the theoretical fundamentals and determining the practical recommendations regarding the diplomatic relations of Ukraine with the European Union in the field of security and in accordance with the candidacy.

Literature Review

Ukraine, as an independent sovereign state, has established diplomatic relations with 181 countries of the world, the Holy See, as well as the sovereign Order of Malta throughout the entire period of its existence, and, the state did not break them with any country until 2019. However, the events taking place in Ukraine and related to the armed aggression of the Russian Federation have prompted the country to break diplomatic relations with Russia on February 24, 2022, Syria on June 30, 2022, and North Korea on July 13, 2022, which by their actions and public appeals have caused a threat to the national interests of Ukraine and violated the level of its safe existence as an independent state.

Morango (2021), investigating the problems of the Russian – Ukrainian conflict, considers diplomatic relations of Ukraine with the European Union as an important tool for ensuring the interaction of the European community with the countries participating in the conflict and building both international relations in general, and cross-border regional relations, in particular, in the conditions of the current state.

Vidnyanskyi (2021) has singled out the main problematic aspects of developing diplomatic relations of Ukraine with such countries as Poland, Hungary, Romania and Slovakia and established that they significantly affect the level of security in the regional dimension. At the same time, Ukrainian – Polish relations have the character of good neighbourliness, which is one of the elements of guaranteeing geopolitical stability in Europe. For what concerns Hungary, Romania, and Slovakia, there are a number of unresolved issues that are periodically exacerbated under the pressure of the Russian Federation, causing threats to Ukraine and disrupting security in the Eastern European region. In particular, it is worth paying particular attention to the pro-Russian standpoint of Hungary, which for a long time systematically vetoes the solution of problematic issues of the implementation of European policy and positions itself in opposition to European solidarity, while V. Orban loudly declares that Ukraine is an artificial state.

Vovk & Sekunova (2016) consider Ukraine's diplomatic relations with France somewhat tense, as evidenced by their instability and France's close interaction with Russia.

Sulym (2020) assesses the current state of diplomatic relations between Ukraine and Germany as a crisis one, which, on the one hand, has been formed against the background of problematic aspects of the internal development of the European Union, and, on the other hand, because of the systemic political instability in Ukraine. However, Germany's support towards Ukraine in the matter of integration into the European Union is assessed at a sufficiently high level. At the same time, the scientist analyses Ukraine's diplomatic relations with Austria and established that the Austrian side is a mentor of Ukraine in developing relations with the European community.

It should be noted that the prospects of Ukraine's diplomatic relations with the Benelux countries (Belgium, the Netherlands, Luxembourg), with which, according to the viewpoint of Ryeznikov (2015), effective diplomatic dialogue and cooperation in the foreign economic sphere have been established, are quite optimistic.

Diplomatic relations of Ukraine with the Republic of Lithuania are positively evaluated by Lutsyshyn & Kornat (2021), who have studied Ukrainian – Lithuanian cooperation in the field of security and defence and established close cooperation between the countries, and they characterize partnership relations in security and defence sphere as mutually beneficial and stable.

Along with this, relations between Ukraine and Belarus have become extremely aggravated, which is a sub rosa ally and is actively cooperating with the Russian Federation in waging war on the territory of Ukraine. Analysing the prospects of the European Union's diplomatic relations with such countries as Ukraine, Belarus and Moldova, Baltag (2018) has concluded that the European Union's diplomatic relations with these countries are quite uncertain, forasmuch as the social-political crisis in Ukraine, the decrease in the level of democratization of Moldova and the inclusion of Belarus in the most repressive countries violate the principles of democratic practice of ensuring the security of the European continent and lead to the emergence of a number of risks and threats.

Vovkanych (2021) connects the increase in instability and uncertainty with the aggravation of the global and regional situation of the countries of the European Union and the Eastern European countries as a result of which a significant confrontation has been induced, in which Russia seeks to establish control over Ukraine, which will allow it to obtain significant advantages in terms of geopolitical dominance in Europe and push the US out of Europe. At the same time, the implementation of the principles of the Euro-Atlantic development course of Ukraine contradicts the ideology of Russia, which, in addition to the above, aspires to be the leading geopolitical centre of power in Europe. It is obvious that the full-scale military invasion and armed aggression of Russia against Ukraine has revealed all the weaknesses not only of the countries participating in the conflict, but also of the leading states of the world and international security organizations. As a result, the international security system has shown the low level of its efficiency and, consequently, has undermined the stability and peace in Europe and the world.

Undoubtedly, the support of the European Union regarding ensuring the stable and democratic development of Ukraine is implemented within the framework of the priority partnership in the “Ukraine – EU” format, which is evidenced by the multifaceted support of Ukraine in the process of Euro-Atlantic integration and increased assistance in the conditions of armed resistance to Russian aggression, as well as powerful political, financial and humanitarian aid of the European Union to Ukraine. The tough sanctions policy of the European Union in relation to the Russian Federation is equally important. In this context, the statement of Borrell (2022) is relevant, who emphasizes the need to strengthen European defence by terminating Russia’s unprovoked war against Ukraine in order to ensure the future security and democracy of the member states of the European Union. At the same time, Russia’s armed aggression is considered to be the cause of the third asymmetric shock, which has destabilized security both in European countries and in countries bordering Ukraine, increasing the impact on Eurozone states due to the influx of refugees and actualizing the need to reduce dependence on Russian energy carriers. In general, Kalyavyev & Shapoval (2020) characterize the diplomatic relations of Ukraine with the European Union in the field of security as comprehensively developed on the basis of ensuring the implementation of the principles of democracy and the support of Ukraine by the European Union in armed resistance to the aggression of the Russian Federation.

The decisive steps taken by the European Union in relation to Ukraine, manifested in the unprecedented decision to grant Ukraine the status of a candidate for EU membership, prove the dominant importance of the principles of democracy in the process of developing diplomatic relations and the ability of the European Union to provide a worthy response to geopolitical challenges. Studies of LCF Law Group (2022) in this direction show that Ukraine’s accession to the European Union is preceded by the conducting the necessary reforms, in particular, as follows:

1) reform of the Constitutional Court;
2) judicial reform;
3) strengthening the fight against corruption;
4) bringing national legislation into compliance with FATF standards in order to strengthen the fight against money laundering;
5) adoption of the anti-oligarchic law;
6) harmonization of audiovisual legislation with the norms of European law;
7) improvement of legislation on national minorities.

In this context, the establishment of relations between Ukraine and NATO is of great importance, which supports Ukraine’s ability to ensure its own defence capability and contributes to the strengthening of Euro-Atlantic security. However, the establishment of relations with NATO threatens Ukraine with the strengthening of the armed aggression of the Russian Federation against Ukraine, forasmuch as the latter cites close cooperation with the North Atlantic Alliance as one of the reasons for the unjustified military invasion into Ukraine. There is no gainsaying that it is impossible to establish a political dialogue between Ukraine and Russia in modern conditions; therefore, with the aim of obtaining a certain defensive force against Russia, Ukraine has turned to Switzerland with a request to represent the interests of Ukraine in Russia by Switzerland; however, the consent of the aggressor country for such a representation has not been obtained yet.

The remark of Masters (2022) is reasonable, who claims that Ukraine has played an important role in the world security order for a long period and formed the priorities of interaction with the European Union and the North Atlantic Treaty Organization, and the military actions taking place on its territory testify to the destabilization of the situation in the global security environment and the resumption of fighting between superpowers.

Rehman (2022), investigating the Russian – Ukrainian conflict and its impact on global and regional security, has established that Russia’s war against Ukraine provoked the tension in the geopolitical environment, the deterioration of the world order and the problem of the aggravation of nuclear danger on the European continent. Undoubtedly, the security environment on a global and regional scale has a significant impact on Ukraine’s diplomatic relations with the European Union, which, against the background of increasing global trends and challenges, exacerbates the problem of geopolitical turbulence and confrontation, deepens the processes of economic inequality. Under such conditions, the experts of the Razumkov Centre

(Razumkov Center, 2021b; Razumkov Center, 2021a) assume that the outlined trends threaten to disregard the norms of international law, as a result of which the problems of interaction between the main subjects of diplomatic relations worsen and conflicts arise, one of which is the full-scale invasion of the Russian Federation on the territory of sovereign Ukraine.

A positive solution to the problem of ensuring peace on the European continent, terminating the war in Ukraine and providing the principles of international security depends on the effectiveness of establishing diplomatic relations between the countries participating in the conflict and the world community. It is obvious that the entire civilized world condemns the armed aggression of the Russian Federation and makes maximum efforts to support and help in the confrontation of Ukraine. Unfortunately, the main prospects for terminating the war have not been determined yet; and, the diplomatic way of resolving the conflict situation has not been successful.

Materials and Methods

The general scientific and special research methods have been used in the academic paper, in particular, as follows: methods of analysis, synthesis and scientific abstraction have been used in order to determine the essence of diplomatic relations of Ukraine with the European Union in the field of security and in accordance with the candidacy; identification of the main problematic aspects in the diplomatic relations of Ukraine with the countries of the European Union has been carried out by applying the method of analogies and comparison; studying the state, trends and dynamics of indicators that reflect the level of support of the European Union to Ukraine has been carried out on the basis of statistical and graphic methods; the generalization of the results of the conducted research has been carried out using the method of systematization.

The information base of the research consists of scientific developments of domestic and foreign scientists, reporting data of international and domestic organizations.

Results

Obtaining the status of a candidate for membership in the European Union by Ukraine has opened up significant prospects for the development of the country as an independent, sovereign and democratic state. However, the implementations of aspirations for full integration and the desire to join the European Union has provoked the opposition of the Russian Federation, which considered Ukraine to be a sphere of its own influence, which was manifested in the full-scale military invasion of the Russian army on the territory of Ukraine and in the large-scale destruction that the country suffered from.

On the very first day of the beginning of the Russia – Ukraine war, Ukraine has severed diplomatic relations with Russia and called on the member states of the European Union to provide assistance in order to retaliate against the aggressor. In turn, the European Union has condemned the actions of Russia and expressed concern about the violation of security on the European continent. As a result, the country has found itself in a situation in which fighting against the aggression of an enemy country requires significant financial resources. Needless to say, given the crisis state of the national economy, Ukraine cannot finance the war on its own.

Understanding the significant threat to the security situation on the European continent and Russia's statements about its ambitious plans to seize the territories of the post-Soviet countries, the European Union has taken the decision to provide the maximum possible support to Ukraine and ensure its needs in deterring the enemy. It should be noted that significant amounts of financial resources in the form of grants and loans were provided not only by the countries of the European Union, but also by the USA, Great Britain, Canada and Japan. In addition, Ukraine received significant support from international financial organizations, in particular, from the World Bank, the European Investment Bank and the International Monetary Fund. The total amount of financial assistance to Ukraine in the conditions of the war with the Russian Federation in 2022 in terms of funding sources is reflected in Figure 1.

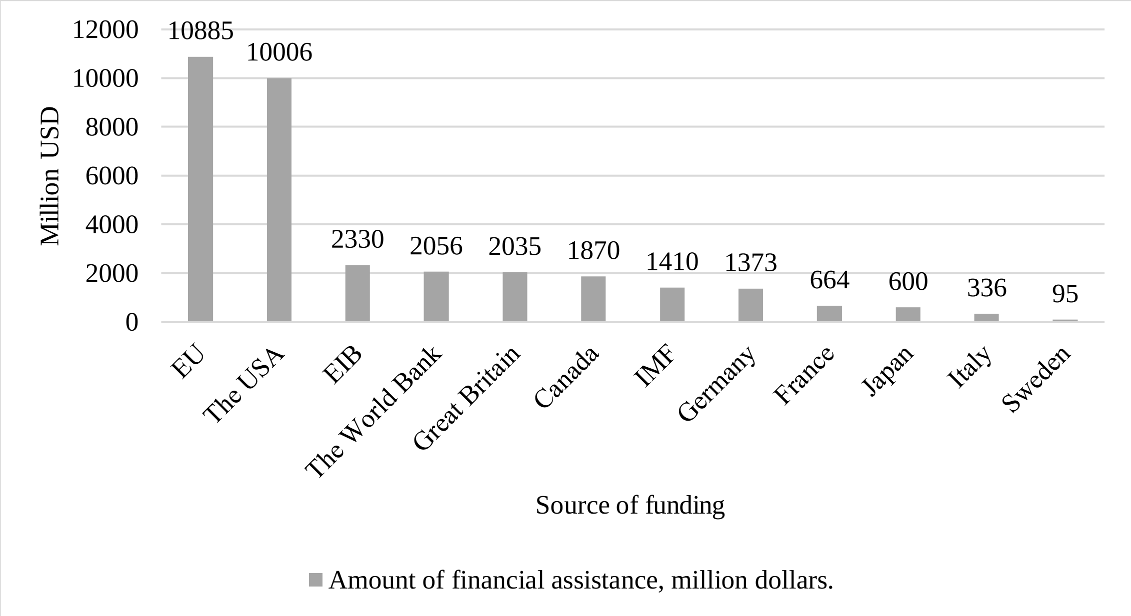

Figure 1. Amounts of financial assistance to Ukraine in the conditions of a war with the Russian Federation in 2022.
Source: it has been complied based on: Samoiluk (2022).

As evidenced by the results of the conducted research, the largest amounts of financial aid to Ukraine have been planned by the European Union (10 885 million USD) and the United States (10 006 million USD). It should be noted that 90% of the amount of financial assistance from the USA is in the form of grants, and the European Union finances the needs of Ukraine under the terms and conditions of lending with preferential terms. It is obvious that the given amounts of funding are auxiliary and due to the need caused by the war.

At the same time, it should be noted that the investment attractiveness of Ukraine has significantly decreased since the beginning of the military conflict in the East of Ukraine in the period of 2015–2020 (Figure 2), which is evidenced by the rather low volumes of direct investments in Ukraine from the European Union. This is due to the high degree of risk for European investors to invest in conflict zones, where it is extremely difficult to ensure the appropriate level of security of business and invested capital, and the unpredictable possibility of escalation of armed confrontation and aggression significantly restrains the possibility of investment activities.

The features of Ukraine's diplomatic relations with the European Union and their security cooperation depend on numerous destabilizing factors, from among which the following ones should be highlighted as the most dangerous, namely: the geopolitical processes in Europe and the world, the complex security situation in the middle of the European Union, as well as the war in Ukraine, which is the most significant factor in disrupting global economic stability.

The establishment of constructive regional cooperation of Ukraine with neighbouring countries is equally important and the continuation of the implementation of cross-border cooperation programs with the European Union, which are financed by the latter, namely in the format as follows:

1) Poland – Belarus – Ukraine;
2) Hungary – Slovakia – Romania – Ukraine;
3) Romania – Ukraine;
4) The Danube Transnational Programme.

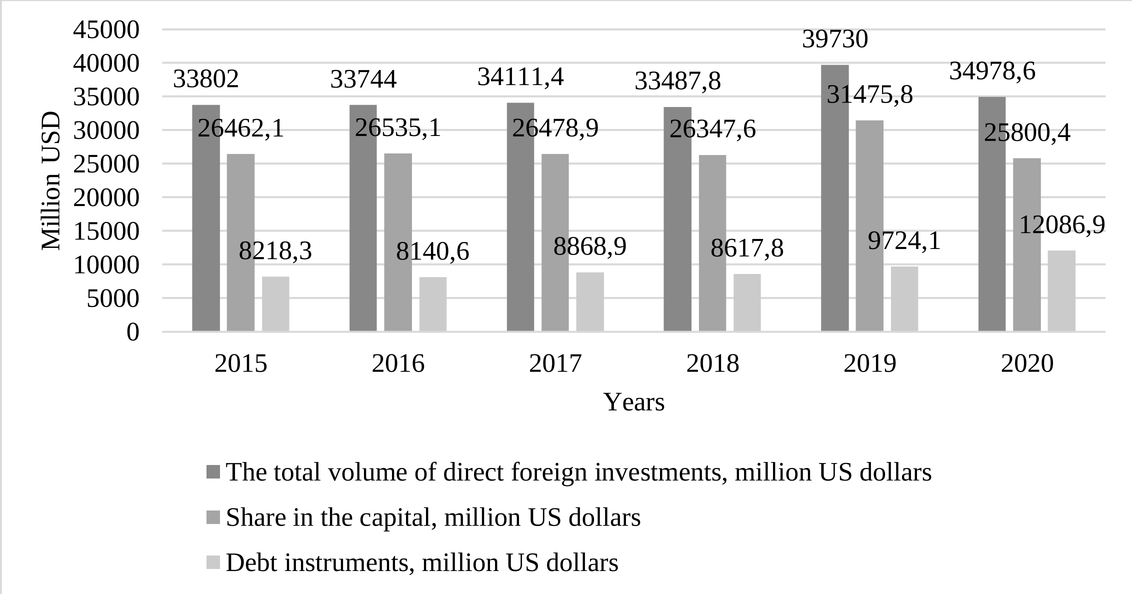

Figure 2. Dynamics of the volume of direct investments in Ukraine from the European Union in 2015–2020.
Source: it has been complied based on: Samoiluk (2022).

However, if in relation to the second, third and fourth programs no problematic aspects have been recorded, then regarding the first one, there are a number of issues related to the position of Belarus and its attitude to the escalation of military aggression on the territory of Ukraine. Taking into account the significant list of sanctions introduced by the European Union against Belarus, the existing format of diplomatic relations with Belarus cannot be implemented, but requires significant modification and review.

In this context, the creation of new formats of regional cooperation by Ukraine turns out to be justified; in particular, the expediency of strengthening diplomatic relations within the framework of the so-called “Lublin Triangle”, which has begun its operation in 2020 with the participation of Ukraine, Poland and Lithuania, is actualized. We consider it quite acceptable to expand the boundaries of such international cooperation by joining Latvia and Estonia, one of the aspects of diplomatic relations between which should be the deepening of cooperation in the field of ensuring regional security.

In addition, the issue of ensuring peace and security in the world and especially on the European continent, which depend on the behaviour of the Russian Federation in relation to Ukraine and its influence on the world community, remains unresolved. In order to find effective methods for the implementation of the specified aspirations by the European Union and a quick resolution of the Ukrainian-Russian conflict, a list of principles of interaction between the European Union and the aggressor country has been formed, which is systematized in Figure 3.

Summarizing the principles of the interaction of the European Union with Russia in the conditions of the war in Ukraine makes it possible to single out certain features; in particular, it is worth noting the active support of the European Union for the principles of democracy and the desire for a peaceful resolution of the military conflict. At the same time, it stands to mention the introduction of a strict sanctions policy against the Russian Federation and the restriction of its access to international systems, as well as the intensification of activities related to the search for new formats for the establishment of diplomatic relations in the field of security.

It is obvious that ensuring peace and security is a priority direction in developing diplomatic relations between Ukraine and the European Union. With the aim of bringing Ukraine closer to the European community, a number of unprecedented decisions were made, as a result of which Ukraine, under a simplified procedure, has acquired the status of a candidate for membership in the European Union and received benefits and preferences in the field of financing basic and additional needs.

BASIC PRINCIPLES OF INTERACTION OF THE EUROPEAN UNION WITH RUSSIA

- Strengthening the activities of the European Union towards preventing Russia's attempts to create spheres of influence in Europe
- Confirmation of the solidarity of the European Union with Ukraine and other countries of Eastern Europe that cooperate with the European Union and are threatened by Russia by supporting the existing mechanisms for the peaceful settlement of conflicts
- Confirmation of the main provisions of the Helsinki Final Act and the Paris Charter regarding the implementation of the principles of ensuring and strengthening European security
- Intensification of the activities of the European Union regarding the convictions of Russia to proceed to the de-escalation of the conflict with Ukraine
- The requirements of the European Union to start negotiations and establish a dialogue between Russia and Ukraine
- Intensification of the restrictive measures of the European Union and partner countries against Russia as a response to military actions and armed aggression against Ukraine and to the destabilization of the situation in Europe
- Coordinating the capabilities of the European Union together with the United States and the North Atlantic Alliance in order to ensure peace and security on the continent
- Intensification of the activities of the European Union regarding the strengthening of sanctions against Russia

Figure 3. The basic principles of the interaction of the European Union with Russia in the conditions of increasing challenges and the danger of war in Ukraine.
Source: author's development.

Discussion

Scientific studies of diplomatic relations of Ukraine with the European Union in the field of security and in accordance with the candidacy are in the centre of attention of the scientific community, and the specifics of their development in the conditions of the war of the Russian Federation with Ukraine, at the moment, are not sufficiently covered and fully disclosed. It is obvious that the challenges, threats and dangers caused by Russia's military invasion have led to the destabilization of the security situation in the whole world and caused the need to review the existing approaches to ensuring international security. Staying of Ukraine in the so-called "grey zone" of international relations, in the role of a mediator between peace and war, causes additional obstacles for the rapid resolution of conflict situations, under which Russia turns into an aggressor country that terrorizes the whole world with its threats to use nuclear weapons, and the establishment of its own spheres of influence in Europe. Under such conditions, the following situation is observed: Ukraine is unable to independently resist the armed pressure of Russia and requires the help of highly developed countries in obtaining defensive weapons, forasmuch the acquisition of offensive weapons is limited by the principles of the functioning of the European Union and NATO. At the same time, it is worth recognizing that Ukraine's security depends significantly on the strengthening of European security, and in all its dimensions.

Undoubtedly, under the circumstances prevailing in Europe, the European Union has faced a crisis of the security system and the unreliability of the mechanisms for deterring military aggression. Taking into account the outlined tendencies, a number of challenges, threats and risks have been formed in the European community, leading to the deepening of security instability and causing the emergence of destabilizing factors, in particular as follows:

1) the presence of unresolved disagreements, conflict situations and frozen conflicts;
2) international rivalry for obtaining access to resources and control over logistics routes;
3) the danger of spreading weapons of mass destruction;
4) intensification of the development of regional separatism, terrorism, extremism, religious and ethnic confrontation.

The strengthening of the influence of the above-mentioned destabilizing factors, supplemented by the problems of armed aggression of Russia against Ukraine, requires the search for effective ways and methods of solving the crisis security situation in Europe in order to establish effective diplomatic relations in the field of security based on the principles of democracy, mutual respect and international cooperation.

Conclusions

Thus, the obtained results of the conducted studies of diplomatic relations of Ukraine with the European Union in the field of security and in accordance with the application make it possible to state that the issue of ensuring security on the European continent has become extremely acute and requires an immediate and balanced solution, which becomes possible by building an effective interstate diplomatic dialogue. It has been established that the diplomatic relations of Ukraine with the European Union in the field of security and in accordance with the candidacy are the main form of interstate support in accordance with the norms of international law and the practice of conducting international dialogue in the field of security and maintaining international peace. It is obvious that the diplomatic relations of Ukraine with the European Union in the field of security and in accordance with the candidacy in the conditions of 2022 are characterized as the cornerstone of the world system of interstate relations in the field of implementation of the international legal capacity and competence of states. It has been revealed that the Russian Federation considers Ukraine a sphere of its own influence and makes maximum efforts to establish control over it, using forcible methods. It has been proven that the diplomatic relations of Ukraine with the European Union are characterized by loyalty, efficiency and a high level of multilateral support for Ukraine, which is confirmed, in particular, by the highest volumes of financial assistance provided by the European Union and the unprecedented decision to grant Ukraine the status of a candidate for EU membership.

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A study of metonymy in compliments to the female gender in Russian youth speech (In comparison with Chinese youth speech materials)

К вопросу изучения метонимического переноса в комплиментах в адрес представительниц женского пола в речи российской молодёжи (в сопоставлении с материалами речи китайской молодёжи)

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Abstract

This article is devoted to metonymy in the lexical units of compliments to the female gender in youth speech of Russian. Metonymy, as one of the tropes, is an important means of semantic change and replenishing the lexical stock of youth speech. This paper collects complimentary expressions using metonymy in modern Russian youth speech, divided into 6 different lexical-semantic groups through component analysis. The purpose is to analyze the cognitive-semantic features of metonymy in Russian and compare its similarities with Chinese compliments for females in youth speech. As a result of the study, the following is shown: 1) metonymy, as a common means of semantic change, is widely used in youth speech; 2) metonymy of adjectives is more frequently used in compliments for females in youth speech based on the cause-and-result relationship between features of objects; 3) metonymization is closely related to extra-linguistic factors, in which reflected the aesthetic standards of youth for female; 4) the comparison with Chinese materials shows the similar metonymization of youth speech in two languages as well as differences in expressions, which reflects the connection of metonymy with the national, linguistic picture of the world.

Аннотация

Данная статья посвящена метонимии в лексических единицах комплиментов женскому полу в молодёжной речи российской молодёжи. Метонимия, будучи одним из тропов, является важным средствам семантического переноса, а также средствам пополнения лексического запаса молодёжной речи. В работе собраны комплиментарные выражения с употреблением метонимии в современной речи российской молодёжи, выделены 6 лексико-семантических групп посредством компонентного анализа в целях анализа когнитивно-семантических характеристик метонимии в молодёжной речи, а также сопоставляются сходные лексические единицы в речи китайской и российской молодёжи. В результате исследования выделено следующее: 1) метонимия в качестве одного из средств семантического переноса широко применяется в молодёжной речи; 2) в молодёжной речи чаще всего наблюдаются метонимия прилагательных на основе отношения признак – признак его каузатора / результата; 3) метонимический перенос тесным образом связан с внеязыковыми факторами, в котором отражается эстетическое восприятие молодого поколения; 4) сопоставление материалов китайского и русского языков показывает сходный механизм работы метонимии в двух языках, а также

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Keywords: compliments, youth speech, metonymy, female gender, Russian language.

различия в переносных выражениях, что отражает связь метонимии с национальной языковой картиной мира.

Ключевые слова: комплимент, молодёжная речь, метонимический перенос, женский пол, русский язык.

Introduction

As a common sociolinguistic phenomenon, compliments are extensively used in daily communications. The term 恭维语 (compliment) in Chinese corresponds to the Russian term *комплимент*. However, definitions of which in the two languages are slightly different: in Chinese, it is understood as “to ingratiate someone with laudatory expressions” (China Academy of Social Sciences, 2002); while in Russian, it means “polite, pleasant expressions, laudatory comments” (Ozhegov & Shvedova, 1996). There is a motivation difference between the two terms, despite which the laudatory and praiseful aspects of compliments are emphasized in Russian and Chinese languages. Therefore, this article generally comprehends compliments as words and expressions with positive, laudatory meanings.

In modern communication, compliments represent a basic conceptual category of speech activities with many similarities in different languages. Among all these similarities, gender characteristic is one of the most significant aspects that attracts many researchers' attention in recent years’ linguistic study. As J. Holmes mentioned (1988), women give and receive significantly more compliments than men.

In modern sociolinguistic theories, youth speech is interpreted as a variant of standard language, on the one hand, being under the influence of physiological and psychological characteristics of young people. However, on the other hand, it is affected by the rapid development of modern information technology and the multi-cultural atmosphere in the context of globalization. These factors lead to the distinctive features of youth speech – the chasing of catch words and unconventional expressions. Furthermore, compliments also play a significant role in youth speech as an important component of speech activities. Among these, complimentary expressions for the female gender count for a large proportion.

Metonymy is generally interpreted as a rhetorical device that consists of the regular or occasional transfer of an object from one class or a single object to the object of another class or another single object, associated with the given one by contiguity or involvement in the same situation (Iartseva, 1990). Metonymy is considered a basic model of polysemy in Russian linguistics (Shmelev, 1973; Novikov, 1982; Apresyan, 1995). As a kind of trope, metonymy is closely connected with lexical semantics and is an important means of forming neologism. As mentioned above, there is a large number of catchwords and unconventional expressions in youth speech. Among them, many are formed through metonymic transfer. It is an effective means of replenishing the lexical stock of youth speech.

Therefore, this paper collects words and phrases constituted by metonymic transfer in compliments for the female gender in modern youth speech of Russian. In this paper, we describe the cognitive-semantic characteristics of complimentary expressions of youth speech utilizing component analysis and divide materials into 6 lexical-semantic groups.

Language materials chosen for this article are mainly from the dictionary of Russian youth slang, jargon, and catchwords; and the dictionary of network buzzwords: Dictionary of popular and colloquial speech of the city Arkhangelsk, volume 2, part 2, youth jargon of Arkhangelsk (Morozova, 2019), Dictionary of youth slang (Zakharova, 2014), New Russian-Chinese Slang Dictionary (Ding, 2008), etc., complemented with electronic dictionaries and corpora.

In addition, the article also conducts dynamic collection from major youth user-oriented social media platforms to ensure the currency of the materials, mainly referring to the postings and statements of users on the platforms like Twitter and Vkontakte.

Theoretical Framework

Basic units of lexical-semantic descriptions

Speaking of component analysis, we must first introduce the basic concepts in describing lexical semantics. It is well known that the main unit of the lexical-semantic system is the word; as a combination of sign and meaning, it is a constituent part of the language system and a mapping of the real world. These two aspects are also reflected in the study of lexical meanings: lexical meanings are systematic, governed by paradigmatic and syntagmatic relations, and the influence of extra-linguistic factors must also be taken into account in the process of lexical meaning study.

In the context of structuralism, words are divided into morphemes, the smallest phonological-semantic combinations; accordingly, lexical meaning, as a complex object of semantic study, is also dismantled into basic units: the seme and the sememe. Sememe is the meaning of a lexeme, while seme is the smallest semantic component of a lexeme, which consists of sememe (Sun, 2015).

The understanding of lexeme is relatively nonconsensual, as V.V. Vinogradov (1938), in his early works, used the term lexeme to describe a system of forms that express the corresponding meaning, while the word as the smallest element of sentences, i.e., with a specific meaning and form in context. However, in his later works, the term "word" was used instead of the original lexeme. The term "word" was replaced by the lexical form of the word in order to maintain the unity of linguistic terminology (Vinogradov, 1938).

L. A. Novikov (1982) adopted another term – a lexical-semantic variant of the word, the basic constituent unit of the lexical-semantic system, which differs in lexical meaning between variants but has the same form. The lexical-semantic unit is a combination of form and meaning, and L. A. Novikov regards lexeme and sememe as the signifier and the signified of the lexical-semantic variant.

In addition, as mentioned above, words can be divided into morphemes, and different morphemes also have their meanings, called morpheme meanings. The relationship between seme, sememe, and morpheme meanings is close and complex. Seme, rather than a lexical component, is a linguistic-theoretical building block generalized to facilitate the depiction of semantic relationships among linguistic units (Zhang, 2011). A seme can be derived from comparing sememes, which correspond one-to-one to lexical-semantic units. At the same time, morpheme meanings correspond to morphemes, which do not necessarily manifest themselves in sememe.

Cognitive-semantic features of metonymy

In Russian linguistics, polysemy and metonymy are the semantic relations in language. They provide a convenient way of preserving information and linguistic economy, meaning one sign can mean many objects, properties, and phenomena (Krasina & Novikova, 2019). While modern cognitive linguistics views metonymy as a kind of salience in the same cognitive model (Lakoff, 1987; Taylor, 1995; Panther & Radden, 1999), replacing the object with its most obvious feature.

The Russian scholar E. V. Padoucheva in her study of dynamic analyses of lexical semantics (2004), argues that metonymic transfer is caused by shifting the focus from one participant of conceptual structure to another, raising the communicative rank of the former and lowering the rank of the latter. For example, verbs generally have two participants in their conceptual structure: agent and patient. In metonymic transfer, the focus of the word changes from the agent to the patient or vice versa, and the meaning of the word changes accordingly.

E. V. Rakhilina (2010) adds to E. V. Padoucheva that metonymic transfer includes a shift in the focus of lexical participants and a shift in the focus of the verb from process to result. For instance, "walked over a thousand hills" - "walked over", where "over" in the former emphasizes a process, and the latter emphasizes the result. The author believes that adjectives can also be metonymic transfer.

However, for adjectives, there is only one participant: the noun, so E. V. Rakhilina suggests that adjectives have implicit participants: participant of participant (part-whole relations, etc.) or spatio-temporal participant (Rakhilina, 2010).

Adjectival metaphors can be divided into the following.

1) Partial characteristics → overall characteristics
2) Individual characteristics → overall characteristics
3) characteristics → the time/place when / where it is implemented
4) characteristics → the causer or the result of the characteristics

5) characteristics → specific demonstration of the characteristics
6) Size → Distance

As noted above, the nature of metonymy is the semantic change resulting from a change of focus in the cognitive model from one participant to another. Described in rhetorical terms, it will be substituting a vehicle for a tenor. Based on the component analysis, collected materials can be divided into lexical-semantic groups, aggregating the same part of speech with common semis. By dividing the lexical-semantic groups, it is possible to observe the process of metonymic transfer based on a word with similar sememes, i.e., to analyze the substitution process of tenors based on similar vehicles.

The reason for not dividing materials based on the metonymical types that the scholars mentioned above in this paper already summarize is that it is difficult to present all types of metonymies limited by collected language materials.

Besides that, divided lexical-semantic groups allow for a better observation of the common types of metonymic transfer in youth speech, reflecting their cognitive-semantic characteristics.

According to the collected materials in this paper, six lexical-semantic groups were divided through component analysis, and their main composition is noun or adjective + noun phrase.

Results and Discussion

Table 1.
Lexical-semantic group "beautiful"

Russian	Literal translation	Interpretation
Крутая герла	cool girl	beautiful girl.
Сасная девушка	sassy girl	very pretty, seductive girl, from the English word "sassy" (saucy, confident).
няша / няшка / няшная	"meow" girl	beautiful and sexy girl. "Ня-" from the Japanese word for meow.
Няшная телка	"meow" heifers	a young, beautiful, and nice girl

(The table is made by the authors of this article)

In the lexical-semantic group, "beautiful" exist typical expression formed by metonymic transfer.

The Russian expression *крутая герла* ("cool girl") is used to describe the beautiful appearance of a young lady. The adjective *крутой* usually means "decisive, impressive" when describing a person. In the case of referring to a young lady, a metonymic transfer of the word can be observed in its semantic change: when used in compliment to a female, the focus of this word shifts from the "general impression" to the "feature of appearance", the seme [beautiful] is a cause of the original seme [impressive], in this word, there is a transfer from characteristics to the cause of this characteristics.

In the second example, the adjective *сасный* originally means "saucy, overbold", and is generally used to describe the "character trait" of a person. Furthermore, in some situations, it transferred to the meaning "confident", which is the opposite comment of similar behavior. When this word is used for female, from this sememe derived the sememe [pretty], [sexy]. In the process of semantic change, the focus is transferred from the "character trait" to "the feature of appearance", where the "beauty of appearance generally generates the "confidence". In other words, there is a transfer from the characteristics to the cause of these characteristics.

While the metonymic transfer in the third and fourth examples is slightly different from those mentioned above, the word няшный is formed based on metonymic transfer: its root morpheme ня- gets the meaning "meow" in the Japanese language. In the word-formation process, the focus transfers from the sound characteristics of a cat to its appearance features, from which derived the semes [cute], [soft], and [beautiful]. When this word is used for females, there is a metaphorical transfer based on metonymic transfer, which compared the appearance characteristics of a female with a cat, and the words няша/няшка/няшная got their sememes beautiful and sexy girl.

Furthermore, the phrase *няшная телка* is also based on both metonymic and metaphorical transfers. The word *телка* is metaphorically used to describe a young woman. While the word *няшная*, as mentioned above, is formed based on metonymic and metaphorical transfers, this complimentary expression is formed by complicated semantic transfer.

Table 2.
Lexical-semantic group "cute"

Russian	Literal translation	Interpretation
тян / тянка	chan	lovely girl, from the Japanese word "ちゃん," a suffix used to indicate intimate address, usually for younger subjects.
чика / чикса / чикуля	chick	lovely and beautiful girl.
цыпочка	little chicken	
малышка	kid	lovely girl.
малая	small	
крошка	crumbs	a very cute little girl.
Дюймовочка	Thumbelina	a cute and pretty little girl.

(The table is made by the authors of this article)

The Russian word *тянка* ("chan") consists of the root *тян-* and the suffix *-к* indicating feminine. The formation of this word is also based on metonymic transfer, where the focus of root morpheme *тян-* in this word is transferred from "the address of a younger person" to "age characteristics", highlighting the seme [young] of the object. In contrast, based on this, in Russian, this morpheme refers in particular to females, which transfers the focus from [age characteristics] to the "feature of appearance", from which derived the seme [cute]. That is a transfer from characteristics to the result of these characteristics.

Likewise, the words *чика*, *цыпочка*, and *малышка* have the same seme [young], which when referring to a female, the focus transfers from "age characteristics" to "feature of appearance", from which derived the seme [cute]. Moreover, based on metonymic transfer, the words *чика* and *цыпочка* are metaphorically used to describe females, comparing lovely young girl with "chick" and "little chicken". These examples also belong to the transfer from characteristics to the result of these characteristics.

While the examples *малая* (small), *крошка* (crumbs), and *Дюймовочка* (Thumbelina) have the same seme [small], which in these examples transfers the focus from "form characteristics" to the "features of appearance, visual feature", metonymically connecting the seme of [small] with [cute]. Furthermore, except for the metonymic transfer, the word *Дюймовочка* (Thumbelina) obtained its sememe "cute and pretty little girl" as well based on metaphorical transfer, which compared the female figure with a thumb.

Table 3.
Lexical-semantic group "sexy and charming"

Russian	Literal translation	Interpretation
Конкретный агрегат	fitting equipment	Sexy and charming girl. The literal meaning of the word *агрегат* is equipment or device.

(The table is made by the authors of this article)

In the lexical-semantic group "sexy and charming", the Russian word *конкретный агрегат* is used to describe the body shape of a woman: the original meaning of the word *агрегат* is the combination of several different types of machines or devices. At the same time, in this situation, it refers to "fitness equipment". Moreover, in this lexical-semantic group, this word obtains its sememe "sexy and charming girl". In the process of metonymic transfer, the focus of the situation "getting charming body shape through using fitness equipment" transfer from "equipment" to "the charming body shape", the two partitions of this situation are associated with the cause-and-result relationship.

In addition, the adjective *конкретный* in this phrase is also metonymically transferred. That is because the original meaning of *конкретный* is "specific", which is derived from the sememe "good, great, with high quality" in the youth discourse. Moreover, in the process of transferring, the focus of this word shifts from "behavioral features" (speaking specific words and doing specific things) to "evaluation". Therefore, it is also a transfer from characteristics to the result of this characteristic.

Table 4.
Lexical-semantic group "kind"

Russian	Literal translation	Interpretation
галабобер	a girl like a beaver	Very kind, animal-loving girl. In Russian, *Гала* is a common name for women; *бобер* means beaver.

(The table is made by the authors of this article)

An example in this lexical-semantic group clearly shows that the meaning of morphemes does not correspond to sememes. In Russian, the word *галабобер* is composed of the root morpheme *гала-* and *-бобер*. *Гала-* is a common name for a female, and the original meaning of the morpheme *-бобер* is a beaver. The sememe of this lexical-semantic variant is the combination of these two morphemes by metonymic transfer.

In particular, the root morpheme *гала-* derived its seme [women] by substituting the individual for the whole, *гала-* as a representative, standing for the whole group of females.

The root morpheme-*бобер* gained the seme [animal] through replacing the whole with the individual. In this example, as a result of focus transferring, the participant "person" of the situation, "a person who loves animals", takes the center position instead of the participant "animal", based on which the morpheme derived the semes [animal-loving person], [kind].

Furthermore, by the combination of the metonymically transferred meaning of morphemes, the word *галабобер* obtained its sememe "a girl, who is very kind, loves animals".

Table 5.
Lexical-semantic group "dressed in style"

Russian	Literal translation	Interpretation
хипстерша	hipster girl	very fashionable girl, with an iPad, Starbucks coffee, and skateboard.
продвинутая	advanced girl	the girl who knows about fashion very well.
элегантушка	elegant woman	gorgeously-dressed female

(The table is made by the authors of this article)

In the lexical-semantic group "dressed in style", the word *хипстерша* (hipster girl) is formed by metonymic transfer of its morphemes, in which including the root morpheme *хипстер-* (representative of the hipster subculture) and the suffix *-ш* used about women. The Russian word *хипстер* has come from the English word "hip" (hipster culture), which indicates the subculture that was born in the 1940s and 1950s in opposition to the mainstream culture and was well received among youth people in those days. In today's youth speech, its original meaning was derived from the semes [popular], [trend] by transferring the focus from the name of the subculture "hipster" to "the feature of this subculture". Based on this, it transferred the overall characteristics to the individual characteristics, using this word to describe the feature of its representative. The word *хипстерша* (hipster girl) is formed in the context of the massive popularity of the hippie culture and the young people's admiration for it.

While the second example in this group, *продвинутая* is derived from the verb *продвинуть* (move forward), which originally means "advanced, be in the forefront". In the process of semantic change, the focus transferred from the "feature of behavior (pursuit of the most modern and recently developed ideas)" to the "dress style (fashion)" of females, which belongs to the transfer of characteristics to the result of this characteristics.

Moreover, in the example *элегантушка*, the root morpheme *элегант-* (elegant) of this word derived the sememe [gorgeously dressed] also by focus transferring, which put the “dress style” in the center instead of the “qualities characteristics”. It is a transfer of characteristics to the cause of these characteristics.

Table 6.
Lexical-semantic group “excellent”

Russian	Literal translation	Interpretation
альфачка / альфа-самка	alpha girl	cool, confident, and beautiful women sought after by men. The word came from the initial of the Greek alphabet "α".
топовая тянка	top girl	the most beautiful, the best, the sweetest girl, from the English word “top”.

(The table is made by the authors of this article)

In the lexical-semantic group “excellent”, the Russian word *альфачка* (alpha girl) is formed by the root *альф-* and the suffix -*чк*, which refers to a person. The root morpheme *Альф-* is come from the initial of the Greek alphabet *α*, which obtained its seme [first] by transferring the focus from the name of this letter to the "feature of it", and from which gained the semes [excellent], [best]. On this basis, when using to female, the formed word means the best characteristics of a female, which include [cool], [confident], and [beauty].

When it comes to the phrase *топовая тянка*, the original meaning of the adjective *топовый* is top; in this example, it gained the seme [best] by metaphorical transfer. When it is used for female, the focus of this adjective transfer from the "overall characteristics" to the “appearance feature", highlighting the physical characteristics of female.

Above analyzed the metonymy transfer of complimentary expression in Russian youth speech, while in Chinese youth speech, there are similar transfers, so below is a comparative analysis in both languages.

In Chinese, the word *正妹*, which translates into "correct" sister, is used to describe a woman with good (correct) facial features and a beautiful appearance. The metonymization of the word *正* is the opposite of *крутой* in the example *крутая герла*, which is the transfer of characteristics to the result of this characteristic (the good facial features led to the pleasant external appearance).

In Chinese youth speech also metonymically associated “small” with “cute”, e.g., *小姐姐* (little sister), *小仙女* (little fairy), *小美女* (little beauty), etc. The brackets show the literal translations of these examples, which have the same meaning – cute girl, just like those examples in Russian: *тян*, *чика*, *цыпочка*, *малышка*, etc., also belongs to the transfer of characteristics to the results of these characteristics. However, it can be noted that unlike the Russian language, where mostly the two sememes of “small” – [young age] and [petite figure] are expressed separately (except for the example *малая*), in Chinese, they are more closely related. For instance, the word *тян* associated [young age] with [cute], while *крошка* [petite figure] with [cute]; while the word *小* of the example *小姐姐* can on the one side emphasizes [young age] of the cutie girl, on the other side – hers [petite figure].

In addition, Chinese youth speech prefers to associate “cute” with “soft”, e.g., *软萌* (soft and cute), *软妹* (soft sister), which are formed by metonymic transfer based on tactile metaphor. This process is similar to the example *няша/няшная* in Russian, but the order of metonymic and metaphorical transfer is slightly different. As mentioned above, the word *няша* is formed by metaphorical transfer based on metonymy. While in the two examples of Chinese youth speech compared the character of a person with an object that does not have sharp angles or hard edges, on this basis, the word *软* (soft) obtain the sememe [gentle] and [nice], which describe the feature of temper or personality. While in these two examples, the focus transfers from the "character feature" to "a whole feature of person”, transferring the characteristic to the results of this characteristic, giving this word a new sememe [cute]. Multiple semantic transfers form these examples in both Russian and Chinese. Though the vehicles of metaphors are different, they emphasize similar features of this vehicle and use these features to describe the overall character of a girl.

Analogous to *хипстерша* in the semantic group of “fashion” in Chinese youth speech, the word *洋气* (*foreign flavor*), where the word *洋* obtains its sememe [popular] by a similar semantic transfer. The original meaning of the word *洋* is wide water, such as *海洋*, which means ocean. While it has another sememe [foreign(country)], e. g.: *东洋*, which means orient foreign countries, and *西洋* – western foreign countries by metonymization – replace the names of other countries by their positional features (over the oceans). In the youth speech, the sememe [foreign] is further metonymically transferred to [popular], [novel], where “a whole characteristic of a region" is transferred to "the characteristic of an individual in this region”. In contrast, the example in Russian *хипстерша* transferred the focus from “a whole characteristic of a subculture” to “the characteristic of an individual, who represents this subculture”. Both belong to the transfer from overall characteristics to individual characteristics. Furthermore, these examples fully reflect the influence of the extra-linguistic factors: *хипстерша* (hipster girl) obtained its metonymic sememe [fashionable/trendy girl] in the context of the massive popularity of hippie culture among young people in the world. In contrast, the metonymic meaning of *洋气* (foreign flavor) is closely related to the low productivity of China in the first half of the 20th century.

Similar to the example *альфачка* (alpha girl) in Russian youth speech, in Chinese, the expression *超 A 的* (*super A*), which means “handsome, aggressive”, when used for female. The word "A" in this expression comes from the first Greek letter “alpha”. It obtains its sememe [first] from the postural characteristics of this letter. And then in youth speech, this sememe of this word metonymically transferred to the features of the human, female gender, which in Chinese obtain the sememes [leadership], [aggressive], [cool]; while in Russian – [cool], [self-confident], [beautiful]. Although the processes of semantic transfer in two languages are similar and the vehicles of two metonymies and metaphors are the same, it can be found that the transferred meanings are not the same in both languages. The Russian language emphasizes more on the characteristics of an outstanding female, while the Chinese language concentrates on highlighting their masculinities.

The above comparative analysis of the complimentary expressions for the female gender in Russian and Chinese youth speech leads to the followings:

In complimentary expressions of youth speech of both Chinese and Russian languages observed, lexical units with a metonymic transfer share a similar metonymization mainly manifested as the transfer from characteristics to the result of this characteristic and from overall characteristics to individual characteristics. It shows that metonymy, as a universal linguistic and cognitive phenomenon, is widely used in youth discourse.

In addition, a semantic transfer is a complicated process, usually not always completed by a single metonymic or metaphorical transfer but by combining the two. That can be proved by the examples of Russian and Chinese youth speeches.

As a variant of the standard language, youth speech, despite its willingness to be different, is based on standard language. Nation's linguistic, social, and historical factors subtly influence speech behavior. For example, the two sememes of *小* (small) in Chinese and the different expressions in Russian; and the extra-linguistic factors reflected behind the expressions *洋* (*foreign*) and *хипстерша* (hipster girl).

There are a lot of borrowed words in youth speeches of both languages, such as *сасный*, *хипстер* from the word *хипстерша*, *альфа* from the word *альфачка*, etc. Some semantic transfers happened in the original languages of these borrowed words. For example, "sassy" and "hip" of *сасный* and *хипстерша* already have the semems [beautiful] and [popular] in the English youth speech. At the same time, some words obtained their new sememesonly after they entered the new language. For instance, [cute] of the expression *тян / тянка* in Russian, unlike Japanese, which only means a gentle address; and “alfa” in expressions *超 A 的* and *альфачка* in two languages obtained different sememes.

Conclusions

With the discussion and analysis above, the followings are observed:

1) Metonymy, as an important means of replenishing the lexical stock, has many applications in youth speech. Metonymic transfer in complimentary expressions for female gender of Russian youth speech is mainly formed by adjectives, with a small number of nouns.
2) In the adjective metonymy, the most common mode is “transfer of the characteristic to the result or cause of this characteristic”, occurring through the causal

connection between the metonymy's vehicle and the tenor. Besides that, the metonymic transfer in the word-formation process can be observed, where most use the object to replace the feature of itself, giving the morpheme the adjective meaning to describe the female gender.

3) The process of metonymical derivation is closely connected with extra-linguistic factors and reflects the female aesthetics of youth; we can see many qualities of the female gender are highlighted in the metonymization of these examples. Such as the “beautiful and confident” in *сасный*, the “young” and “diminutive figure” in *крошка* and *чика* and other examples, and the “charming body line” in the example *конкретный агрегат*, etc.
4) It can be noted that a large part of the compliments for the female gender in Russian youth speech is oriented towards their appearance, emphasizing their beauty, sexiness, or loveliness; a small part of the compliments is directed at women's clothing. Even the most common positive expressions *альфа*- and *топовой*, which do not have a specific object of compliment, in complimentary expressions for the female gender emphasize women's physical appearance. That is a result of the traditional female aesthetic, where women's appearance is always the object of compliments, and women are used to complimenting each other's appearance (Coates, 1994).
5) In the complimentary expressions in youth speech also reflect a subtle change in the Russian youth's aesthetics of the female gender, emphasizing their self-confidence and courage to pursue fashion, such as *сасная*, *хипстерша*, *альфачка*, etc. Of course, there are other expressions, but this article is limited to analyzing the lexical units with a metonymic transfer, which presents just a part of the complimentary expressions in youth speech.

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Polyvariance of vector formation of sustainable development of metallurgical enterprises

Поліваріантність формування вектору стійкого розвитку металургійних підприємств

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Abstract

The article establishes that the formation of the vector of sustainable development of metallurgical enterprises should be based on the use of such methodological approaches as systems analysis and program-target approach; on a combination of methods of economic diagnostics (method of expert assessment, method of economic and mathematical modeling, methods of multifactor and trend analysis). The polyvariance of the process of forming a system of indicators, which is the basis for calculating the integrated indicator of the vector of sustainable development, ensures taking into account the state and trends of changes in technical-technological, economic-environmental, and social components of the industrial enterprise. To solve this scientific problem, the stages of polyvariate formation of the vector of sustainable development of metallurgical enterprises are developed, which are based on the established basic principles; actualization of the vector of sustainable development is happening in accordance with the state of technical-technological, economic-

Аннотація

У статті встановлено, що формування вектору стійкого розвитку металургійних підприємств повинно ґрунтуватись на використанні таких методологічних підходів, як системний аналіз та програмно-цільовий підхід; на комбінації методів економічної діагностики (методу експертного оцінювання, методу економіко-математичного моделювання, методів багатофакторного та трендового аналізу). Поліваріантність процесу формування системи індикаторів, що покладено в основу розрахунку інтегрального показника вектору стійкого розвитку, забезпечує врахування стану та тенденції змін техніко-технологічної, економіко-екологічної та соціальної компонент діяльності промислового підприємства. Для вирішення цього наукового завдання розроблено етапи поліваріантного формування вектору стійкого розвитку металургійних підприємства, які ґрунтуються на встановлених базових принципах; актуалізація вектору стійкого розвитку відбувається у відповідності до стану техніко-технологічної, економіко-екологічної та соціальної складових та

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environmental and social components and takes into account the modes of operation of the metallurgical enterprise, corresponding to the actual level of the integrated indicator.

Keywords: polyvariance, the vector of sustainable development, indicators, the integrated indicator, environment-friendly production processes.

враховує режими функціонування металургійного підприємства, що відповідають фактичному рівню інтегрального показника.

Ключові слова: поліваріантність, вектор стійкого розвитку, індикатори, інтегральний показник, екологічність виробництва.

Introduction

Studies of the state of the domestic metallurgical industry clearly show that the negative consequences that occur in the enterprises of the metallurgical industry are the result of an imbalance in the management mechanism of the entire mining and metallurgical complex of Ukraine. The key features of the unbalanced mechanism are systemic technical-technological, economic-environmental, and social destructive phenomena in enterprises that are strategic producers of metal products.

The solution to the scientific problem of developing the vector of sustainable development of metallurgical enterprises is proposed by using the advantages of methodological approaches at the same time, namely a program-targeted approach to developing and adjusting the program of actions to achieve the goal of the enterprise and methodologies of system analysis in terms of using methods of economic diagnostics, in particular methods of expert evaluation, economic and mathematical modeling, multifactor and trend analysis. The analytical basis for providing a polyvariate approach to the formation of the vector of sustainable development of metallurgical enterprises is the calculation of a system of indicators of evaluation and integrated indicators, which are focused on dynamics of change and development of preventive measures in all functional areas of metallurgical enterprise, including technical-technological, economic-environmental, and social components of the enterprise as a complex socio-economic system.

As the results of research, the stages of polyvariate formation of the vector of sustainable development of metallurgical enterprises have been proposed. Under conditions of uncertainty, they provide an opportunity to update indicators of assessment of technical-technological, economic-environmental, and social levels of activity of metallurgical enterprise on the basis of retrospective analysis of achieved results by individual indicators and by establishing cause and effect relationships between the absolute and relative indicators of financial statements.

Based on the results of practical testing of the integrated indicator of sustainable development of the metallurgical enterprise, the basic principles are substantiated, compliance with which is mandatory in the modeling of processes and phenomena and the formation of multiple linear regression models for analysis, planning, and forecasting.

Theoretical Framework or Literature Review

The Decree of the President of Ukraine No. 722/2019 of 30.09.2019 approved the Sustainable Development Goals of Ukraine until 2030, which, in particular, includes several goals that complement each other, focused on the formation of a vector of sustainable development of enterprises and highlight problems that need to be addressed immediately on the way to sustainable development of the economy, civil society and the state as a whole. Those goals are: promotion the sustainable, inclusive, and sustainable economic growth, full and productive employment, and decent work for all; creating sustainable infrastructure, promoting inclusive and sustainable industrialization and innovation; ensuring the transition to rational models of consumption and production; ensuring openness, security, viability and environmental sustainability of cities and other settlements.

At the beginning of the last century, at the first International Conference for Nature Conservation, held in Bern in November 1913, stressed the urgent need to implement global nature conservation through interrelated activities at the national and international levels (Sarazen, 1913). This thesis later became the basis for the formation of an international approach to environmental security as part of the overall security of the country, in particular at the UN Conference on Environmental problems (Stockholm, 1972), the Second UN Conference on Environmental problems and Development called "Earth Summit" (Rio de

Janeiro, Brazil, 1992) and others. Of particular importance in this area was the UNESCO General Conference on October 16, 2003, which recognized the Charter of the Earth. The Charter has defined the fundamental principles of a just, sustainable, and peaceful global society in the XXI century. It has emphasized the interdependence of the world, the mutual responsibility of all, both to each other and all living and future generations (Landveld, 2012).

Following the UN Conference on Sustainable Development (Rio + 20; Brazil, Rio de Janeiro, June 2012), the final document "The Future We Want" was adopted. It's reaffirming the course set at the World Summit on Balanced Development in 2002 for sustainable development and for ensuring the construction of an economically, socially, and environmentally balanced future for the planet, for present and future generations (Landveld, 2012).

The 70th-anniversary session of the UN General Assembly (September 2015) in New York (USA) hosted the Summit on Sustainable Development, which set a global course for sustainable development and building an economically, socially, and environmentally balanced future for planets, as well as the rule of life and management in every country in the world: "it is economically advantageous to be environment-friendly" (Outcome Documents, 2015).

This historical digression into human awareness of the environmental dangers of its activities illustrates the steps taken by the international community to come to the final conclusion that the main vector of world development in the near and long term should be the combination of environmental and economic goals. In turn, against the background of the merging of resource, environmental and economic threats, it is necessary to ensure efficient, sustainable, and environment-friendly regimes for the functioning of material industries in general and industrial enterprises as major polluters in particular.

The sustainable development of metallurgical enterprises is considered in the context of the relationship of technical and technological (production), economic-environmental and social components. In this context, the polysemy category of "economic-environmental security" formulated by Afonov R.P. (2020) in relation to the metallurgical enterprise, draws attention, namely: it is a dynamic state of resources…, which is characterized by the stability of its economic interests; transparency, and efficiency of results due to the process of continuous improvement of technical and technological potential through the implementation of corporate missions and strategies, which, ultimately, ensures its sustainable development in external and internal threats with mandatory compliance with the principle of environmental conditionality of production. We believe that taking into account the provisions of the Strategy of Environmental Security and Climate Change Adaptation for the period up to 2030 approved by the Cabinet of Ministers of Ukraine, which was designed to ensure compliance with regulations such as the Law of Ukraine "On ratification of the UN Framework Convention on Climate Change"; the Law of Ukraine "On Ratification of the Association Agreement between Ukraine, on the one hand, and the European Union, the European Atomic Energy Community, and their Member States, on the other hand"; the Law of Ukraine "On Ratification of the Paris Agreement" (Resolution of the Cabinet of Ministers of Ukraine no. 218, 2021) (6), etc., it is necessary at the legislative level and in scientific schools to gradually abandon the term economic security, at least when assessing the security of industrial enterprises, replacing it with complex phrases technical-technological and economic-environmental security. After all, now the economic goals and tasks, both at the enterprise level and the state level had to be environment-friendly; moreover, today we are talking about the greening of all spheres of human activity in society.

The process of globalization of the economy requires consideration of sustainable development of metallurgical enterprises in combination with technical-technological, economic-environmental, and social issues. Following this direction is especially important for Ukraine due to the presence of many factors, the impact of which is destructive on the development of the industry and the national economy as a whole, namely:

export-oriented metallurgical enterprises and their dependence on foreign markets;
extremely high level of depreciation of the active part of fixed assets (both physical and moral);
material consumption and energy consumption of production;
unsatisfactory brand and size range of metal products;
pollution of the natural environment by emissions into the atmosphere and discharges into water bodies;
irrational use of basic natural resources and their depletion;

lack of sufficient infrastructure and effective waste management system, which leads to the mass formation of unauthorized landfills and numerous violations of the Law of Ukraine "On Waste" and other regulations; lack of an effective system of state supervision (control) in the field of environmental protection, etc. (Resolution of the Cabinet of Ministers of Ukraine no. 218, 2021).

reduction of the number of the employed population in the industry from 3236.7 thousand people in 2012 to 2358.6 thousand people in 2020 (Voronko-Nevidnycha, et al., 2021; Voronko-Nevidnycha & Sirenko, 2020).

It should be noted that the domestic metallurgical industry is one of the largest polluters of the environment in the country due to the use of mostly obsolete and low-efficiency technologies. As for the methods of steel production, three methods are used in Ukraine: open-hearth; oxygen-converter; production of electric steel. Moreover, if we talk about the open-hearth method, as obsolete and most harmful to the environment, energy-intensive and dangerous compared to others, then, according to the world organization World Steel Association, our country is the undisputed world "leader" in this regard (Voronkova & Metelenko, 2020). The presence of uncertainty in the economic activity of domestic metallurgical enterprises significantly complicates the process of selecting optimal solutions and can lead to unpredictable results. Regarding the peculiarities of enterprise management, their detailed standardization is given, in particular, in Section II of the Commercial Code of Ukraine No. 436-IV of, 2003. However, the Commercial Code of Ukraine does not regulate such defining guidelines for the functioning of the business entity as the mission and strategy of the enterprise, which are mandatory prerequisites for the formation of a vector of sustainable development.

The methodological basis for the polyvariant formation of the vector of sustainable development of metallurgical enterprises is the use of both systematic analysis (in the formalization of complex structures) and a program-targeted approach, which provides the ability to reveal the integrity of the object and its mechanisms; identifying the types of internal and external relations and bringing them into a single theoretical picture; development and adjustment of the program of actions in the interests of achievement of the purpose (formation of a vector of sustainable development) by the decision of triune scientific task in a subsystem of technical and technological, economic-environmental and social components; standardization of the system of legislative, normative-legal and sub-normative acts of regulation of activity of industrial enterprises of the metallurgical branch taking into account interests of the state and business interests of subjects of managing.

The application of economic diagnostics as a system of target analysis in conditions of uncertainty using the methods of expert assessments, economic and mathematical modeling, multifactor and trend analysis using indicators of evaluation and calculation of integrated indicators, focused on developing preventive measures in all functional areas of metallurgical enterprise, in particular in the technical-technological, economic-environmental and social components of the enterprise as a complex social and economic system.

The application of the program-target approach is accompanied by the use of the method of expert evaluation, which is acceptable and objectively necessary in the formation of the vector of sustainable development of the enterprise. System analysis in this case allows not only a new approach to solving many pressing problems of polyvariate formation of the vector of sustainable development of metallurgical enterprises but also to explore specific actions, situations, and goals in combination with established and measured factors of influence; to structure new models of estimation taking into account influence on them of branch and organizational structure, features of production technology, processes of "aging" of manufacture, limited access to resources, etc. Domestic scientists (Zaloznova, 2018; Kindzersky, 2016; Mazur, 2016) assess the current state of the industry as a state of deep deindustrialization; they note that in a quarter of a century of economic transformations Ukraine has dropped out of the top ten industrialized countries and has now become the poorest country in Europe with deindustrialized production and that the current spontaneous, unjustified and unregulated industrial policy of Ukraine has resulted in deindustrialization.

Thus, in general, we can conclude that domestic research on the sustainable functioning of industrial enterprises (Hroznyi, et al., 2019; Tarasova, et al., 2020; Voronkova & Metelenko, 2020) covers certain areas of activity, but does not focus on the most important components, which today play a crucial role in shaping prospects for both domestic and international metal markets. Analytical evaluations are mostly carried out by calculating indicators or integrating them without building a system of actions that takes into account the integral relationship of the components of technical-technological, economic-environmental, and social systems.

Therefore, there is a need to develop stages of polyvariate formation of the vector of sustainable development of the metallurgical enterprise, which must meet such requirements:

be based on the joint application of systems analysis and program-targeted approach to the identification of factors and conditions for the formation of the vector of sustainable development of metallurgical enterprises;
apply the methodology of economic diagnostics (using the methods of expert assessments, economic and mathematical modeling, multifactor and trend analysis) for developing and adjusting the program of action in the interests of achieving the goals of the enterprise;
to ensure the polyvariate process of forming a system of indicators (including integrated indicators), which takes into account the relationship of such components (areas) of the enterprise as technical and technological, economic, environmental, and social;
take into account the dynamics of changes in all components (areas) of the industrial enterprise and adapt to changing environmental conditions without significant losses for the enterprise as a complex socio-economic system.

Methodology

The sequence of stages of polyvariate formation of the vector of sustainable development of metallurgical enterprises in conditions of uncertainty of the external environment is shown in Figure 1.

The scheme was developed by the authors of the article.

The system of indicators and their updating is formed on the basis of using the calculation method set out in the "Guidelines for identifying signs of insolvency of the enterprise and signs of actions to conceal bankruptcy, fictitious bankruptcy or bankruptcy" (The Order of the Ministry of Economy of Ukraine No. 14, 2006).

The updating of indicators for assessing the technical-technological, economic-environmental and social levels of the metallurgical enterprise is based on a retrospective analysis of the results achieved by individual indicators and by establishing causal links between absolute and relative indicators of financial statements.

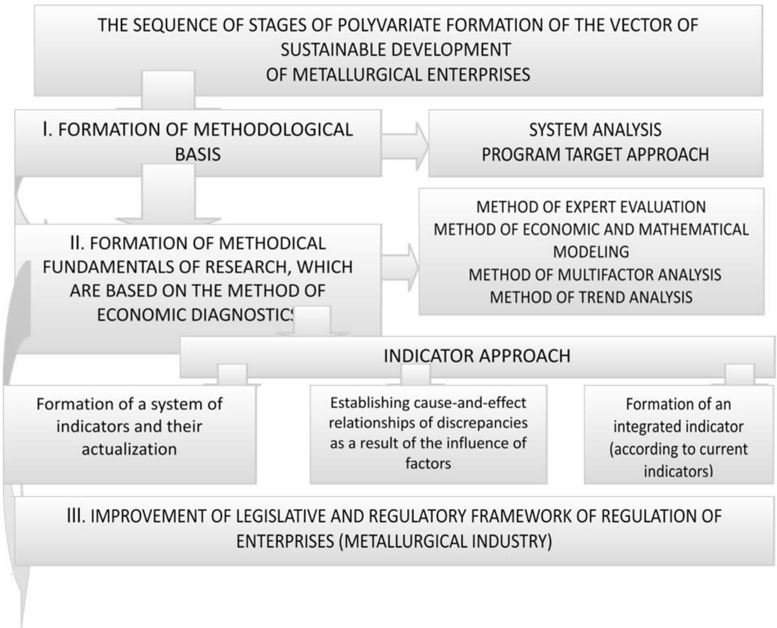

Figure1. Stages of polyvariate formation of the vector of sustainable development of metallurgical enterprises in conditions of uncertainty.

For the formation of an integrated indicator, it is necessary to use the method of economic and mathematical modeling (in particular, regression analysis), multifactor analysis, which allows measuring the dependence on the operating conditions of the enterprise; aimed at streamlining, regular location and combination in space and time of all constituent elements involved in the calculation. Considering that any multivariable function can be reduced to a linear form by logarithmic or substituting variables, then in practice the multiple regression equation is given in a linear form (Orekhov, et al., 2004):

$$\hat{Y} = a_0 + a_1 X_1 + a_2 X_2 + \cdots + a_n X_n \qquad (1)$$

where $a_0, a_1, \ldots, a_n$– parameters of the equation, which should to be determined.

If for each factor, in particular the resultant feature, *n* values are known $, X_{1i}, X_{2i}, \ldots, X_{ni}, i = 1, 2, \ldots, m,$ then by using the standard procedure of the least-squares method, to estimate the parameters of the regression equation, we obtain a system of linear algebraic equations.

$$\{a_0 m + a_1 \sum_{j=1}^{m} x_{1j} + a_2 \sum_{j=1}^{m} x_{2j} + \cdots + a_n \sum_{j=1}^{m} x_{nj}$$
$$= \sum_{j=1}^{m} y_j;\ a_0 \sum_{j=1}^{m} x_{1j} + a_1 \sum_{j=1}^{m} x_{1j}^2 + a_2 \sum_{j=1}^{m} x_{1j} x_{2j} + \cdots + a_n \sum_{j=1}^{m} x_{1j} x_{nj} \qquad (2)$$
$$= \sum_{j=1}^{m} x_{1j} y_j \ \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots .$$
$$+ a_1 \sum_{j=1}^{m} x_{nj} x_{1j} + a_2 \sum_{j=1}^{m} x_{nj} x_{2j} + \cdots + a_n \sum_{j=1}^{m} x_{nj}^2 = \sum_{j=1}^{m} x_{nj} y_i$$

The obtained system of *n+1* equations with *n+1* unknowns $a_0, a_1, \ldots, a_n$ can be solved by linear algebra methods. For a large number of equations, it is best to use the Gaussian method with the choice of the main element. Since the matrix of this system of linear algebraic equations is symmetric, its solution always exists, and the only one. If the number of equations is small, then the inverse matrix method can be successfully used to solve the problem.

To verify the adequacy of the obtained model, it is necessary to perform several consecutive actions, namely to calculate the residuals of the model, i.e., the discrepancy between the observed and calculated values; relative error of residues and its average value; the RMS error of the dispersion perturbation; coefficient of determination; multiple correlation coefficient R, which is the main indicator of the correlation density of the generalized indicator with factors:

$$R = \sqrt{1 - \frac{\sum_{i=1}^{m} (y_i - \hat{y}_i)^2}{\sum_{i=1}^{m} (y_i - \underline{y})^2}}. \qquad (3)$$

If the value of *R* is close to 1, then the relationship between the indicator and the factors is considered dense. The multiple correlation coefficient *R* is the main characteristic of the closeness of the relationship between the resultant trait and the set of factor traits. Note that the correlation coefficient is applicable when the regression equation is a linear function. In the case of a nonlinear regression function, the concept of correlation ratio is introduced. This ratio is defined by a similar equation but characterizes the degree of approximation of the regression equation to the observation data. In some cases, during the examination of multifactorial processes, it is advisable to pre-examine the degree of relationship between individual factors in pairs. If all pairwise connections are close to linear on average, then there is every reason to assume that the multiple connections will be linear. Paired correlation coefficients are used to determine the density of the relationship between two of the examined factors (excluding their interaction with other variables). The method of calculating these coefficients and their interpretation is similar to the method of calculating the linear correlation coefficient for the case of a one-factor connection.

With help of the outlined procedure of multifactor regression analysis, the prediction of changes in the simulated process (phenomenon) as a result of changes in one or more factors (indicators and their components) is carried out and the new vector of sustainable development of the metallurgical enterprise is formed, i.e. the process of polyvariant, which is based on the identification of technical and technological, economic-environmental and social levels of the metallurgical enterprise is ensured.

Thus, for building an integrated indicator in order to form one of the options for the vector of sustainable development of the metallurgical enterprise, we have selected such relevant indicators that are included in the list of indicators (The Order of the Ministry of Economy of Ukraine No. 14, 2006) and reflect (directly or indirectly) processes occurring in technical-technological, economic-environmental and social spheres of activities of the industrial enterprise:

k_1– the share of fixed assets in the assets of the enterprise;
k_2– maneuverability of own current assets;
$k_3 k_3$ – coverage ratio;
$k_4 k_4$– the share of current assets in assets;
k_5– the financial autonomy ratio;
k_6– long-term investment structure ratio;
k_7 – fixed-asset turnover;
k_8– equity turnover;
k_9 – Beaver's ratio;
k_{10} -k_{10} –return on equity.

Based on the calculations of the actual level of current indicators of economic activity of the metallurgical enterprise in accordance with the Methodology (The Order of the Ministry of Economy of Ukraine No. 14, 2006), as well as the formation of multiple linear regression functions, the calculation of the integrated indicator of sustainable development vector of the metallurgical enterprise is carried out. The algorithm for determining the integrated indicator is based on the calculation of indicators k_1–k_{10}, the density of the relationship between which and the significant impact on the performance indicator has been proven experimentally. Each indicator characterizes a particular aspect of the economic activity of the metallurgical enterprise and reflects the (direct or indirect) impact on the level of the integrated indicator. Standardization of selected indicators is carried out by dividing the actual indicators by the standard value, and the integrated indicator is determined as follows:

$$I_{fs} = \sum_{i=1}^{n} \frac{k_i^{fact}}{k_i^{st}} * \omega_i \tag{4}$$

where k_i^{fact}– the actual value of the current indicator from the list of selected indicators;
k_i^{st}– the standard value of the current indicator (recommended experimentally, in accordance with modern conditions of operation of the metallurgical enterprise);
k_i^{st}□$_i$–weight (significance) of the current indicator.

The aggregation of features into one integral assessment is based on the so-called "additive value theory" according to which the value of the whole is equal to the sum of the values of its components (Grabovetsky, 2009). The integrated indicator varies within the limits of change of modes of functioning of the metallurgical enterprise are shown in Table 1.

Table 1.
Modes of functioning of the metallurgical enterprise in accordance with the actual level of the integrated indicator of the vector of sustainable development

The level of the integrated indicator	The limits of the indicator	The mode of functioning of the enterprise
Unsatisfactory (critical, low)	0,00 – 0,30	Systemic signs of crisis phenomena in the technical-technological, economic-environmental and social spheres for a long period. Unprofitable activities for a long time. Lack of own financial sources to ensure current activities.
Satisfactory (allowable)	0,30 – 0,50	Periodic crises in the technical-technological, economic-environmental and social spheres (loss of qualified personnel, loss of markets, pollution of the environment, lack of resources to upgrade equipment and technologies, etc.)
Satisfactory (sufficient)	0,50 – 0,70	Sustainable functioning in the technical-technological, economic-environmental and social spheres throughout the year. Positive changes in volume economic indicators (volumes of activity in-kind). Sufficient level of competitiveness of products and an enterprise in the market. Profitable activities at all levels of profit. Periodical processes of investing in fixed assets, technology, personnel.
Normal	0,70 – 0,90	Sustainable functioning in the technical-technological, economic-environmental and social spheres for three years. Stable positive dynamics of increasing the volume of economic activity. Increasing the level of competitiveness of products and enterprises as a whole in the market of goods and services. Periodical implementation of investment and innovation projects at the expense of own sources of financing.
Optimal	0,90 – 1,00	Sustainable functioning in the technical-technological, economic-environmental and social spheres for five years. Stable positive dynamics of annual growth of economic activity. High level of competitiveness of products and enterprises in general in the market of goods and services. Investment activity of the enterprise and their financing from their sources (net profit). Investing in staff development. Update of technologies in the direction of the realization of the principle of the greening of production.

Source: own research

Thus, we have developed stages of polyvariate formation of the vector of sustainable development of metallurgical enterprises, which, among other things, include the construction of multiple linear regression functions, which allows for organically combination qualitative and quantitative factors, the relationship between which has been proven experimentally; take into account the modes of functioning of the metallurgical enterprise, which are differentiated according to the currently achieved level of the integrated indicator, that was calculated based on current assessment indicators.

Result and Discussion

The practical approbation of the developed integrated indicator was carried out at the metallurgical enterprise of the Zaporizhzhia region PJSC MK "Zaporizhstal". It was established that in 2018 and 2019 the level of the integrated indicator is characterized as "normal"; in 2019 and 2020 - as "satisfactory", i.e., during 2020 - 2021 the vector of sustainable development of the metallurgical enterprise has a negative trend are shown in Table 2.

Table 2
The integrated indicator of the vector of sustainable development of the metallurgical enterprise

Name of the enterprise / research period	01.01.2018	01.01.2019	01.01.2020	01.01.2021
PJSC MK "Zaporizhstal"	0,86	0,89	0,59	0,52

Source: own research

Polyvariance of the proposed approach to the formation of the vector of sustainable development of metallurgical enterprises is the diversity of logical selection, combining relevant indicators and forming on their basis multiple linear regression models for analysis, planning, and forecasting. In general, modeling is a scientifically based method that evaluates almost all the characteristics of complex systems used for the development and implementation of management decisions (Petrenko, 2010). For solving each of the problems, as scientists say, «you need to build your own mathematical model of the process or phenomenon, which would take into account their» (Stepanyshyn & Tysovsky, 2012). The proposed stages of the polyvariate formation of the vector of sustainable development of metallurgical enterprises, which is updated taking into account the state of technical-technological, economic-environmental, and social components, have provided an opportunity to formulate basic principles that are mandatory for the sustainable development of metallurgical enterprises:

– the principle of scientific validity (combination on the basis of scientific research the ecological and economic interests of society, which provide real guarantees of human rights to safety, health, and favorable living environment; determination of optimal costs to ensure natural and anthropogenic and ecological safety and environmental protection from various sources);
– the principle of economic responsibility (consists in obligatory compensation by nature users of damages caused to the environment, human health, and property of individuals and legal entities as a result of man-made and environmental offenses);
– the principle of complexity (systematic, comprehensive coverage of the situation), which contributes to the multi-purpose use of resources, the development of low- and zero-waste production, processing of raw materials;
– the principle of economic calculation (requires a link between the greening of production and its economic efficiency and profitability), which is fundamental in the formation of the management system of the production sphere in general, as it meets the interests of economic entities and society as a whole;
– the principle of payment for the use of natural resources (aimed at solving important social, economic, and environmental problems of increasing interest in efficient nature management, the formation of additional financial sources for the reproduction of limited environmental resources);
– the principle of the greening of production, which provides for a gradual transition to environment-friendly technologies in order to reduce the level of man-made load on the environment.

We also insist that the sustainable functioning and development of industrial enterprises in Ukraine should take place in accordance with the approved state program on the cooperation of public authorities and self-government with owners of metallurgical enterprises with the mandatory involvement of recognized domestic scientific experts in this field. It is necessary to develop a comprehensive "road map" for the development and modernization of each individual metallurgical enterprise due to the importance of their impact on the prospects of Sustainable Development of Ukraine. In our opinion, the program should provide for large-scale modernization and renewal of metallurgical production, reduction of harmful effects on the environment, real regulatory measures (financial and credit, price, tax regulation, etc.) that would stimulate enterprises to both production and to social responsibility.

Conclusions

It is established that the peculiarity of research on the sustainability functioning of industrial enterprises is the lack of focus on the most important areas - technical-technological, economic-environmental and social, which further hinders the process of building an orderly system of actions aimed at forming an adequate vector of their sustainable development. The development of the vector of sustainable development is based on the joint application of systems analysis and a program-targeted approach to the identification of factors and conditions of formation; applies the method of economic diagnostics to develop and adjust the program of action in the interests of achieving the goal of the enterprise; provides a polyvariate process of forming a system of indicators and takes into account the dynamics of changes in all components (areas) of the industrial enterprise, adapting to changing environmental conditions.

The sequence of stages of polyvariate formation of the vector of sustainable development of metallurgical enterprises allows measuring the impact of qualitative and quantitative factors on the effective indicators of assessing the level of sustainable development of the enterprise in accordance with the modes of the function of the metallurgical enterprise, differentiation of which corresponds to the actual level of the integrated indicator, calculated based on current evaluation indicators.

The principles that are mandatory for sustainable development of metallurgical enterprises, in particular for PJSC MK "Zaporizhstal" and the need to develop a comprehensive "road map" for the development and modernization of each metallurgical enterprise due to the importance of their impact on the perspective of sustainable development of Ukraine as a whole have been practically proved and substantiated.

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European practices of inclusive education (experience for Ukraine)

Prácticas europeas de educación inclusiva (experiencia para Ucrania)

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Abstract

In the era of globalization, there is a process of democratization and openness of society. The value of human beings, their dignity, and their lives are being redefined and given new meaning. Race, gender, gender, social stratum, physical and mental capabilities are no longer “criteria” for being in society. Everyone has the right to exercise his or her rights. Everyone has the right to education, medicine, life, etc. Ukraine is gradually moving towards Europe and over the past five years has been actively implementing a program of inclusive education. Inclusive education is a system of educational activities aimed at overcoming discrimination and exclusion of students with physical and psychological disabilities. This system of education has become in opposition to the boarding school system, where students are cut off from society. For five years, Ukraine has been actively creating inclusive classes and introducing various teaching methods. We can consider Europe as an example as a defender of democracy and human dignity. Therefore, the purpose of our work is to study the European

Resumen

En la era de la globalización hay un proceso de democratización y apertura de la sociedad. El valor del ser humano, su dignidad y su vida se están redefiniendo y adquiriendo un nuevo significado. La raza, el género, el estrato social, las capacidades físicas y mentales ya no son “criterios” para estar en la sociedad. Todos tienen derecho a ejercer sus derechos. Todo el mundo tiene derecho a la educación, la medicina, la vida, etc. Ucrania se acerca poco a poco a Europa y en los últimos cinco años ha aplicado activamente un programa de educación inclusiva. La educación inclusiva es un sistema de actividades educativas destinado a superar la discriminación y la exclusión de los alumnos con discapacidades físicas y psíquicas. Este sistema de educación se opone al sistema de internado, en el que los alumnos están aislados de la sociedad. Desde hace cinco años, Ucrania está creando activamente clases inclusivas e introduciendo diversos métodos de enseñanza. Podemos considerar a Europa como un ejemplo de defensa de la democracia y la dignidad humana. Por lo tanto, el objetivo de nuestro trabajo es estudiar las prácticas europeas de educación

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practices of inclusive education in Ukraine. For the purpose we used the following methods: observation (throughout the study), interviews with all subjects of the learning process, inductive method, testing to check knowledge. Since the essence of inclusive education is not only the acquisition of knowledge but also comfortable growth in society, we want to pay special attention to this aspect. The results of the study showed that a special role is played by individual development of tasks for students, allowing to involve children even with psychophysiological problems. Also, a special role is played by parents and a teacher's assistant (for example, in Italy), the game form of learning, the change of activities after 10-20 minutes, group work, etc. The novelty of the study lies precisely in the analysis of the implementation and evaluation of European practices in Ukraine. The results of the study can be used in adjusting educational programs of inclusive education, communication of all subjects of training and for their qualitative implementation, as well as acquiring the importance of the role of assistant teacher.

Key words: inclusive education, inclusive pedagogy, pedagogy, training, education**.**

inclusiva en Ucrania. Para ello utilizamos los siguientes métodos: observación (durante todo el estudio), entrevistas con todos los sujetos del proceso de aprendizaje, método inductivo, pruebas para comprobar los conocimientos. Dado que la esencia de la educación inclusiva no es sólo la adquisición de conocimientos, sino también el crecimiento confortable en la sociedad, queremos prestar especial atención a este aspecto. Los resultados del estudio mostraron que el desarrollo individual de las tareas para los alumnos desempeña un papel especial, ya que permite involucrar a los niños incluso con problemas psicofisiológicos. También juegan un papel especial los padres y el asistente del profesor (por ejemplo, en Italia), la forma de juego del aprendizaje, el cambio de actividades después de 10-20 minutos, el trabajo en grupo, etc. La novedad del estudio reside precisamente en el análisis de la aplicación y evaluación de las prácticas europeas en Ucrania. Los resultados del estudio pueden utilizarse para ajustar los programas educativos de la educación inclusiva, la comunicación de todos los temas de la formación y para su aplicación cualitativa, así como para adquirir la importancia del papel del profesor asistente.

Palabras clave: educación inclusiva, pedagogía inclusiva, pedagogía, formación, educación.

Introduction

For decades now, the modern world has followed the path of globalization, the openness of some countries to others. Cultural, political, economic integration processes have woven a large social web around the world: between countries, companies, people regardless of gender, race, age. A concomitant feature of this process is the democratization of society and the development of the concept of “open society”.

An open society carries with it the ideology of equal rights for all people among themselves, can participate and play an active role in society, use all the benefits of modern society: from visiting stores, theaters, museums to studying in schools, colleges, universities. Men and women, children and adults, people with autism and visual impairments, the physically excluded, and the healthy - they are all equal before the law, the state, and the world. But finding people in public and open spaces who have physical and/or psychological problems has been and continues to be uncomfortable and barrier-free. The sphere of education and science for people with disabilities is no exception. Everyone has the right to education, everyone has the right to knowledge, but people with physical, mental, psychological disabilities cannot receive an education. The main reason is that educational institutions (of all levels) simply do not have the material and technical base to educate such people, and instead have many barriers. Previously, boarding schools and special classes were opened for children with disabilities. That is, in this way, children were cut off from society, their peers, and normal life. In order to overcome loneliness and to realize the ideology of “society for all”, for several decades inclusive education has been actively developed and implemented.

Inclusive education (from Inclusion - inclusion) is a system of educational services guaranteed by the state, based on the principles of non-discrimination, consideration of human diversity, effective involvement, and inclusion in the educational process of all its participants (Ministry of Education and Science of Ukraine, (n.d)). Simply put, that these are classes where normal children and children who have some diseases or defects study.

Examples of quality implementation of inclusive education are the countries of Europe. In particular, Italy (as the first country), Austria, and Germany. In these and other European countries the right to education, protection of persons with disabilities, inclusive education is enshrined in constitutions and a number of international agreements and laws. European countries have material and technical bases, workers and specialists, a variety of pedagogical practices, and assistance centers.

Ukraine joined (ratified) the Salamanca Declaration (Spain) in 1994. This is the document in which the term “person with special educational needs” was formulated for the first time. Such international structures as the United Nations (UN), separately UNESCO, and public organizations also played an important role. Ukraine is on the path of European integration, so it must comply with democratic norms and values, create an “open society” and be a civil society. Involvement of people with special needs in society realizes natural, constitutional human rights and makes the country worthy of the European Union.

Even though over the past 5 years Ukraine has done a lot for the quality implementation of inclusive education, such classes in some areas (and not all over the country), the problem remains that society is not ready to accept such people to itself, and the fact remains that the education system in Ukraine is “different” and it masters the European experience in its own way. That is why the work aims to study inclusive practices (European experience) within Ukraine.

The aim of the work led to the solution of the following tasks: to analyze the situation with inclusive education within Ukraine, to study the European experience in this area. To investigate the comfort and quality of inclusive education practices in Ukraine.

Theoretical Framework or Literature Review

The topic of inclusive education is not new. In the scientific space, there are already a sufficient number of texts on this topic. In Ukraine, to a greater extent, studies are devoted to the definition of the concept of “inclusive education”, related concepts, and the subject of the introduction of education at the legislative level. It would be appropriate to note the work of Prodius Oksana “PECULIARITIES OF MODELS OF INCLUSIVE EDUCATION IN THE EUROPEAN COUNTRIES” (Prodius, 2019). This theoretical study analyzes the current situation of inclusive education in Europe and expresses the opinion that the inclusion of people with disabilities in society has positive characteristics for the economy. For example, quality human resources, inclusive classes economic for the creation of special, specialized institutions, etc. Malyshevs′ka Iryna (Malyshevs′ka et al., 2019) studied the socio-philosophical component of inclusive education. The achievement of Western colleagues is more diverse and concerns different subjects of the educational environment. To the general and theoretical works, we can refer the works of Claes Nilholm (Nilholm, 2021) developments that aim to qualitatively influence the practical and methodological teaching of inclusive education through quality theoretical training. Antonio M. Amor (Amor et al., 2019), who with colleagues studied a study of inclusive education based on 2380 articles. The most theoretical article we can consider Yao Ydo (Ydo, 2020), which, in our opinion, has a philosophical purpose in the collective responsibility and comfortable coexistence of people. The work of Lani Florian (Florian, 2019), which questions the relevance of the existence of special inclusive education. The purpose of inclusive education is not only to educate and tutor a child with special needs a “basic program,” but also to give some special knowledge and make a person a certain specialist. But the methods of teaching general and specific subjects are different. Thus, teachers of special subjects are less adaptable to teaching in inclusive classes than the “general” profile of the teacher. A related work is Thinking Inclusive Science Education from 2 Perspectives: Inclusive Pedagogy and Science Education, which deals separately with the possibility of teaching natural subjects.

A special and major role in the success of inclusive education is played by the teacher, who creates the atmosphere in the classroom, influences the adaptation of the child in society, adapts the curriculum, and “leads” students throughout the learning process. Not all teachers agree with the introduction of inclusive classes, not all believe in its success. Therefore, Timo Saloviita (Saloviita, 2020). investigated teachers' attitudes towards inclusive education in Finland. According to the researcher, gender does not significantly affect the desire to teach in an inclusive classroom, but age plays a small role. Yes, young teachers are more open to such children than mature teachers. Similar work on teachers' reflections is written by Paul S. Hengesteg, Laura Bestler, et al., (Hengesteg et al., 2021).

"Subject matter" consideration of inclusive education is conducted by Michael Braksiek (Braksiek, 2022). His work examines the attitudes of physical education teachers towards starting an inclusive classroom. The respondents of his study were master's and bachelor's degree students just gaining knowledge in the pedagogical field.

A contemporary theme concerns Linda Daniela and Miltiadis D. Lytras (Daniela and Lytras 2019). They studied robotics in inclusive pedagogy. It is known that almost all schools are moving to compulsory computer science and are actively introducing new technologies into the educational environment. Yes, learning becomes more interesting, more diverse, and interdisciplinary. For example, students can program themselves. Only for children with special needs conditions should be created. Due to visual impairments, students may have problems with the aforementioned programming.

The work of Edvina Bešić (Bešić, 2020). in the experience of Austria raises the question of the mistaken belief that inclusive education is education only for people with disabilities, but this is erroneous. Such education opens the door to the world of science and education for refugees, people of a different race, gender, religious or sexual views.

Europe is gradually moving away from the classical type of education and more and more towards STEAM (STEM) education. (science, technology, engineering, and mathematics). This system of education aims to develop a harmonious person with interdisciplinary thinking and a broad worldview. In such a system there are no classical subjects, but there are project activities that require analytical thinking on the synthesis of knowledge. Considering that inclusive education also requires a special approach, although these two pedagogical phenomena can be combined. Erin Sanders O' Leary, Casey Shapiro, and others (O' Leary et al. 2020) joined in the analysis of STEM education and inclusive pedagogy. They have studied the use of such a system by teachers themselves and their instruction.

An individualized approach to students can be because of the play form. The issues of play form in inclusive teaching, the role and degree of the teacher in the play process have been addressed - Erica Danniels & Angela Pyle (Danniels & Pyle, 2022)

It will be relevant to mention the work of Luca De Benedictis & Silvia Leoni (De Benedictis & Leoni, 2021) in the Erasmus study of inclusion. Inclusive education should not be confined to a school or university. Being open about everything and engaging students with disabilities in international experiences unlocks doors to new knowledge, experiences, professional development, and communication in general. The study found low rates of involvement of special students and disparities in favor of the female gender.

Additionally, we studied the Manos Antoninis (Antoninis et al., 2020) report on work in education, information on the website of the Ministry of Education and Science of Ukraine. And in the collection "Young Adults and Active Citizenship".

Methodology

The study was conducted by the authors of the article in Ukraine during one school term in secondary education institutions. All schools study according to the "New Ukrainian School" (NUSH) concept. Individual plans were developed for children with special development, coordinated with a special commission and the student's parents. It should be noted that the forms of work changed depending on the success of the educational process. Thirty children (1-2 special children per class), 20 teachers, and 20 teaching assistants participated in the study. Teachers had to follow the NUSH curriculum, adapting it for students with special development, as well as using the student portfolio method, changing activities every 10-20 minutes, the game method, working in groups, and working in groups with a leader to help the special student.

Because of the specific topic of the study and the individual characteristics of the students, the authors used several empirical methods: observation (throughout the school semester), interviews with teachers and their assistants before the study and after. We did not formulate specific questions but highlighted certain themes (instruction, classroom atmosphere, use of certain practices, and student reactions). Forms of student control after each topic covered. And interviews with each individual student after each passed topic. Feedback from parents (optional) was also collected. The inductive method and generalization method were used after the results were obtained.

Using the above methods, we want to see not only the quality of learning and mastery of knowledge, but also an assessment of the comfort of learning, the reaction of children with special needs to the educational environment, the relationship with society, and this can be understood by following the students and through personal conversations with teachers, assistants and the children themselves.

Results and Discussion

During one school term, we used a comprehensive approach to the topic of inclusive education in Ukraine, combining subjective methods (interviews, conversations) and objective (test tasks, a certain assessment of success according to a table of our own design), and methods and forms of teaching were constantly changing. The results of the study are based on the results of each individual student and children's own reflections. We have only generalized them and reduced them to certain opinions.

After conducting the research, we obtained the following results.

- Portfolio Maintenance - 100% All teachers indicate in favor of the portfolio. This is the only practice that was able to collect an absolute score from all respondents. The main advantages of this practice include: collection of all forms of work, possible demonstration to specialists, parents, analysis of work results, and progress in learning. Collecting a portfolio does not take much time and is not complicated in its structure.
- Changing activities every 10-20 minutes - 20% are against this practice and noted that they are not comfortable presenting the material and they do not have time. 40% in favor of such practice but taking into account the student's ability. There were cases where the student's motivation and initiative allowed the form of work to continue. 40% for such practice. Separately, the results showed: for students with physical disabilities, such practice was necessary. The average activity lasted about 10 minutes.
- Group work. There was a division into strong and weak groups, a group with a leader, and groups of desire. 10% - mark on problems. 90% - for such form of work. Working in groups contributes to the socialization of a child with special needs, and to students (with development without deviation) “fostering” respect for the other. In a supportive environment, the emotional level of the child with disabilities improved, they actively participated in common tasks.

The observation method yielded the following results:

- The special role of the teacher's helper stood out;
- The play form proved to be a method of calming the child and distracting her;
- Saw adequate acceptance of children of a student with certain disabilities; Sometimes “forgetting” that she is not
- Cases of “speech” bullying. use of the word “handicapped,” etc.;
- The need to enlarge books in Braille;
- The form of work is difficult to change because of the great interest of the child;
- The need to change the form of work due to lack of interest.
- Increase of students' self-control two months after the training.

In elementary school, grades are formal. There can be no assessments. Therefore, the authors made their assessment methodology based on the objectives of elementary school: reading, expressing own thoughts, the ability to count (arithmetic), the development of creative abilities. Instead of grades subjective assessment of the teacher: “active” learning, “slow”, “difficult”.

Table 1.
Assessing students in relation to their own progress.

Skill	First month	Second month	Third month	Fourth month
Reading	"Active" - 11 out of 30 "Slowly"-14 out of 30 "Difficult"- 5 out of 30	"Active" - 11 out of 30 "Slowly"-14 out of 30 "Difficult"- 5 out of 30	"Active" - 15 out of 30 "Slow" - 11 out of 30 "Difficult"- 4 out of 30	"Active" – 16 out of 30 "Slow" - 10 out of 30 "Difficult"- 4 out of 30
Expression	"Active" 12 out of 30 "Slowly" 8 out of 30 "Difficult" - 10 out of 30	"Active" 12 out of 30 "Slowly" 8 out of 30 "Difficult" - 10 out of 30	"Active" - 12 out of 30 "Slow" - 8 out of 30 "Difficult"- 12 out of 30	"Active" - 16out of 30 "Slow" - 7 out of 30 "Difficult"- 7 out of 30
Arithmetic	"Active" - 10 out of 30 "Slowly" 13 out of 30 "Difficult" - 7 out of 30	"Active" - 10 out of 30 "Slowly" 13 out of 30 "Difficult" - 7 out of 30	"Active" - 11 out of 30 "Slow" - 13 out of 30 "Difficult"- 6 out of 30	"Active" - 11 out of 30 "Slow" - 13 out of 30 "Difficult"- 6 out of 30
Creativity	"Active" 23 out of 30 "Slowly" - 3 out of 30 "Difficult" - 4 out of 30	"Active" 23 out of 30 "Slowly" - 3 out of 30 "Difficult" - 4 out of 30	"Active" - 25 out of 30 "Slow" - 2 out of 30 "Difficult"- 3 out of 30	"Active" - 25 out of 30 "Slow" - 3 out of 30 "Difficult"- 2 out of 30

Author's development
* of the 30 students, six were visually impaired. But the necessary facilities were provided.
* all learning progress was put in relation to each student individually. The curriculum and practices were adjusted.

Based on the results of the training and interviews with teachers, we can draw the following conclusions:

– Gradual progress in learning due to the mixed form of work.
– Creative tasks were much better for the children. Teachers did not interfere with the tasks. Only teaching assistants helped children who needed it. But physical ability did not affect motivation to engage in creative work.
– Arithmetic was the hardest to do and produced the least results. Teachers changed tasks, played games, and divided into groups, but there were no meaningful configurations in the results.
  The best result was in reading. As a skill to be mastered. There was more interest in reading new things. Helping each other played a big role. Which was not the case with arithmetic.
  Expression depended on reading and creativity. Children worked actively in groups, which influenced higher scores.

The history of inclusive education in Ukraine has a long way to go. Even before 1994 and the Salamanca Meeting. It has gone from the help of church ministers, patrons, and philanthropists to constitutional recognition and acceptance of people with special needs. Taking European practices of inclusive education as a model, we should remember that the Ukrainian educational system differs from the European one. Therefore, full implementation is impossible. A positive factor was the New Ukrainian School, which set itself the goal of educating full citizens and people capable of critical thinking. In such a concept, the existence of inclusive education is possible.

We have investigated the practices of inclusive education through its main subjects of interaction - students (with different disabilities), teachers, and assistants. The results are subjective, but it is acceptable and the main thing in our study. Even through the Ukrainian educational system, the introduction of European practices is possible.

The portfolio method used showed its absoluteness because of the convenience and similarity to the characteristics in the individual plan of each student. Firstly, it is a cancellation of work for the bureaucratic system and reports. Secondly, a set of reports for special assistance cells, which are also active participants in the educational process of people with disabilities. It is "normal" for European education that different organizations with specialists "lead" unusual children and help teachers adapt them. This practice exists both in Europe and in Ukraine.

The practice of changing activities every 10-20 minutes has undergone a large percentage of criticism due to the inability of the teacher to present all the material. But it should be noted that other respondents had time to expound the material. And everyone was in the same conditions (had 1-2 students for the whole class) and had helpers nearby. Many teachers switched to play-based learning and regained the attention of their students. Erica Danniels (Daniela & Lytras, 2019) in her study of play in kindergartens also examined the teacher's role in the play. There were two: free play and guided play. At the time of our study, the guided role was the one that was performed the most. For teachers taught the child autonomy, self-regulation and did not interfere in the relationship with other participants in the game. A special role was played by the teacher's assistants who helped students who could not perform the tasks quietly because of deficiencies. Because of the game, it was necessary to show the importance of knowledge and its relevance to the child. The issue of importance and relevance of knowledge was raised in Thinking Inclusive Science Education from 2 Perspectives: inclusive Pedagogy and Science Education. The authors were convinced that the child needs to apply the knowledge he or she gained from his or her own experience, needs to look at the world around him or her in a useful way, and that is why using life experiences to solve the tasks at hand.

Working in groups yielded very different results and showed all subjects of interaction. Yes, we saw the children's desire to be useful to each other. A child felt responsibility for his or her work to others. We saw that children did not care about the "vices" of their classmate or classmate, and they were perceived as normal and ordinary children. Many thanks for this to the teachers who create the atmosphere in the classroom. Responsibility for facilities, regulations, etc. are the business of the school, and only the teacher and parents can create an atmosphere of tolerance. There have been cases of bullying, but this is more due to illiteracy in the topic of tolerance. For example, in calling a child "disabled". It would be appropriate to note that the word "disabled" has not existed in Ukraine for several years. It was abolished due to its excessive use and offensive "background".

The teachers noted the combination of two practices - play and group work. Which also gave a beautiful emotional background to the child. Especially, in our opinion, it was necessary to get rid of the feeling of competition, so that there was no "who is better than the other". A real education system should be as tolerant as possible for everyone.

Separately, let us mention the factor of "child's interest". During the study, there were many cases of emotional instability of the child, excitement, and displays of nervousness. Assistants did their best to calm the children down and distract them. Already the practice of play helped children to calm down, pull themselves together, and start the task in a new way. That is why we can say that play is a distraction from the problem and a way to overcome obstacles.

Even though the elementary school has no right to grade students, especially children with disabilities, the Ministry of Education and Science of Ukraine has created guidelines for evaluating children. This is the concept of "assessment without assessment". The evaluation system is based on competence-based, activity-based, subject-subjective approaches and provides for partnership interaction between the teacher, students, and their parents or other legal representatives. The main functions of assessment are motivational, diagnostic, corrective, developing, learning, educational, social. (MON). Thus, when assessing students, it is not important what grades they received, but how they showed motivation during learning, how they responded to difficulties, what progress they made, etc. That is why we also moved away from the grading system. Teachers gave each child a comment and a grade for each month of instruction on basic, basic skills.

Creative tasks and creative-cultural development, in general, showed the best results. Many students wanted to follow the rules, but half went the creative route and moved away from standard thinking.

The ability to read during the educational process became a skill that could be acquired through practice and constant work. It also had an influence on the expression of one's own thoughts. Emotional background in the classroom played a special role, as we noted.

The results of our study show the special role of the teacher's assistant, who ensures the physical performance of tasks by the child, who calms the child, who is a certain connection of the child with the environment. By the way, the age of the teacher and the assistant does not play a role when teaching in an inclusive classroom. Timo Saloviita (Saloviita, 2020) and Michael Braksiek (Braksiek, 2022) came up with similar results. The results of our study through observation and interviews provide the impetus for exploring a more substantive and better role for the teacher aide.

Best practices, tasks, games, forms of group work could be collected and published as methodological recommendations, "Compendium of tasks", etc.

Because of the individual approach, Ukrainian inclusive education can accept and try to adapt other practices in the way of an "open society". We agree that educational systems are different from the beginning. But because of the individual approach, practices will still change, and new horizons in working with children need to be opened.

We studied inclusive education in Ukraine in the context of an already running system that works and is still gaining momentum. Therefore, the legislation to us has had some success. Legal legislation is the basis for the existence of inclusive education. Without a steam system, recognition of all actors and their responsibilities, the provision of power, and a system of control, there will be no inclusive education.

Conclusions

Globalization gave impetus to the democratization of the environment, which led to the dominance of the ideology of an open society. Ukraine, which is on the way to European integration, should adopt the ideology of an "open society," the ideas and values of Europe. In Soviet times, people with disabilities of body and soul were cut off from the "ordinary" world, were isolated in "special educational institutions," but this carries a sense of detachment, loneliness, and powerlessness.

European countries of the world are among the first to introduce inclusive education. Now Ukraine is on the way to inclusive education, and after the war, this topic will become even more relevant.

Having conducted our research, we can assert that such European practices as: the introduction of a portfolio for each student, changing activities after 10-20 minutes, working in groups, and the support of the teacher and his assistant have a positive impact on inclusive education.

Using the following practices: students will gradually make progress in learning, they will actively communicate with peers, and peers will perceive such students as "normal" and equal. A special role deserves teacher assistants who accept the child's care so that all of the teacher's attention does not go to one student. It is also necessary to be especially careful to form an individual plan of the child with special needs and to adjust certain tasks in teaching.

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Geopolitical attitudes of the Ukrainians in the realities of large-scale military aggression in 2014-2022: historical understanding of dilemmas

Actitudes geopolíticas de los ucranianos en las realidades de la agresión militar a gran escala en 2014-2022: comprensión histórica de los dilemas

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Abstract

The work examines the problem of geopolitical attitudes of Ukrainians in the realities of large-scale military aggression. The article notes that the number of supporters of democratic Western values is growing in Ukraine. The research is primarily based on the use of empirical research methods: observation and survey. Sociological surveys conducted by Ukrainian sociological research groups: “Rating”, “Democratic Initiatives named after I. Kucheriv” and “Kyiv International Institute of Sociology” In the results, it was noted that the geopolitical attitudes of Ukrainians in the southeastern regions have noticeably transformed. In particular, if in 2013 the idea of joining the Customs Union was supported by the majority of residents (64%), then in 2015 only 33% supported it. In general, the number of Ukrainians who support Ukraine's accession to the EU will continue to grow. The conclusions summarize that the Russian-Ukrainian war influenced a new understanding of

Resumen

El trabajo examina el problema de las actitudes geopolíticas de los ucranianos en la realidad de la agresión militar a gran escala. El artículo señala que el número de partidarios de los valores democráticos occidentales está creciendo en Ucrania. La investigación se basa principalmente en el uso de métodos de investigación empíricos: la observación y la encuesta. Encuestas sociológicas realizadas por grupos de investigación sociológica ucranianos: “Rating”, “Iniciativas Democráticas que llevan el nombre de I. Kucheriv” e’Instituto Internacional de Sociología de Kiev” En los resultados, se observó que las actitudes geopolíticas de los ucranianos de las regiones del sureste se han transformado notablemente. En particular, si en 2013 la idea de adherirse a la Unión Aduanera era apoyada por la mayoría de los residentes (64%), en 2015 solo la apoyaba el 33%. En general, el número de ucranianos que apoyan la adhesión de Ucrania a la UE seguirá creciendo. Las conclusiones resumen

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Russian-Ukrainian relations in the post-Soviet space. The level of Ukrainian support for the idea of Ukraine's integration into the European Union is particularly high.

Keywords: geopolitical attitudes, population of Ukraine, transformation, Russian-Ukrainian war.

que la guerra ruso-ucraniana influyó en una nueva comprensión de las relaciones ruso-ucranianas en el espacio postsoviético. El nivel de apoyo ucraniano a la idea de la integración de Ucrania en la Unión Europea es especialmente alto.

Palabras clave: actitudes geopolíticas, población de Ucrania, transformación, guerra ruso-ucraniana.

Introduction

The challenges of our time place new demands on the formation of historical memory and the revision of the past coexistence of peoples. In 2014. The Russian Federation (hereinafter Russian Federation) launched a war against Ukraine by occupying Ukrainian Crimea and then supporting separatist sentiments in Donetsk and Luhansk regions. At the same time, an aggressive information campaign and the hybrid war were launched to discredit Ukraine at every possible level. Ukrainian society responded to these challenges by uniting public and government institutions, forming an active volunteer movement, supporting the army, forming additional volunteer formations, and by informational resistance (Krasnozhon, 2021). At the same time, the confrontation also took place on a worldview level - a number of old established myths, imposed since Soviet times, collapsed in the minds of most Ukrainians. Partial freezing of the conflict during 2016-2021, its transfer from active combat to local confrontation contributed to the preservation of the level of trust in the Russians, but the open attack on February 24, 2022 (using the Belarusian territory) led to an openly negative attitude towards the Russian Federation and Russian ideologemes, a final break in the Ukrainian consciousness of the concepts of “good neighborliness” proposed in due time by Russia, ideas about high Russian culture, the presence and influence of which is not felt in the actions of Russian military.

The problem of change of moods of the Ukrainian population since February 2022, the fall of pro-Russian political and social forces is a relevant object of research on the political situation in Eastern Europe. Therefore, the purpose of the article is to analyze the geopolitical moods of the Ukrainian population in the realities of large-scale military aggression in 2014-2022, in particular, through the prism of historical comprehension of the dilemma of the choice between European values. Thanks to the realization of this task, it is possible to forecast certain scenarios of the future neighborhood of Ukraine and the Russian Federation in a time perspective. Such research, therefore, will be important for understanding the prospects and consequences of the Russian-Ukrainian war, which will still be felt in the future in Europe and all over the world (in view, for example, of Ukraine's role in the world market of food products).

The main sources for the study of this problem are sociological surveys conducted by powerful Ukrainian research centers. They make it possible to assess transformations in the consciousness of citizens in a temporal perspective, i.e., to determine the real level of support or decline of trust in a particular phenomenon.

Theoretical Framework or Literature Review

Many Ukrainian scholars have studied the peculiarities of the Russian-Ukrainian war since 2014. However, after the large-scale invasion by the Russians (February 2022), there was a qualitative reassessment of all long-standing events. Scholars acknowledged that it was impossible to foresee such a bloody and radical continuation of the Russian-Ukrainian confrontation. However, a few months after the start of the Russian aggression, it is possible to determine both the prerequisites for the war and to outline indicative scenarios of its development and consequences. For this reason, an important task of modern political science remains the analysis of the geopolitical attitude of Ukrainian citizens. Note that since the Russian-Ukrainian war, Ukrainian scientists began to actively study it through a scientific prism.

For example, Kuzio (2021) investigated the development of the Russian-Ukrainian war since 2014 and characterized its main causes and preconditions. Parshyn & Mereniuk (2022) investigated the peculiarities of the development of Kyivan Rus’ through the prism of multiculturalism. For this study, the works of historians are valuable because they show the duration of the Russian-Ukrainian conflict. They confirm the opinion that Ukraine takes its roots from Kievan Rus', not Russia. In addition, Ukrainian historians prove that Kievan Rus' developed in a European direction during the centuries.

Ishchuk (2022) characterized the main motives of Russian aggression against Ukraine. The researcher notes that although the official version of the Russian government is to restore the integrity of the divided "Russian world," in fact the motives of the attack on Ukraine are quite different. Russia without Ukraine is no longer an empire, and with its rich Ukrainian territories, it automatically becomes an empire.

Ishchuk (2022) further cites a different motive. Russia wants to take away from Ukraine the primogeniture that Ukrainians rightly received from medieval mighty Kievan Rus'. Therefore, through this as well as through its aggressive geopolitical desires, the aggressor state is trying to absorb the economic, social, and cultural potential of Ukraine.

The work of Kulyk (2019) is especially important for our study. This specialist researched the problem of the Russian-speaking population in post-Soviet states while paying more attention to the situation of the Russian-speaking population in Ukraine. Kulyk (2019) analyzed the change of the main identical Russian-speaking categories in contemporary Ukraine. In his summary, he believes that in contemporary Ukraine, Russian speakers have become "fully Ukrainian," rejecting the Soviet philosophy. Note that many foreign researchers have also taken part in the study of this problem. Ghilès, (2022) investigated the development of the Russian-Ukrainian war and the transformation of Europe's policy in this regard.

For example, Bînă & Dragomir (2020) characterized the peculiarities of the Russian-Ukrainian information war based on the analysis of the main propaganda mechanisms used by the Russian media. At the same time, Aladekomo (2022) investigated the transformation of the Russian-Ukrainian war through a legal prism. Arel & Driscoll (2022) characterized the events of the Russian-Ukrainian confrontation to the large-scale Russian invasion in February 2022.

Bertelsen (2017) in his monographic study outlined the basic preconditions of the Russian-Ukrainian war, the scholar paid special attention to the coverage of events02 and 3-2. its impact on the beginning of the Russian invasion of Ukraine. Note that currently there are many works devoted to terminological aspects of modern wars, in particular, the study of the concept of hybrid warfare. The latter is a manifestation of modern wars, including the Russian-Ukrainian war. On the other hand, Martz, 2022, highlighted in detail the various crimes of the Russian state against Ukraine.

At the same time, Claessen (2021) analyzed the geopolitical realities of the Russian-Ukrainian confrontation and its consequences in the future.

The work of O'Loughlin & Toal (2019) deserves special attention. These experts have characterized the problem of the transformation of the geopolitical attitude based on the analysis of the sentiments of Ukrainians in the southeastern regions of Ukraine. They noted the existence of tangible pro-Russian tendencies in the region in question, which had a certain influence on local political life and support for predominantly pro-Russian politicians at the level of the national parliament (Verkhovna Rada of Ukraine).

At the same time, they recorded that the level of pro-Russian sympathies has decreased since the events of 2014, but this has not fundamentally changed the political balance of power in the region. Consequently, there are not many separate studies on the evolution of the geopolitical attitudes of Ukrainians in Ukrainian and global academic thought in general. For this reason, the research on the influence of open armed aggression in 2022 on the geopolitical moods of Ukrainians in the future remains relevant.

Methodology

The article is formed as a result of the use of general scientific and empirical methods of research. In particular, methods of analysis and synthesis were used in the study of the theoretical part of the problem. Using the method of comparison, it was possible to trace the peculiarities of the transformation of geopolitical attitudes of Ukrainians in 2014 (the beginning of Russian aggression against Ukraine) and 2022 (after the large-scale invasion of Russian troops into Ukraine).

Based on the axiological method, it was possible to pass from theoretical judgments to certain conclusions regarding the geopolitical orientations of Ukrainians. Possible potential geopolitical attitudes of Ukrainians are reflected as a result of using the prognostic method. The historical method of research reflects the development of the geopolitical attitude of Ukrainians through the historical prism.

At the same time, the study is based on the use of empirical research methods: survey, observation, analysis of statistical data. The main material for the empirical research was sociological surveys conducted by the "Rating" group and the "Razumkov Center", the Kyiv International Institute of Sociology, and the "I. Kucheriv Democratic Initiatives" group. The Kyiv International Institute of Sociology conducted research demonstrating the attitude of Ukrainians to Russia, and their attitude towards Ukraine's accession to the EU and NATO. At the same time, the sociological group "I. Kucheriv Democratic Initiatives" conducted research primarily in Eastern Ukraine. The main focus of their surveys was to analyze the attitudes of Ukrainians in southeastern regions toward the Russian military and Russian citizens and to investigate the attitudes of residents of these regions toward the idea of joining Russia. "Razumkov Center" studied the sentiments of Ukrainian refugees who returned to their homeland (Centre, 2022). The research group "Rating" conducted a sociological survey and used it to form the results of the mood of Ukrainians during the war (Visit Ukraine, 2022). It should be noted that during the survey Ukrainian sociological services use the term Russia to define the aggressor state, so we leave this approach unchanged.

Results

On February 20, 2014, the Russian Federation began armed aggression against Ukraine. As a result, Russian troops occupied the peninsula of Crimea and part of Donbas. Since that time, a confrontation between patriots and pro-Russian people began in Ukrainian society, primarily in the eastern regions of Ukraine. At the same time, a study by the I. Kucheriv Democratic Initiatives group, conducted from March 16-30, 2014, confirms the opinion that in the Donbas, a significantly larger number of people at this time categorically did not support the idea of joining Russia. In particular, only 26.8% of respondents supported the separation of the Donbas from Ukraine and its accession to Russia. However, 51.7% of respondents believed that the southeastern regions of Ukraine should remain part of Ukrainian lands. Since March 2014. Donetsk Institute for Sociological Research organized a survey among residents of Donetsk. Their results showed that 18.2% of respondents wanted the region to be part of a union with Russia, while 8.7% were in favor of joining Russia. At the same time, only 4.7% supported the idea of the proclamation of the so-called DNR (Donetsk People's Republic). Note that 52.2% did not support Donetsk joining Russia (Wood et al., 2015). Later, a sociological survey by the Kyiv International Institute of Sociology, organized in April-May 2014, demonstrated that 25% of respondents still sought to leave Ukraine and join Russia. However, only 5% supported the idea of creating the "DPR". Thus, as can be seen from the sociological research, most of the residents of Don did not strive to form a "people's republic". This idea was artificially imposed on them with the help of Russian propaganda (Bertelsen, 2017). At the same time, as the military conflict escalated, the share of those who wanted to join Russia noticeably increased. This was caused by the opinion that a bloodless Crimean scenario was better than a prolonged brutal war. This idea was actively imposed on the residents of the southeastern regions of Ukraine (John, 2022). However, we emphasize that still the majority of the population did not support either joining Russia or the option of "independence" in the manifestation of a "people's republic" (Wood et al., 2015).

The total number of residents of Ukraine who expressed a positive attitude to Russia from April 2014 to May 2015 decreased from 45% to 29%. However, the percentage of those who began to have openly negative attitudes toward Russian citizens increased from 17% to 28% (Ukraine-wide analysis). Most of those who had a negative attitude toward Russians were in the Western and Central regions. However, respondents in the East (46%), South (43%), and Donbas (39%) showed a tolerant and positive attitude towards Russian citizens. Perhaps the reduction in the power of hostilities in Donbas (since 2015) influenced the decrease in the number of those who experienced alienation between the societies of Ukraine and Russia (O'Loughlin & Toal, 2019).

Since 2015, sociologists began to organize a survey on the geopolitical interests of Ukrainian citizens. For example, as of 2013, in eastern Ukraine, 19 percent favored the idea of joining the European Union, while 64 percent supported the idea of joining the Customs Union. After the Russian invasion, however, there was a fundamental change in the geopolitical attitudes of Ukrainians in the eastern regions (Arel & Driscoll, 2022). For example, a study organized in December 2015 found that in eastern Ukraine (territories controlled by the Russian military were also taken into account), 29% of respondents supported Ukraine's accession to the

EU. 35% did not support it, and 36% of respondents noted that they had difficulty answering. At the same time, the idea of joining the Customs Union in the East of Ukraine was not supported by 32%. However, 35% of respondents refused to answer or found it difficult to answer. Yet 33% supported Ukraine's accession to the Customs Union. Note that in just 1 year of the war, the sentiment of the residents of eastern Ukraine has changed dramatically (O'Loughlin & Toal, 2019). Consequently, if in 2013 the idea of joining the Customs Union was supported by the majority of residents (64%), then as of 2015 only 33%. In general, the number of Ukrainians supporting Ukraine's accession to the EU is further increasing. This is evidenced by the results of the 30th All-Ukrainian War Poll. This poll was conducted by the research group "Rating" in June 2022. The overwhelming majority of the Ukrainian population supports Ukraine's accession to the European Union (87%). Only 3% are against it. Consequently, it can be stated that the support for Ukraine's accession to the EU is unanimous among residents of all regions and ages (Ishchuk, 2022). At the same time, 69% of respondents believe that it will happen within 5 years. 14% believe that it will happen between 5-10 years. Only 3% believe that the accession to the EU will take place in 10-20 years. Only 7% of respondents believe that Ukraine will not integrate into EU standards (Voytyuk, 2022). It should be noted that as of 2022 the support of the Ukrainian population for the idea of joining NATO has noticeably increased (Voytyuk, 2022). In June 2022 it is supported by 76%, against - 10%, undecided - 12%. It should be noted that only in March 2022 68% of Ukrainians supported the accession to NATO. In general, the idea of Ukraine joining NATO is more cautiously perceived by residents of the southeastern regions (O'Loughlin & Toal, 2019). In particular, 55% of the residents of these territories perceive this idea positively. At the same time, as 20% are categorically against it, 22% would not come to a referendum on Ukraine's accession to the Alliance (Voytyuk, 2022).

Sociological surveys conducted by the group "Rating" in 2022 point to the evolution of public attitudes of Ukrainians, which occurred as a result of Russian aggression. In particular, after the initial shock, panic moods have subsided (Visit Ukraine, 2022). Over 92% of respondents are confident that the Ukrainian armed forces will be able to defend the country from the Russian army. Only about 6% of the respondents are not sure about the possibility of repulsing Russia. It should be noted that the conviction of achieving victory is absolutely dominant in all regions of Ukraine. For comparison, in January 2022 a poll was conducted, where it was asked to determine the chances of success of Ukraine in the conflict with Russia - then only 56% of Ukrainians, who believed in victory if the military clash acquired an aggressive dimension, assessed them positively.

In March 2022, about 57% of respondents believed that the Ukrainian army was capable of defeating the Russian army within a few weeks. Specifically, 18% thought victory would come in a week, while 39% thought it would take several weeks. 18% of respondents assumed that the military actions would last for several months, and only 9% of Ukrainians assumed that no radical military success is to be expected in the nearest future (Ukrinform, 2022). To speed up the victory, respondents are ready to resort to active actions. First of all, we should note that almost 97% of respondents determined that they would not leave the country in the near future. 4/5 Ukrainians also indicated that they support the Ukrainian military in the confrontation with Russia, and identified themselves as military, volunteers, or persons providing financial or informational support.

The image of the Russians contains negative public connotations. As the research of the "Rating" group showed, 40% of Ukrainians say without hesitation that the vast majority of Russians have a positive attitude to waging war against Ukraine. A quarter of respondents believe that half of the supporters of the war in Russia, while about the same number of respondents are convinced that only a quarter of the population actually supports the war in Russia (Visit Ukraine, 2022). Of this complex question, the dilemma is extremely important: What will the next Ukrainian-Russian relations be like? 42% of respondents are in favor of never establishing friendly relations with Russia again - in their opinion, it is impossible to restore friendly relations, a little less than a quarter of the population is convinced that it will take 20-30 years after the war to establish peaceful relations between the peoples, 18% think that a term of the next 10-15 years will be enough. Only 12% of those surveyed say that only a few years will be enough to restore "pre-war" friendly contacts (Visit Ukraine, 2022). If we analyze the geography of such a survey, we can see a certain "disposition" towards Russia on the part of residents of the East and South of Ukraine, especially among people who have relatives in the Russian Federation. On the other hand, more than 30% of respondents have relatives in Russia, and they are in no mood to seek ways of reconciliation with official Moscow.

Refugees returning to Ukraine, according to research by the Razumkov Center, in February 2022 rated their condition on average 7.9 out of 10 (Centre, 2022). In the proposed scale, 0 meant "the maximum level of peace and confidence," while 10 corresponded to an incredible level of panic and uncertainty about the future. In total, more than 57% of respondents indicated numbers between 8 and 10, i.e., they defined their state as extremely panicky (Centre, 2022). By mid-May, however, the situation had already changed. The psychological state of refugees who return to Ukraine is assessed by an average of 5.5. Only 15% of respondents evaluated their inner state by the score from 8 to 10. This indicates a significant improvement of the well-being of people and muted panic moods. In addition, 94% of the Ukrainians, who returned home, admitted that Ukraine will come out of the war victorious. Characteristically, no one gave a negative answer - the remaining 6% of respondents noted that it was difficult for them to answer such a question (Centre, 2022). Consequently, sociological surveys indicate the beginning of the solution to certain historical problems. In particular, there is a noticeable trend towards the final rejection of good-neighborly relations with Russia in the future, transforming them into the status of maximum neutral (but not friendly).

Discussion

The historical roots of the misunderstanding between present-day Ukraine and Russia lie in the history of development (Ostrovyi, 2022). As early as the ninth century, the state-centered in Kyiv was called Rus, a name that later spread to all the lands that recognized the power of the princes of Kyiv. At the same time, the narrow meaning of the term was preserved for quite a long time: the territories around Kyiv were considered Rus' (Mereniuk & Parshyn, 2021). While the lands in the northeast, which became a stronghold of the Moscow princedom, were considered by the Slavs to be Zalessia, although the culture there also had Byzantine-Russian roots (Parfinenko et al., 2019). Any imperial ambitions of the Russians toward Ukraine came later, only in the seventeenth and eighteenth centuries, when the Russian Empire was actually created. True, the transformation of Russia and its transformation into the Soviet Union proved to be more devastating for Ukraine: while Tsarist Russia sought to "denazify" primarily the Ukrainian elite, the Soviets Russified everyone. The consequences of this process became evident in 1991 when a significant part of Ukrainian citizens inherited the Soviet mentality: everything Russian was recognized as privileged, everything Ukrainian as primitive (Kuzio, 2021). This paradigm, therefore, underwent gradual changes - new generations of Ukrainians perceived their country differently. Although sociological surveys indicated that Russia was considered a friendly country, the number of supporters of democratic Western values was growing. At the same time, the regime and. Putin's regime was acquiring striking authoritarian traits (Galeotti, 2019). Control of the Russian media, the formation of biased public opinion, and militarism led to the annexation of Crimea in 2014 and the deployment of the war in Donbas. February 2022 was a new test for Ukraine, resulting in a significant change in attitudes toward Russia.

One should trust sociological surveys that indicate a decrease in supporters of Russia and an increase in the popularity of NATO and the European Union. The methods of barbaric warfare imposed by the Russians have been permanently imprinted in the minds of Ukrainians, and there will be no quick reconciliation with the opponents. This indicates, in particular, the elimination of the old mythologem of "fraternal nations," which was once actively propagated. Also, a considerable fascination with Russian cultural achievements will become a thing of the past, since, given all the atrocities of the Russians, they have nothing to do with the modern aggressor country. An important dilemma is also the appeal to NATO and the European Union. Previously, there was an uncertain attitude toward these structures. Now, given the help and support of Western allies, Ukrainians will definitely relate better to representatives of the Alliance in the future.

Conclusions

The outbreak of the Russian-Ukrainian war in 2014 and especially its escalation since February 2022 brought a new understanding of Russian-Ukrainian relations in the post-Soviet space. According to sociological surveys, attitudes in Ukraine toward Russians have long been predominantly positive. Joint history, economic relations, and achievements in science and culture deepened this cooperation. At the same time, the gradual formation of I. Putin's authoritarian and propaganda-blinded society has exposed old imperial stereotypes of Russian thinking. As proven, the majority of Ukrainians believe that the restoration of pre-war Russian-Ukrainian relations is impossible, the current level of support for Ukraine's integration into the EU is high. According to the analyzed data, 69% of the respondents believe that this accession to the EU will take place within 5 years. Ukrainians are also confident in their own armed forces, which, in their opinion, are capable of protecting them from aggression. At the same time, to be fair, we should note Ukrainians' understanding of the true essence of the war: according to sociological surveys, Ukrainians extend responsibility for aggression and waging a destructive war to all Russians, not only to the Russian authorities headed by I. Putin. This correlates with obtaining truthful information about the Russian speeches in favor of the war, support for the main conventional signs of this conflict, etc. In this, we see a skillful confrontation in the information war, which was not the case, for example, in 2014. - The Russian side failed to show and impose on Ukrainians and the whole world its vision of the development of events, the voluntary annexation of territories, and the fictitious "atrocities" of the Ukrainian military. In reality, Donetsk, occupied by pro-Russian collaborators, has not been turned into a "sacrificial stone" - the city does not look destroyed even after the start of hostilities in February 2022. Obviously, Russian propaganda has failed and cannot shape Ukrainian public opinion. New times dictate new trends in public opinion. Obviously, they have no place for old dilemmas like the mythologem of "brotherly peoples" (to be or not to be together with russia?).

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Termination of pre-trial investigation due to a serious illness of the suspect (accused) in the criminal procedure of Ukraine and some European states

Зупинення досудового розслідування з огляду на тяжку хворобу підозрюваного (обвинуваченого) у кримінальному процесуальному праві України та деяких європейських держав

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Abstract

The aim of the article is to study the legal regulations, doctrinal approaches to the understanding of mental disorder or another serious disease of the suspect (accused) as a reason for stopping the pre-trial investigation in the criminal procedural law of European countries, and also the development and justification of the proposal, directed for the improvement of the regulation of such reasons in the criminal procedural law of Ukraine. The methodological grounds of the research constitute general scientific and special legal methods, in particular dialectical, method of analysis, method of generalization, structural and functional method, hermeneutical method, dogmatic method, comparative legal method. We analyze one of the reasons for stopping the pre-trial investigation – mental disorder or another serious disease of the suspect (accused). Analyzing the corresponding legal acts of the CPC of Ukraine and European countries, the views of researchers, we provide our views on the questions of the research topic, and give suggestions on the improvement of the criminal procedural law of Ukraine. The signs of mental disorder of the suspect (accused) have been

Анотація

Метою статті є вивчення правового регулювання, доктринальних підходів щодо розуміння психічного розладу чи іншої тяжкої хвороби підозрюваного (обвинуваченого) як підстави для зупинення досудового розслідування у кримінальному процесуальному праві європейських держав, а також напрацювання та обґрунтування пропозиції, спрямованої на вдосконалення регламентації цієї підстави у кримінальному процесуальному законі України. Методологічну основу дослідження становлять загальнонаукові та спеціально-правові методи, зокрема діалектичний, аналізу, узагальнення, структурно-функціональний, герменевтичний, догматичний, порівняльно-правовий. У статті проаналізовано одну з підстав для зупинення досудового розслідування – психічний розлад чи інша тяжка хвороба підозрюваного (обвинуваченого). Аналізуючи відповідні норми КПК України та європейських держав, погляди дослідників, автори подають своє бачення питань, що входять до предмета дослідження, висловлюють пропозиції щодо вдосконалення кримінального процесуального закону України. З'ясовано ознаки психічного

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clarified, the criteria of the serious somatic symptom disorder as a reason for stopping the pre-trial investigation have been singled out. A new version of P. 1 Ch. 1 Art. 280 of the CPC of Ukraine has been proposed.

Keywords: criminal procedural law, stopping (suspension) of the pre-trial investigation, suspect (accused), mental disorder, serious somatic symptom disorder.

розладу підозрюваного (обвинуваченого) та виокремлені критерії тяжкого соматичного захворювання як підстави для зупинення досудового розслідування. Запропоновано нову редакцію п. 1 ч. 1 ст. 280 КПК України.

Ключові слова: кримінальне процесуальне право, зупинення досудового розслідування, підозрюваний (обвинувачений), психічний розлад, тяжке соматичне захворювання.

Introduction

The society predominantly associates the words “criminal law” and “criminal procedure” with a criminal offence that has been committed, with a perpetrator who should be found and punished (Meikališa & Strada-Rozenberga, 2018). After having been started, the pre-trial investigation, directed to achieving the goals of criminal proceedings, must be brought to a logical conclusion. However, during the pre-trial investigation certain circumstances sometimes appear which prevent the continuation and end of the criminal proceedings. It would appear that if the fact of committing a criminal offense is established, then there cannot exist any delays for the comprehensive, complete and impartial pre-trial investigation. However, in real life this is not always the case. The circumstances, which are meant here, are connected with the temporary obstacle in the implementation of criminal proceedings, in particular with the impossibility of the suspect (accused) to take part in such a pre-trial investigation. Such circumstances make up the content of the grounds for stopping the pre-trial investigation.

The grounds for stopping the pre-trial investigation constitute circumstances confirmed by the totality of evidence, which are provided for in the criminal procedural law and which temporarily prevent the continuation and end of the pre-trial investigation.

It is worth mentioning that in the Polish doctrine of the criminal proceedings the circumstances which make up the grounds for the suspension of the criminal proceedings are treated as such that not only prevent the continuation of the proceedings, but make its course impossible (Waltoś, 1970; Rodzoch, 2017). Instead, in the Ukrainian criminal procedural law, law enforcement practice and science of criminal procedure only the circumstances that make criminal justice impossible are considered as the grounds for the closure of criminal proceedings.

The termination of the pre-trial investigation leads to unfavorable consequences. Indeed, the termination of the pre-trial investigation results in the fact that its normal development and course is disturbed, the restoration of the violated rights of participants in criminal proceedings is delayed. This affects the quality and effectiveness of the criminal proceedings in general. The termination of the pre-trial investigation has also negative consequences of the mental nature. The natural processes which occur in the memories of the witnesses and victims lead to forgetting of some details of the committed criminal offense, which surely affects the completeness and depth of establishment of the subject of proof. On the other hand, the opinion about the helplessness of law enforcement agencies is increasing in society, the authority of the law enforcement agencies decreases. With this in mind, the legislator must introduce effective procedural means which would decrease (neutralize) negative effects of the fact of termination of the pre-trial investigation, and provide for successful overcoming of obstacles that led to such a decision. The doctrine of the criminal process is supposed to help the legislator to accomplish this task.

The article answers the questions about the regulation of such ground for the termination of the pre-trial investigation as mental disorder or other serious disease of the suspect (accused) in the criminal procedural law of Ukraine, whether it is consistent with the approaches established in the criminal procedural law of some European countries and which are the doctrinal positions on the essence of such ground for the termination of the pre-trial investigation.

Literature Review

The problems of termination of pre-trial investigation, in particular mental disorder or another serious disease of the suspect (accused) as the ground for making such a decision, were considered in the works of Ada Famiglietti, Jan Kudrelek, Inka Rodzoch, Stanisław Waltoś, Mykola Shumylo, Liudmyla Dunaievska, Olena Kozeratska. Scientific ideas, theoretical provisions and recommendations which were formulated in their works were reflected in legislation and positively perceived by law enforcement practice.

Stanisław Waltoś (1970) researched the matter of disease duration of the suspect as the ground for termination of criminal proceedings. The author justifies that the language unit "duration" means that the suspect would be ill for an indefinite period of time or during the period that is larger than the maximal term of pre-trial investigation. On the other hand, Jan Kudrelek (2004) rightly noted that the termination of pre-trial investigation based on the mental disorder of the suspect may be possible only in the case when mental dysfunction occurs after the suspect commits a criminal offense. The researcher rightly attributed the impossibility of the suspect's participation in criminal proceedings as the ground for termination of pre-trial investigation to the signs of a mental disorder of the suspect. Instead, Inka Rodzoch (2017) arrived at the conclusion that the use of the term "another serious disease of the suspect" by Polish legislators provides for an opportunity to differentiate it from mental disorder and to affirm that somatic symptom disorder of the suspect was meant in this case. She argued that unlike in the case of mental disorder, doubts in the somatic health of the suspect should not require certification of the fact of the disease by the expert's conclusion.

Ada Famiglietti (2014, 2018) emphasized that in order to terminate criminal proceedings it is not enough only to prove the mental disorder of the accused. It is also necessary for the accused to be in the state which makes it impossible for him to understand what is happening all around, and such a state prevents the accused from self-defense. The researcher pointed out that the aforementioned can be expanded also to somatic symptom disorders in the case when they are reflected on the psyche of the accused in a way that excludes the possibility to consciously participate in the criminal proceedings.

Mykola Shumylo, Liudmyla Dunaievska and Olena Kozeratska (2019) made a distinction between the terms "mental disorder" and "mental disability". They arrived at the conclusion that mental disability constitutes a deviation from normal mental development, that includes speech disorders, emotional and volitional sphere, mental development and limits the total intellectual activity of a person. Instead, mental disorder is always connected with the lack of the ability of a person to realize the meaning of their actions and control them. It is the mental disorder that is the ground for the termination of the pre-trial investigation.

Methodology

The methodological basis of this article is the dialectical approach to the scientific knowledge of social phenomena. While writing this article, we have also used general scientific and special legal methods of knowledge: the analysis, which was used to determine the drawbacks of legal regulations of mental disorder or another serious disease of the suspect (accused) as ground for the termination of pre-trial investigation in the criminal procedural law of Ukraine); generalization, which was used to form new scientific approaches to understanding mental disorder of the suspect (accused) as ground for the termination of pre-trial investigation); structural-functional method, which made it possible to find out the signs of mental disorder as ground for the termination of pre-trial investigation; hermeneutical method, which was used to interpret the essence of the serious somatic symptom disorder as ground for the termination of pre-trial investigation; dogmatic or special legal method, which was used to study scientific approaches to understanding mental disorder or another serious disease of the suspect (accused) as ground for the termination of pre-trial investigation; comparative legal method, which made it possible to compare norms regarding regulations of such ground for the termination of pre-trial investigation as mental disorder or another serious disease of the suspect (accused) in the criminal procedural law of Ukraine and other European countries.

Results and discussion

The case when a suspect has come down with a serious illness which prevents him from participating in the criminal proceedings and such an illness is confirmed by a medical conclusion (P.1 Ch. 1 of Art. 280 of the CPC of Ukraine) is the first ground for the termination of pre-trial investigation in the criminal procedural law of Ukraine (Law of Ukraine No. 4651-VI, 2012).

The latter describes the situation when a person has been informed about the suspicion but the illness of the person prevents them from participating in the criminal proceedings. Since such an active participant as the suspect is excluded from the investigation process, this prevents pre-trial investigation from continuing and ending. Under such circumstances the criminal proceedings shall be stopped.

In addition, similar ground is present in the criminal procedural law of a number of European countries.

Indeed, according to P.1 Ch.1 of Art. 24 of the CPC of the Republic of Bulgaria, the criminal proceedings are stopped if the accused gets a short-term disorder of consciousness which excludes prudence or another serious disease which prevents the implementation of proceedings after committing a crime (Code of the Republic of Bulgaria).

According to § 1 Art. 22 of the CPC of Republic of Poland, if there exists a long-term obstacle which prevents the implementation of the proceedings in particular if the accused cannot participate in the criminal proceedings due to the mental or another serious disease, the proceedings in the case is terminated for the duration of the obstacle (Act of Republic of Poland No. 555).

According to points «b», «c» Ch. 2 § 228 of the CPC of Slovak Republic, police officer terminates the criminal prosecution if the accused cannot be taken to court due to the serious disease and also if the accused cannot understand the essence of the criminal prosecution due to the mental disease which occurred only after the crime was committed (Law of Slovak Republic No. 301, 2005). At the same time, the decision about the termination of pre-trial investigation can be made only after indictment (Kolektív autorov, 2012). Analogous legal regulations are stated in points «b», «c» Ch. 1 § 173 of the CPC of Czech Republic (Law of Czech Republic No. 141, 1961).

In turn, the CPC of the Republic of Italy connects the termination of pre-trial investigation to the mental disorder of the accused. According to p. 1 of art. 70 of this codified act, if the results of investigation reveal that the mental state of the accused is one that prevents their conscious participation in the proceedings and that this state is reversible, the judge makes the decision about the termination of proceedings under the condition that an acquittal or a decision not to prosecute the suspect will not be issued (Code No. 477, 1988).

It is worth mentioning that Italian criminal procedural law makes a distinction between the ability to understand and desire and the ability to participate in the proceedings. The first one covers the fullness of mental abilities that the suspect had at the moment when the crime was committed. The second one corresponds to the possibility of execution of all rights by the suspect connected with legal capacity, in order to guarantee the right to self-defense "on the assumption that technical protection alone is not sufficient" (Famiglietti, 2018).

According to the interpretation of the Constitutional Court of the Republic of Italy the termination of criminal proceedings is not only due to the presence of disorder which can be defined in the clinical sense as mental but also any other state of weakness of the accused that prevents them from the efficient participation in the criminal proceedings (for example, the ischemic pathology makes it difficult to express oneself fully and clearly). Subsequently, the Constitutional Court of the Republic of Italy clarified that a sign of inability to appear before the court is the "irreversibility" of the illness, which excludes any form of conscious participation of the accused. In this case a significant change of the previous legal position happened since the last decision suggests adhering to the current legal regulation despite the attempts to expand the concept of inability of the accused to participate in the criminal proceedings (Famiglietti, 2014).

In addition, according to p. 3 of Art. 80 of the CPC of Greece/Hellenic Republic, if the accused has been proven to have the state of disorder of mental functions before the end of the investigation, the investigator shall make a decision about the termination of the proceedings (Law of Hellenic Republic No. 4620, 2019).

As it has been rightly noted in the literature, the incorrect application of this ground is one of the reasons for the increased duration of pre-trial investigation that affects in a negative way the evaluation of the actions of the investigator and prosecutor (Kudrelek, 2004).

In the Law of Ukraine, the term “serious disease” is not defined. Therefore, this category is evaluative. By pointing at such a disease Ukrainian legislator do not define its specific belonging to the groups defined by medicine. In the medical literature the health ailments of a person are customarily divided into two big categories: somatic (from Greek, *soma* – body) symptom disorders and mental (also known as psychiatric) (from Greek, *psyche* – soul) disorders. In addition, the eleventh revision of the International statistical classification of diseases and related health problems (ICD-11), adopted by the World Health Organization on December 12, 2018, describes health-related mental and behavioral disorders and not mental diseases (World Health Organization, 2018). It is explained by the fact that the use of the main criteria of the disease (biological – the presence of the physical pathology, medical – the quality of life and life threat, social – human social dysfunction) in psychiatry is complicated. Mental disorders do not always manifest themselves in a clear way. Moreover, mental disorder does not have the stages which are traditional for the term "disease" and includes different reactions, personality decompensations against the background of somatic dysfunctions.

It is such diseases that are mentioned in Ch.1 p.1.of the Art. 280 of the CPC of Ukraine. At the same time, it is worth mentioning that Ukrainian legislators defined "mental or any other serious extended disease" as one of the grounds for the termination of trial investigation (art. 335 of the CPC of Ukraine). The absence of indication of mental disorder in P.1 Ch. 1 of Art. 280 of Ukraine can be explained by imperfections of the legislative technique (Law of Ukraine No. 4651-VI, 2012).

It is important to keep in mind that the criminal procedural law of Ukraine does not include the list of somatic diseases or mental disorders that lead to termination of pre-trial investigation.

According to the List of diseases that can serve as a ground for the submission to the court of the materials on the release of the accused from further serving their sentences, approved by a joint order of the Ministry of Justice of Ukraine and the Ministry of Health of Ukraine dated August 18, 2014 № 1348/5/572, tuberculosis, AIDs, leprosy, all IV-th stage malignancies, some endocrine diseases/diseases of endocrine system, mental disorders, diseases of nervous system and sense organs, blood circulation diseases, respiratory diseases, diseases of digestive system, kidneys diseases, diseases of the musculoskeletal system and connective tissue, metabolic diseases, anatomical defects developed from a disease or trauma, acute radiation syndrome are considered as such diseases (Decree of the Ministry of Justice of Ukraine and the Ministry of Health of Ukraine No. 1348/5/572, 2014). However, not all of the diseases mentioned above serve as a factual ground for the termination of pre-trial investigation. Some of them (for example, mental disorders) serve as a ground for changes in the order of proceedings in pre-trial investigation, the others (for example, malignancies) serve as a ground for the release of a person from criminal liability due to a situation change, in the presence of the necessary material and legal conditions. Therefore, the corresponding by-law normative legal act does not answer the questions which exactly serious somatic disorders and mental disorders cause the termination of pre-trial investigation.

It follows from P.1. Ch.1 of Art. 280 of the CPC of Ukraine that such diseases must be serious and confirmed by relevant medical conclusions (Law of Ukraine No. 4651-VI, 2012).

The medical conclusions can be prepared by a doctor-professional in the specific branch himself or collegially by a medical commission. Moreover, the medical conclusion can be issued either by a doctor who directly treats the suspect or by a head doctor of the medical institution or their deputy, where the suspect is held. In addition, the medical conclusion can be compiled both on the basis of the procedural act of the investigator and at the request of the suspects themselves, their defender or legal representative. Finally, medical conclusions can be prepared by the doctors of both public and communal health care institutions, but also by doctors of private clinics. However, in the controversial cases a forensic medical examination can be appointed to establish the fact of somatic disease of the suspect itself and to determine its seriousness.

The existence and nature of disease of the suspect can be also confirmed by medical certificates and conclusions, which are prepared not in connection with the criminal proceedings, but prior to the beginning of the criminal proceedings.

Firstly, let us consider *the mental disorder of the suspect as the ground for the termination of pre-trial investigation*.

In the CPC of Ukraine, the specific signs of the mental disease, which provide an opportunity to separate it from the other disorders of mental activity that do not result in the termination of pre-trial investigation, are not defined. As a result, the cases of termination of pre-trial investigation in the investigative practice happen only on the ground of the statement of fact of mental dysfunction but without the establishment of the nature and degree of illness of the suspect.

Only such a mental disorder can be the ground for the termination of pre-trial investigation which occurred after the criminal offense had been committed. Those are the cases, in which the suspect committed the criminal offense in a state of sanity, namely when they were aware of their actions (inactivity) and were able to control them.

The discovery of mental disorder of the suspect during the pre-trial investigation, which occurred after a criminal offense had been committed and which did not result in the loss of ability to be aware of their actions (inactivity) or control them, cannot be the ground for termination of pre-trial investigation. The criminal proceedings in this case are conducted in the usual manner with providing such a suspect with an additional guarantee for the right of defense. According to P. 3 Ch. 2 of the Art. 52 of the CPC of Ukraine, mandatory participation of the defender from the moment of establishing the mental defect serves as such a guarantee (Law of Ukraine No. 4651-VI, 2012).

Mental defects, as opposed to mental disorders, do not cause a distorted perception of reality. A defect is any deviation from a mental norm. The difference between a defect or state, when a person is not capable to realize their own actions and control them, and another morbid state of mind is in the depth of the defect, its complexity and in the way how it affects the actions of a person. The state of the mental functions (perception, attention, memory, thinking), which provides for an adequate reflection of reality and creates prerequisites for full-fledged intellectual activity, is required for a person's ability and provides them with the right to defend themselves. Such persons realize their actions and can control them, although this does not combine with the mental anomalies without the signs, typical of mental disorders. Such persons have limited abilities to perceive, to comprehend and to remember the facts and circumstances, knowledge of which is necessary for the exercise of the right to protect themselves (Shumylo, Dunaievska, & Kozeratska, 2019).

Solving the problem of what kinds of mental disorder can cause the termination of pre-trial investigation, and in which case the pre-trial investigation has to continue in the order of proceedings regarding the application of coercive measures of a medical nature has an important value for the legislator practice. The answer to this question is stated in the criminal procedural law. Indeed, according to P.4 of the Art. 503 of the CPC of Ukraine, the coercive measures of a medical nature are applied only to persons, who are dangerous for the society (Law of Ukraine No. 4651-VI, 2012).

In the Ch. 39 of the CPC of Ukraine it is stated, that if the temporary mental disorder, insanity or other morbid mental states of the suspect, which prevent them from realizing their actions (inactivity) and (or) controlling them, are established during pre-trial investigation, and in the nature of the committed criminal offense and their mental state the suspect is dangerous for the society and needs forced treatment then the pre-trial investigation is not terminated. In such a case the resolution on the change in the order of pre-trial investigation and its continuation according to the rules stated for the criminal proceedings regarding the application of coercive measures of a medical nature is issued (Law of Ukraine No. 4651-VI, 2012).

It is worth pointing out that in P.1 Ch. 1 of art. 280 of the CPC of Ukraine does not state on the temporary nature of suspect's dysfunction, since in the case of the clinics of mental disorders it is difficult to know beforehand when leveling of symptomatic manifestations occurs and if it occurs at all.

Therefore, the signs of the mental disorder of the suspect that serve as a ground for the termination of pre-trial investigation are the following:

1) serious mental disorder, which lasts for a certain period of time and ends with a compensation, relief of its symptoms, remission;
2) such a disorder caused a loss of ability by the suspect to understand their actions (inactivity) and (or) control them;
3) taking this into account, the mental disorder deprives the suspect of intellectual capacity to participate in pre-trial investigation;
4) such a disorder of the suspect occurred during pre-trial investigation;
5) the suspect is not socially dangerous for the society and for themselves, and therefore does not require the application of coercive measures of medical nature.

The question of presence or absence of mental disorder of the suspect cannot be solved solely by the investigator and prosecutor, since even for the professionals difficulties often arise during the diagnostics and evaluation of seriousness and nature of mental dysfunction of the suspect. After obtaining the document which certifies that the suspect has a mental disorder (for example, references from the psychiatric neurological dispensary) it is necessary to appoint a forensic psychiatric examination to obtain additional data on the nature and seriousness of the disease and also to establish if it is allowed for the suspect to participate in the criminal proceedings. Such a conclusion follows from the provisions of P.3 Ch.2 Art.242 and Art. 509 of the CPC of Ukraine (Law of Ukraine No. 4651-VI, 2012).

By the way, a similar approach is stated also in both Slovak and Czech sciences of the criminal process (Čentéš, 2012; Jelinek, 2012). In other words, the mental disorder of the suspect shall be established as a result of conducting a forensic psychiatric examination, and not be a probable mental disease of the perpetrator of a criminal act (Kudrelek, 2004).

In addition, according to P. 1 of the Art. 70 of the CPC of the Republic of Italy, assessment of the presence of a mental disorder of the suspect is not necessarily connected to the results of the expert examination *ex officio*. The judge can also establish the fact on the basis of evidence, which can be obtained from the case materials. Therefore, such an activity is referred to the judge's discretion (Rumore, 2013; Famiglietti, 2014).

When the criminal proceedings are terminated on the ground of *serious somatic symptom disorder of the suspect,* it is necessary to establish the nature of the disease and its seriousness.

The somatic disease of the suspect can occur in different forms and can have different consequences. Some diseases are of chronic nature and cannot serve as a ground for the termination of pre-trial investigation (for example diabetes, tuberculosis, loss of vision, hearing etc.) except for the period of their exacerbation.

In the same way, the diseases that are of episodic nature, but which are connected with high temperature, increased blood pressure, loss of conscience, namely with temporary sharp deterioration of health, exclude the possibility for the suspect to participate in the criminal proceedings during such a period, however, do not serve as a ground for the termination of pre-trial investigation due to their short-term nature. Under such circumstances if needed the investigator has to raise a question about the continuation of pre-trial investigation terms, if such disease of the suspect prevents pre-trial investigation from ending in times, established by the law.

If it is established during the pre-trial investigation that the suspect has come down with an incurable serious illness (for example, focal ischemic myocardial dystrophy, III-IV stage malignancy, amyotrophic lateral sclerosis), then in such a case if the suspect has committed a criminal offense or minor crime for the first time (apart from corruption criminal offenses, criminal offenses related to corruption, violations of traffic safety rules or vehicle operation by persons in a state of alcohol, drug or other intoxication or were under the influence of drugs, which reduce the attention and reaction speed), pre-trial investigation has to be terminated by filing a petition for the release of a person from criminal liability due to the change in the circumstances and due to the loss of suspect’s danger for the society.

Therefore, the evaluation of the suspect’s disease as serious, which results in the termination of pre-trial investigation, causes some difficulties.

The medical and legal criteria of such a disease are traced in order to provide correct and equal enforcement with P.1. Ch.1 of Art. 280 of the CPC of Ukraine (Law of Ukraine No. 4651-VI, 2012).

Based on medical criteria, the diseases that are dangerous for the life and health of the suspect (some soft tissue damage and injuries of musculoskeletal system, a number of internal organs diseases) and their surroundings (some infectious diseases) belong to serious somatic symptom diseases.

The soft tissue damage and injuries of musculoskeletal system which can serve as an actual ground for the termination of pre-trial investigation, should include clavicle dislocations, upper and lower limbs dislocations, bone fractures, pelvic fractures, skeletal fractures, multiple injuries, that require urgent intervention with the following rehabilitation.

The main diseases of internal organs which at some stages of the course and during the period of exacerbation can lead to the suspension of pre-trial investigation, namely chronic bronchitis, bronchiectasis, bronchial asthma, emphysema, pulmonary fibrosis, respiratory failure, hypertension, ischemic heart disease, a myocardial infarction, rheumatism, chronic venous insufficiency, a peptic ulcer disease, a duodenal ulcer disease, chronic pancreatitis, chronic hepatitis, cirrhosis, gallstone disease, chronic cholecystitis, chronic glomerulonephritis, chronic pyelonephritis, chronic kidney disease, hyperthyroidism, hypothyroidism, diabetes, obesity, iron-deficiency anemia, B_{12}-(folate) deficiency anemia, hemolytic anemia, chronic lymphocytic leukemia, polycythemia vera.

Among infectious diseases it is relevant to single out the following: respiratory tract infections (tonsillitis, flu, acute respiratory viral infections, meningococcal infection, diphtheria, measles, rubella, epidemic parotitis, chicken pox, scarlet fever, whooping cough); bowel infections (typhoid, cholera, food poisoning, salmonellosis, botulism, shigellosis, campylobacteriosis, intestinal yersiniosis), viral hepatitis (hepatitis A, hepatitis B, acute hepatitis C, hepatitis D, hepatitis E), infections of the integumentary system (tetanus, anthrax, erysipelas); infections with multiple transmission mechanisms (3rd and 4th clinical stages of HIV infection, plague, primary and recurrent herpes infection, herpes zoster, infectious mononucleosis, cytomegalovirus infection).

It is important that the disease is either temporary or of a chronic nature but undergo treatment that should cause health improvement to the level that allows suspects to participate in the criminal proceedings.

At the same time, not every serious or even incurable somatic disease of the suspect from the medical point of view can serve as the ground for termination of pre-trial investigation. For example, pulmonary hypertension, poliomyelitis, Parkinson's disease at certain stages and without exacerbation have no significant interference with the suspect’s life activities. Therefore, the judicial criterion of the definition of presence of a serious somatic disease from P.1 Ch. 1 Art. 280 of the CPC of Ukraine. This also includes such a circumstance that the disease causes the suspect's health disorder, which physically prevents him from participating in pre-trial investigation for a certain period of time (to testify, make a request, familiarize yourself with the materials of criminal proceedings, etc). The understanding of the legal criterion is complemented in the doctrine by the fact that a serious somatic disease does not allow to deliver the suspect to the place of implementation of procedural actions due to the danger of suspect’s health deterioration and physical and mental efforts, connected with participating in such actions (Waltoś, 1970). However, this characteristic is only a specification of the previous provision due to the legal criterion of the definition of the presence of serious somatic disease.

Finally, it is worth mentioning that in the Slovak criminal process theory it is emphasized that such an assessment of the somatic disease is usually stated in the expert’s conclusion (Ivor, 2012).

Based on this, P.1 Ch. 1 of Art. 280 of the CPC of Ukraine should be stated in the following form – «the suspect has a serious disease, is injured or has a mental disorder, that temporarily prevents him from participating in the criminal proceedings if this diagnosis is confirmed by a medical or expert’s conclusion”.

Conclusions

One of the conditions for the comprehensive, complete and impartial pre-trial investigation is a mandatory participation of the suspect. This is because the criminal proceedings happen because of the actions incriminated to them. The presence of the circumstances for which the suspect is not able to participate in pre-trial investigation directly, realizing the procedural rights and executing their own procedural responsibilities, provided to them by the laws, prevents the completion of tasks of the criminal proceedings. It is not always possible to establish the subject of proof without the presence of a suspect. That is why plenty of European countries defined the causes connected with mental disorders or serious somatic diseases of the suspect (accused) to be grounds for the termination of pre-trial investigation.

Legal regulation of this cause in the CPC of Ukraine and European countries is similar. Indeed, the presence and nature of mental disorder of the suspect (accused) is established only in the conclusion of forensic psychiatric examination. Instead, it suffices to have a corresponding medical document in the case of serious somatic disease. The essential sign of termination of pre-trial investigation for this ground is the impossibility of participation of the suspect (accused) in the criminal proceedings for a certain period of time.

At the same time, the question whether the mental disorder should be connected with the loss of the suspect's ability to understand their actions (inactivity) and control them or not remains debatable in the doctrine of the criminal procedure. In our opinion, the establishment of the presence of such a mental disorder of the suspect (accused) after a criminal offense was committed, which did not cause the loss of suspect’s ability to understand their actions (inactivity) or to control them, serves as a ground to recognize such participant of criminal proceedings to be a person, which due to their mental defects is not able to fully exercise their rights, but cannot serve as a ground for the termination of criminal proceedings.

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Women musicians from the Middle Ages to the present: The transformation of the image

Las mujeres músicas desde la Edad Media hasta la actualidad: La transformación de la imagen

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Abstract

The article characterizes the problem of transformation of the image of a woman in musical art from the Middle Ages to the present. The work uses both general scientific methods of research: analysis and synthesis, as well as historical methods. As a result, we consider the formation of women in musical art in the Middle Ages, the problems of salon music-making of the XVII-XVIII centuries, and the problem of transformation of the role of women in musical art at the turn of the XX-XXI centuries is characterized. As a result, it is noted that the music of the Middle Ages was defined by a cappella singing and unanimity. The most famous composer of that time was Hildegard of Bingen, who is considered the probable founder of opera. Women-troubadours - medieval poetesses, songwriters, and their performers - held a place of honor in the music of the time. The basic motifs of their songs were different: some sang the consolation of love, while others sang the suffering of one-sided love. Despite this, until the XX century, the attitude towards women musicians was biased, and the image of music was often used in literature to refer to the “new” woman, i.e., feminist.

Keywords: women, music, history, the transformation of the image, current state.

Resumen

El artículo caracteriza el problema de la transformación de la imagen de la mujer en el arte musical desde la Edad Media hasta la actualidad. El trabajo utiliza tanto métodos científicos generales de investigación: análisis y síntesis, como métodos históricos. Como resultado, se considera la formación de las mujeres en el arte musical en la Edad Media, los problemas de la música de salón de los siglos XVII-XVIII, se caracteriza el problema de la transformación del papel de las mujeres en el arte musical en el cambio de los siglos XX-XXI. Como resultado, se observa que la música de la Edad Media se definía por el canto a capela y la unanimidad. El compositor más famoso de esa época fue Gildegard de Bingen, a quien se considera el probable fundador de la ópera. Los motivos básicos de sus canciones eran diferentes: algunas cantaban el consuelo del amor, mientras que otras cantaban el sufrimiento del amor unilateral. Sin embargo, lo que unía sus obras era que la principal protagonista lírica era una mujer que contaba sus propias experiencias y angustias. A pesar de ello, hasta el siglo XX la actitud hacia las mujeres músicas era sesgada, y la imagen de la música se utilizaba a menudo en la literatura para referirse a la “nueva” mujer, es decir, feminista.

Palabras clave: mujeres, música, historia, transformación de la imagen, estado actual.

Introduction

Cultural processes undergo a transformation along with the passage of time. In modern circumstances, female musicians are popular in movies, pop culture, computer games, visual arts, etc. At the same time, such a situation was not typical for the times of antiquity, let alone the periods of earlier history, when attitudes toward women were extremely prejudiced. For example, during the Middle Ages, there was a prejudice against women in the arts, which were seen as an

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exclusively male endeavor. However, as the detailed analysis of the problem indicates, this view is too categorical. The relevance of this work lies in the fact that it demonstrates selected biographical sketches of some medieval women musicians. At the same time, the evolution of the image of women musicians in European cultures reflects the whole thorny path that had to pass in the times of freedom in the 21st century, in which, unfortunately, there is still room for chauvinistic outbursts and provocations. This issue has not been the object of special attention in professional academic literature. Researchers have mainly focused on isolated aspects, which had clear biographical or chronological coordinates, and have not conducted thorough summaries. Our study offers a deeper analysis of the problem and the development of certain synthetic generalizations, which can be useful for the study of gender history, musicology, sociology, anthropology of human relations, axiology, etc. In particular, the following problems are foreseen to be considered: peculiarities of the formation of women in the art of the Middle Ages, women in the musical life of the XVII-XVIII centuries, the transformation of the female role in the art of the XIX-XX centuries, the female role in the modern musical life. Consequently, the main purpose of the article is to study the image of women-musicians from the Middle Ages to the present.

Theoretical Framework or Literature Review

The works of contemporary art researchers are significant for this study. In particular, Strohm (2018) characterized musical life in the Middle Ages. He believed that music had influenced both women and men throughout the centuries. Sajsa (2021) studied the influence of women on the development of music. She also characterized how the discrimination of women by men affected the development of women musicians. Mereniuk (2021) examined some aspects of gender roles in the history. Wiley & Rose (2021) characterized the phenomenon of the interaction of the suffragette movement of the nineteenth and twentieth centuries with literature, art, drama, music, and film. At the same time, Mielke & Znorovszky (2020) investigated the position of women in medieval Europe. This study is important for our article because it highlights the circumstances of the formation of the phenomenon of discrimination. In addition, Mielke & Znorovszky (2020) characterized the role of women in the cultural life of Europe in the V-XV centuries. Maude (2021) studied the image of women in medieval literary texts. In addition, Morabito (2019) described seventeenth- and eighteenth-century music. He focused his attention on the study of Baroque. He emphasizes that this style was widespread throughout Europe and influenced the further development of the art of music (Morabito, 2019). Although the Baroque style is not very popular now, all other researchers identified it as the leading trend in the history of music development. The work of authors exploring contemporary issues in music is also valuable to ours. For example, Sundberg & Thalen (2015) analyzed contemporary trends in music. In addition, they compared belted and neutral types of contemporary singing. Nowak & Bennett (2022) investigated the latest phenomena in contemporary music and characterized its transformative potential.

Despite this, the problem of the role of women in medieval musical life remains unexplored. This can be explained by the then-biased attitude towards women; hence many chroniclers deliberately circumvented the memory of women in a particular cultural sphere. In addition, this problem is debatable due to the scarcity of sources. Little researched is the problem of the transformation of society's attitude to the phenomenon of “women in art” directly through the mental prism. We will try to address these issues in this paper. At the same time, taking into account the analysis of contemporary female music, the problem of choice is not clear (why female performers choose certain genres of music and are almost not represented in others). We will try to study the latter problem of psychological choice in the last part of this article.

Materials and methods

Methods

The research is based on the use of general scientific research methods. In particular, such methods as analysis, synthesis, induction, and deduction were used in the work. The method of analysis involves the study of the object in its division into smaller parts. The method of synthesis influenced on research many smaller aspects of musical art into a single whole. Using a comparativistic method of research it was possible to compare the position of women in music from the Middle Ages to the present time. Also, the axiomatic method of research was used in the work. The latter involves the selection of certain axioms (inviolable statements) based on which specific broad conclusions are drawn. In particular, the work highlights the following specific issues for research: the emergence of women in music in the Middle Ages, women-musicians in the XVII-XVIII centuries, the transformation of the role of women in the art of the XX-XXI centuries, the modern musical life of women).

It should be noted that the main materials of this research were both historical sources and information from the mass media. In particular, the problem of the position of women in music is illuminated based on the study of medieval literary works. The legacy of women troubadours occupies a notable place in this, quotations from which are partially covered in the results. Based on a comprehensive analysis of contemporary art media, it has been possible to identify current trends in the development of music. For this reason, special attention was paid to the phenomenon of misogyny - the phenomenon of manifestations of hatred towards women.

In addition, our study is based on empirical research. Based on the historical-comparativist research method, it was possible to highlight the participation of women in musical art, in particular in operas during the 19th and 20th centuries. It should be noted that at that time women hardly played important roles in musical productions. To identify popular music genres among women, an empirical study was conducted among 16 women, who ranged in age from 22-30 years old, offered to be subjects. The main task of the singers was to sing the specified songs in the style closest to them. This allowed us to characterize the most popular genres of singing and music for contemporary female singers.

Results and discussion

The Middle Ages: The Making of Women in Music

The music of the Middle Ages covers the time from the fall of the Roman Empire (5th century) to the beginning of the 15th century when the Renaissance began. Key features of this time are the noticeable connection between religion and culture. However, even in those times, multiculturalism was observed in many areas, including culture. (Parshyn & Mereniuk, 2022). In addition, in the musical field preference was given to a cappella singing and unanimity. (Strohm, 2018). The main motifs of the songs of that time had pronounced religious features. Obviously, men at that time had a prominent role in the arts (Mielke & Znorovszky, 2020). However, it was then that the emergence of women in music took place, which is primarily due to the personality of Hildegard of Bingen (1098-1179). It was this woman who was the first composer whose name is known in history. More than eight of her compositions have survived to the present day. In particular, Ordo Virtutum (The Church Force) and Spēka spēle (The Game of Forces) are her most famous musical works, pieces about morality. Hildegarde of Bingen's works are examples of the first, unique works for female voices with one male part (Strohm, 2018). Predominantly one man played the devil, but because of his disfigured nature, he could not sing in her musical pieces. They were mainly created for religious ceremonial concerts, and the main singers of which were nuns (Maude, 2021). We suppose that the features of such staging in her works served as the basis for what would in the future be called opera. In general, the music of Hildegard of Bingen was monophonic, consisting of a single melodic line. Her works were designed for high soprano and limited instrumental accompaniment.

In addition, women troubadours - medieval poets, songwriters, and their performers - occupied a special place in the music of that time. This phenomenon of women's activity is practically not investigated in historiography. Troubadours created a canso, a song consisting of three parts. In particular, the first part (exordium) explained the purpose of writing the song (Lee, 2013). The main part told the key plot of the song and ended it succinctly in the form of a cobla. The last words were addressed to the patron or mate (they were called tornado). Among the female troubadours, the Countess De Dia (1140-1175), still called Beatrice (Sajsa, 2021) in historiography, is well known. She was in love with another troubadour, Rambaut d'Aurenga, so her musical works were dedicated to him. The main theme of her musical works is the illumination of pure love. In addition, Beatrice appeals to feminine virtues: *"Valer mi deu mos pretz e mos paratges"* ("*I must rely on beauty*") (Kay & Sarah, 1990, p. 104)

Another woman troubadour was Castellosa of Auvergne, whose work dates from the 13th century. She predominantly used the male system of expressing feelings. Her works are dominated by the theme of suffering and death. At the same time, the phenomenon of suffering is translated to the physical level in the symbolic form of illness. In particular, her song says: (*"Sieviete nomirs no slimības, ja vīrietis to nepieņems"*) ("*A woman dies of illness when she is not treated by a man"*) (Kay & Sarah, 1990, p. 104). Consequently, in her songs, the "healing powers" are possessed by the man. Poor plots are not typical for the work of troubadours. So, as we can see, despite the typical perceptions of "domestic" women of the Middle Ages, still women found time for creative development and self-expression in the then (primarily with religious canons) art. The trends under study were widespread throughout medieval Europe, including outside the "Latin" West. For example, a similar attitude towards women was inherent in Kievan Rus' (Mereniuk & Parshyn, 2021). Although in some socio-cultural aspects women had relatively equal rights with men, which allowed them to engage in self-realization and protect their rights (Mereniuk, 2021).

Women Musicians in the XVII-XVIII centuries.

The artistic life of Europe in the seventeenth and eighteenth centuries took place in numerous salons, which set the tone of cultural life across Europe. Modern art historians believe that the life of France in the late seventeenth and early eighteenth centuries created the foundation for the so-called "salon music" (Sajsa, 2021). At the same time, the harpsichord was invented as a special musical instrument designed for women. It was believed that it manifested the refinement and sophistication of women's nature. Consequently, harpsichordists enjoyed widespread popularity during the period in question. In particular, Marguerite Antoinette was the first court harpsichordist, and she also taught the instrument to the daughters of Louis XIV (Morabito, 2019). Hélène de Montgerie (1764-1836) was an eighteenth-century virtuoso pianist, composer, and teacher (Morabito, 2019). The person in question was a notable figure in European music at the time. At the age of 21, she was admitted to the National Music Institute. She wrote a theoretical work for her students entitled The General Piano Method. At the same time, Therese von Paradis (1759-1824) also became one of the most famous figures among eighteenth-century composers in Austria. Although she lost her sight as a child, it influenced her work. The parade was able to perform with the best male musicians primarily because of the favor of Empress Maria Theresia. Women's music was widely used in the music of the eighteenth century: more than 150 names of women composers are known in the history of the music of that time. Countries like France (45 female representatives) and England (44) took the lead. In Italy there were 27 women composers and singers at the time, in Germany - 24, in Austria - 10. There were isolated figures of women musicians in the Netherlands, Denmark, Belgium, Bohemia, Poland, etc. (Wiley & Rose, 2021).

Despite this, there was still prejudice against women musicians at this time. Even the German Enlightenment had no effect on eliminating such societal attitudes toward women in music (Philips, 2011). The mentioned fact, first of all, explains the limitation of creativity of these authors to the genres of popular songs. At the same time, the main purpose of a woman in the ideas of that time was reduced to three things: to be engaged in motherhood, to be a wife for her husband, and to be the mistress of the house. Consequently, activities in a closed environment of educated musicians were not considered too popular.

In the late nineteenth and early twentieth centuries, the image of women musicians also belonged to certain symbols of the feminist movement (McPherson, 2021). This can be witnessed in some literary works, in particular, Valse melancholic by the Ukrainian writers XIX-XX centuries. They greatly expanded the idea of the problem of women in Eastern Europe at the time, repeatedly actively opposing the traditional male perceptions of the other sex.

The transformation of the role of women in music at the turn of the XX-XXI centuries.

The majority of composers listed in textbooks of classical music, and whose pieces are frequently performed in the regular repertoire for concerts compose males, even though there have been a significant number of female composers throughout the period of classical music. The musicologist Marcia Citron has inquired «why is the music written by female composers not included in the classical repertoire that is standard? ». The author argues that in the 1890s, female composers usually composed art songs to be performed in small recitals, not orchestral symphonies that were intended to be performed by the orchestra inside a big hall, and the latter being considered the most important genre for composers. because women composers didn't compose a lot of symphonies, they were not considered to be significant as composers (Skowroneck, 2010).

Note that in the past, professionally-run orchestras have been largely or completely made up of male. So, previously only men were participated in the work of orchestras. It is not only about the position of the conductor, but also about ordinary performers. In some conservative groups, the only role a woman was allowed to play was that of a harpist (O'Bryan & Harrison, 2014). In particular, in the Vienna National Orchestra in the 20th century, this situation existed for a long time. It is obvious that this orchestra was in the leading positions in the world of classical music. Women did not work in the Vienna Philharmonic until 1997 (Björkner, 2008). The situation changed only after the American tour. Women's organizations in the USA actively called for a boycott of the performance of the Viennese musicians, because there were no women in their group (Solis & Nettl, 2009).

From that time, women began to actively participate in the activities of large orchestras of national importance (Lohman, 2021). There's been many talented singers throughout the years, but the most talented female singers have distinctive voices and personalities that guarantee they can compete against their male counterparts (LaFleur, 2020).

Note that we conducted a small sociological study with 16 young female performers between the ages of 24 and 36 who had been involved in the musical arts for at least 7 years. They were allowed to choose a style of song performance at will. The vast majority of them chose a genre of pop music, generally reflecting and confirming current musical trends. These trends are dictated by the globalization and multiculturalism of music (Lee, 2013). A significant part of pop music defines ideas of global spaces, national equality, and multicultural society. Therefore, women composers around the world choose this genre most for development, although we also note the popularity of rock music, jazz, and blues. While there used to be a surge in the popularity of rap music, now although this style is popular, it is still giving way to other new styles. It should be noted that the trend of ethno-music, which is actively implemented by female performers in Eastern Europe, is widespread now.

Note that among the many contemporary issues that are relevant to female performers is the problem of misogyny in rap music (McPherson, 2021). Hip-hop performers are probably not the biggest fans of misogyny in the world, but this particular musical trend is a kind of maximum quintessence of hatred for women. More than once experts have paid attention to selections of the most resonant music videos and lyrics, in which this hatred is dispersed. In fact, every famous and successful rapper has "distinguished himself" by an extremely biased panchlinic toward the other sex. The rap aesthetic is full of descriptions of "bitches" and "hoes" who are greedy, treacherous, totally hypocritical, stupid, etc. In music videos such lyrics of a woman (not in the image of a mother or wife) are perceived as an attribute - the same as a luxury car, bundles of dollars, or chains made of gold. So, the attitude towards her is formed as an object (Walker, 2019).

Certainly, machismo is only part of playing to the public, a kind of tribute to fashion, like teeth encrusted with diamonds. Misogyny is not an indication that the performer is a potential rapist (Sajsa, 2021). The real scandal was one of Eminem's first known albums, The Marshall Mathers LP, where 11 of the 14 songs sow hatred of women. One of the tracks ("Kim") was dedicated to the rapper's wife and is still considered a model of misogyny towards one, specific woman. At the same time, the distance between word and deed is high, so no one has made any real claims against the rapper. At the same time, the sentiments broadcast by hip-hop artists affect the mass consciousness and affect the understanding of women around the world. To a certain extent, these are the laws of the genre. Bias against women did not appear out of thin air. In the case of rap culture, it is related to the "voice of the street," which values authenticity and the truth of life as much as ostentatious videos with luxurious lives (Sajsa, 2021). Pervasive poverty, street crime, drug addiction, early pregnancy (whose rates have only relatively recently begun to decline in the African-American community in the United States), and racial bias form a kind of social "order" from which hip-hop lyrics sprout (Borch et al., 2011).

At the same time, a new generation of female performers in rap was supposed to form a renewed perspective, but this has not happened. Many popular female performers (Young M.A., Lil' Kim, and others) have been much more willing to adopt machista rhetoric, using it as an elementary and practical way to fight their female rivals.

Conclusion

So, the image of women musicians has undergone a long evolution from the Middle Ages to modern times. The music of the Middle Ages was generally defined by a cappella singing and unison. The main motifs of the songs of that time were religious. Hildegard of Bingen was the first composer whose name is known in history. She wrote plays about morality, perhaps founding the genre of opera. At the same time, women troubadours - medieval poets, songwriters, and performers - held a place of honor in the music of the time. The troubadours created a song consisting of three parts. As it turned out, the main motives of these songs were different. Some women sang of consolation from love, others sang of suffering from one-sided love. What united their works, however, was the fact that the main lyrical hero was a woman recounting her own experiences and anxieties.

Throughout the XVII-XVIII centuries, the salons set the tone for cultural life throughout Europe. French life in the late XVII and early XVII centuries laid the foundation for the so-called “salon music”. At the same time, the harpsichord was invented as a special musical instrument for women. It was believed that it manifested the refinement and elegance of women's nature. Despite this, the attitude towards women musicians did not get any better, and the image of music was often used in literature to define the image of the “new woman”. Even in the XX century, professionally managed orchestras were largely composed of men. So, in the XIX–XX centuries, only men participated in orchestras. It is not only about the position of a conductor, but also about ordinary performers. For example, women did not work in the Vienna Philharmonic until 1997. The situation changed only after the American tour. Women's organizations in the United States actively called for a boycott of the Viennese musicians. Since that time, women have been active in major orchestras of national importance. At the same time, today women musicians freely participate in pop, rock, jazz, and blues bands. On the other hand, misogyny in rap music remains a problem. And female singers often use machismo and other trappings of rap in figuring out relationships with other female singers.

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Modern achievements and prospects for the development of higher medical education: Ukrainian realities

Сучасні досягнення і перспективи розвитку вищої медичної освіти: українські реалії

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Abstract

The purpose of the study is to research and highlight modern achievements and prospects for the development of higher medical education in Ukraine. Theoretical and empirical methods were used to achieve the set goal and solve research problems. A modern doctor must perfectly master his professional competence. The main motive for reforming the medical field is the desire of students to master professional skills and practical skills, to deepen the acquired theoretical knowledge and apply it in practice, to develop skills regarding the standards of providing medical care, to gain experience in practical work, which will allow a modern student to successfully work independently in the future. It is also necessary to create a group that

Анотація

Мета дослідження – вивчити та висвітлити сучасні досягнення та перспективи розвитку вищої медичної освіти в Україні. Для досягнення поставленої мети та вирішення завдань дослідження використовувалися теоретичні та емпіричні методи. Сучасний лікар повинен досконало володіти своєю професійною компетенцією. Основним мотивом реформування медичної галузі є бажання студентів оволодіти професійними навичками та практичними навичками, поглибити набуті теоретичні знання та застосувати їх на практиці, розвинути навички щодо стандартів надання медичної допомоги, отримати досвід практичної роботи, що дозволить сучасному студенту в майбутньому

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would carefully study and propose a number of conceptual priority measures related to changes in legislation and aimed at coordination between universities in order to develop a clear, unified strategy for reforming medical education, to ensure the responsibility of higher education institutions for the quality of education and its guarantee, taking into account the interests of society.

Keywords: medical education, professional education, education in Ukraine, reforming professional education, the realities of medical education in Ukraine.

успішно працювати самостійно. Також необхідно створити групу, яка б ретельно опрацювала та запропонувала низку концептуальних першочергових заходів, пов'язаних зі змінами законодавства та спрямованих на координацію між університетами з метою вироблення чіткої, єдиної стратегії реформування медичної освіти, забезпечення відповідальності вищими навчальними закладами за якість освіти та її гарантування з урахуванням інтересів суспільства.

Ключові слова: медична освіта, професійна освіта, освіта в Україні, реформування професійної освіти, реалії медичної освіти в україні.

Introduction

The modern system of medical education is undergoing significant changes. The list of medical specialties is expanding, so many future specialists in addition to general medical education receive additional, narrow medical specialties. Genetic research methods are being introduced into many subspecialties, for example, in reproductive medicine. This approach requires dosed information for future specialists, when the general outlook of medical knowledge is preserved, and in addition to it, highly specialized knowledge is given. The use of distance education (including in connection with the COVID-19 pandemic) is expanding, as are methods of rapid online testing. Ukraine, one of the former republics of the Soviet Union, is still at the beginning of reform. Ukraine's educational system (including medicine) is still dominated by the Soviet educational system, which is already morally and intellectually obsolete. Students are most often offered textbooks that are 40 years old. At the same time, there have been some positive shifts. New educational technologies are being introduced for Ukrainian medical students. Ukraine remains today an attractive country for foreign students wishing to study medicine. At present, the theme of assessing the quality of education of Ukrainian medical students remains relevant, since no research in this direction has been conducted. This has determined the necessity of this research.

The purpose of the study is to research and highlight modern achievements and prospects for the development of higher medical education in Ukraine.

The tasks of the research are:

- to determine the current directions of reforming medical education;
- to determine ways of implementing interdisciplinary connections in educational activities;
- highlight the conditions for implementing the updated system of medical education in Ukraine.

The research questions to the goals and objectives are as follows. What is the quality of medical education in Ukraine today? What areas of reforms in the system of medical education in Ukraine are the most relevant? Is there a possibility to implement interdisciplinary and international relations in the system of medical education? What are the conditions for introduction of innovative approaches in the system of medical education in Ukraine?

Theoretical Framework or Literature Review

Levels of Reform in the Global Medical Education System. The successive level system of higher education - bachelor's and master's - has recently become a new and unknown system for higher medical education in Ukraine, which was previously represented only by a specialist (Srichawla et al., 2022).

The reform of the healthcare system provides for updated requirements for education and training of specialists in accordance with new standards. The modern development of medicine makes it necessary to make corrections in the training of future medical personnel and improve the qualifications of medical workers in accordance with international standards. That is, medical education should ensure high-quality training of students and become an important component of reforming the health care sector and implementing the social priorities of the state, since the quality of medical care for the country's population and the quality of life of the population depend on the level of training of future doctors (Matalon et al., 2020).

A modern doctor must perfectly possess his professional competence, communication skills and personal and professional culture, be able to explain and transfer knowledge to students or colleagues, as well as adapt to changes in the legislative nature, to the performance of professional duties. This will enable health care specialists to work in a single, generally accepted professional space, using global experience in protocol management (Akoob et al., 2022).

Ways to optimize the medical education system. To create an updated model of the health care system, it is necessary to change the basic secondary and higher medical education in order to optimize the opportunities of medical students and strengthen the competitiveness and prospects of future nurses and doctors. After all, it is common knowledge that the decrease in the level of knowledge and the quality of educational services of future specialists in the medical field has a negative effect on the quality of providing medical care to the population, on the knowledge, skills and desire to help the patient. The World Federation of Medical Education (WFME) developed standards for doctors called "Continuing Professional Development" back in 2003. The following motto is embedded in the series of these standards: "Education cannot be considered preparation for life, because education is life."

Upcoming directions for the development of the medical education system. That is why it is necessary to single out the key strategic directions for the further development of medical education in the context of reforming the healthcare sector of Ukraine and preparing priority measures for implementation in universities (Srichawla et al., 2022).

Thus, higher medical education in the magistracy, according to the current version of the List of areas of training for higher education - magistracy, can be obtained within the framework of two areas of training: “public health” and “nursing management”, but at the moment it is implemented only 1st direction of preparation (Nickerson, 2019).

Methodology

The study was conducted from September 2020 to December 2021 in Ukraine (Kyiv, Sumy, Cherkasy).

The theoretical methods of research were used to disclose the research question of the relevance of medical education and its quality. Theoretical and empirical research methods were used to investigate the state of implementation of interdisciplinary relations in the system of medical education. Finally, empirical methods were used to identify the ability to implement the latest methods of education. The essence of each of methods is given below.

– theoretical: comparative analysis of pedagogical and medical literature, retrospective analysis, synthesis, comparison and content analysis during the study of normative documents in the fields of medical education, educational programs, curricula of professional training of future specialists, study and generalization of the experience of scientific and pedagogical activity - to analyze the state of development of a scientific problem in pedagogical theory and the educational process of domestic and foreign institutions of higher education; abstraction - to determine the essence and structure; specification and detailing - to identify and theoretically substantiate the pedagogical conditions for the development of medical education in Ukraine; system analysis, modeling and generalization;
– empirical: observations, questionnaires during the study of the current state of formation of the professional identity of future specialists in physical therapy, occupational therapy in institutions of higher education.

Results and Discussion

The analysis of literary sources on medicine and methods of teaching medical specialties in higher education institutions, as well as legal norms, revealed such trends. The analysis was performed separately for bachelor's and master's degrees Quality of medical education for different specialties in Ukraine. The direction of training "nursing" (bachelor's degree) as a specialty is presented in the law "On the approval of the Regulations on internships" (Srichawla et al., 2022).

Qualification requirements for medical and pharmaceutical workers with higher education in the direction of training "health and medical sciences" (hereinafter - Qualification requirements) for the specified specialty provide for the following positions: general practice nurse, palliative care nurse, preventive care nurse, nurse for rehabilitation.

Thus, bachelor's degree graduates in the direction of training "nursing" have formal opportunities in terms of professional implementation.

The situation is different with the direction of training "public health", which is not in the Nomenclature of Specialties of Specialists with Higher Medical and Pharmaceutical Education, and therefore does not appear in the Qualification Requirements. For the direction of training "management of nursing activities" the situation is similar due to its recent appearance. In turn, the Qualification Requirements include the specialty “Nursing Management”, which was acceptable according to the scheme of vocational education: a specialty in the specialty “Nursing” and an internship in the specialty “Nursing Management”, which is currently not possible for implementation due to abolition of specialty and internship (Oswald et al., 2020).

It is also necessary to note the presence of the specialty "organization of healthcare and public health" in the Qualification requirements. For this specialty, the following requirements for the level of professional education are established: higher education - a specialist in one of the specialties: "General Medicine", "Pediatrics", "Dentistry", "Medical Preventive Care". Preparation for internship / residency in the specialty "health organization and public health". This specialty (“organization of health care and public health”) is noted here due to the obvious similarity with the direction of preparation of the master’s program “public health”.

The scale of implementation of undergraduate and graduate programs in the field of education "health and medical sciences" can be assessed by the volume of admission targets for these programs (Figure 1).

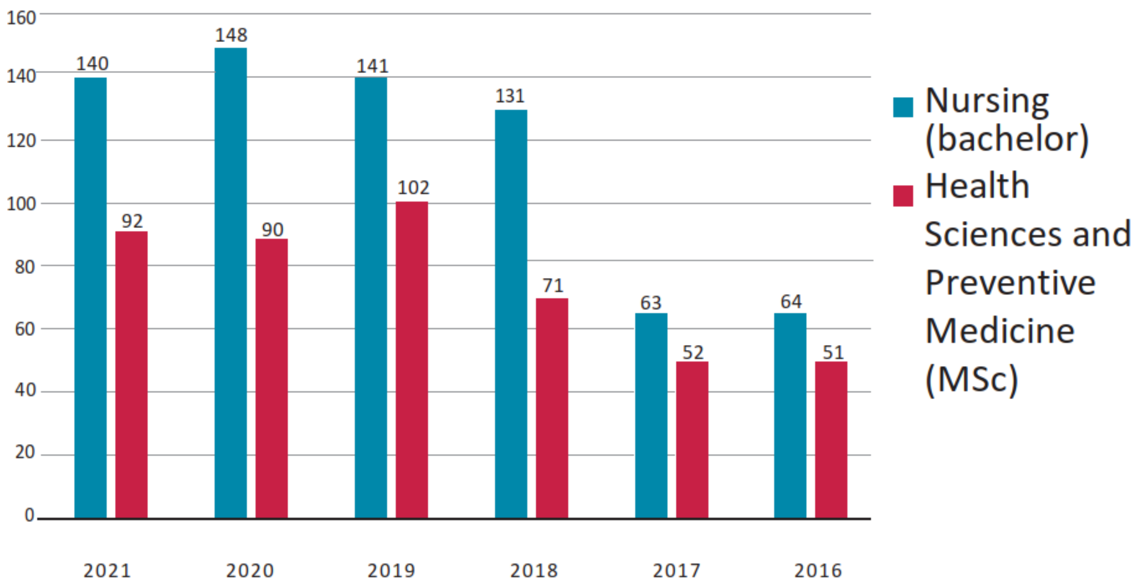

Figure 1. Total volumes of target figures by years of admission to educational programs of higher education at the expense of federal budget appropriations.

The presence of admission targets in the direction of training "nursing" (bachelor's) is understandable, but for "health science and preventive medicine" (master's) - not quite. This aspect is considered here from the point of view of the admission of graduates of the educational program to medical activities, since the direction of training "public health", related to the field of education "health and medical sciences", is not presented in the Qualification requirements.

Thus, at present, in the direction of training "public health", masters cannot carry out medical activities in any specialty, although their first graduations have already taken place, taking into account the fact that the term for obtaining full-time education is 2 years. Since there is no corresponding medical specialty for them (masters), the procedure for primary accreditation of specialists is not possible. Master's degree in the direction of training "public health", as one of the areas of professional activity, the field of "health" is provided (in the field of organizing the health care system in order to ensure public health).

Thus, taking into account the terms and stages of accreditation of specialists, as well as categories of persons with a medical or other education and subject to accreditation of specialists, it is obvious that it is necessary to amend the Qualification Requirements.

Ways to reform and optimize the system of medical education in Ukraine. One of the directions for the development of higher medical education in the magistracy "public health" and "nursing management") could be a purposeful continuation of the education of bachelor's graduates in it in the direction of training "nursing". Such “purposefulness” can be achieved by regulatory and legal improvement of admission to medical activities, i.e., amending the Qualification Requirements and Professional Standards (if any).

An option for such an improvement could be the addition of the section “Level of professional education” of the specialty “nursing management” of the Qualification requirements for medical and pharmaceutical workers with higher education in the direction of training “health and medical sciences” with the following formalization (Table 1).

Table 1.
Specialty "management of nursing activities"

Level of professional education	Higher education - specialty in the specialty "nursing". Internship training in the specialty “Nursing Management” or Higher education - bachelor's degree in the direction of training "nursing" and master's degree in one of the areas of training: "public health", "management of nursing activities"

Source: author's development

The second direction of development of higher medical education in the magistracy can be the alternative of the magistracy in the direction of training "public health" to residency in the specialty "health organization and public health" (Table 2).

Table 2.
Specialty "health organization and public health"

Level of professional education	Higher education - a specialist in one of the specialties: "General Medicine", "Pediatrics", "Dentistry", "medical and preventive work". Training in internship/residency in the specialty “organization of health care and public health” or training in the magistracy in the field of study “public health”

Source: author's development

Such alternativeness can be brought to life not only by making additions to the Qualification Requirements, but, most importantly, to the relevant professional standard. By introducing the necessary additions and changes to the specified professional standard, it is possible to achieve selective differentiation in the positions of medical workers, taking into account generalized labor functions and skill levels.

Interdisciplinary and international connections. It is worth noting that in 2018 the Ukrainian-Swiss project “Development of Medical Education” was launched (Figure 2).

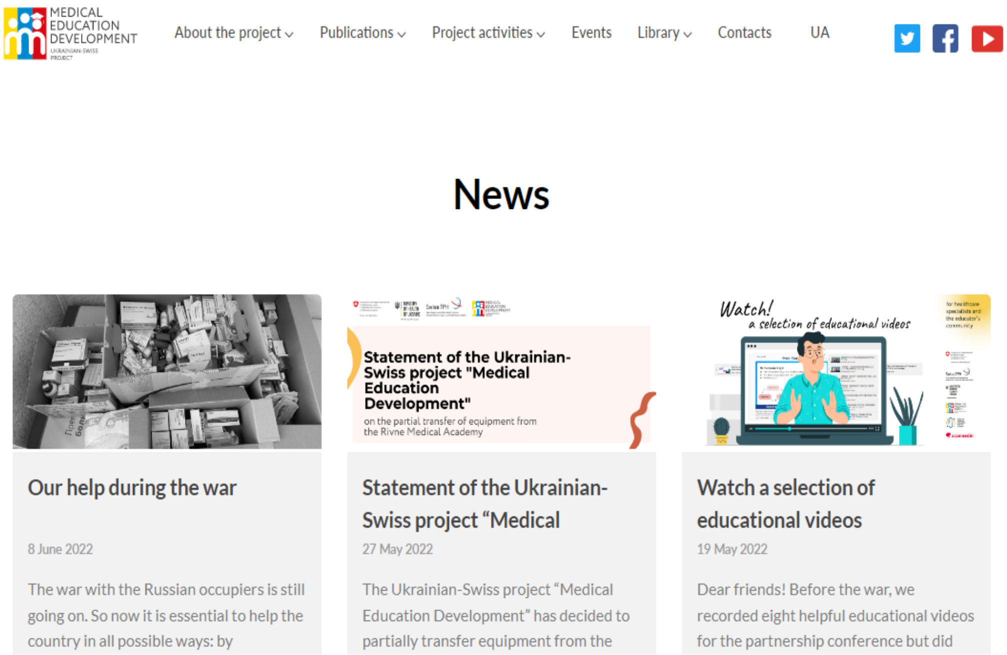

Figure 2. MED Project.
Source: author's development.

The Medical Education Development Project (Project, MED) is implemented in Ukraine by the Swiss Institute of Tropical and Public Health (Swiss TPH) with the financial support of the Swiss Agency for Development and Cooperation (SDC). The first four-year phase of the project started in December 2018 and will last until the end of 2022. The budget for the four-year implementation phase is 4.9 million Swiss francs. The project is implemented in cooperation with the Ministry of Health of Ukraine, focusing on priorities that are established with the aim of providing medical education effectively and meeting the existing needs of health care in Ukraine. It is widely recognized that the availability of properly trained and motivated staff in highly resourced, equipped facilities is a critical factor in delivering quality interventions that will improve population health outcomes. Therefore, the overall goal of the "Development of Medical Education" Project is to improve the quality of health care in Ukraine by improving the medical education system for representatives of the primary health care sector. The main focus of the project is on primary health care (doctors and nurses), both in terms of practical primary health care and in building the capabilities and skills of management personnel. The project covers all levels of medical education - undergraduate medical education, postgraduate education (internship), as well as continuous professional development, providing expert, regulatory and educational support in the process of improving the quality of education for primary care workers (Medical Education Development, 2022).

The increased demand of society for progressive changes in the modern conditions of global competition in medicine determines the consideration of medical universities as important drivers of the transformation of medical education. The integration of medical education into the European space involves the coordination of the methods and content of education with the holistic picture of the modern world, the relationship and mutual influence of social and humanitarian disciplines in the formation of personality through the use of interdisciplinary integration; selection of problematic tasks and arguments that require creative thinking and intelligence combined with knowledge (Pietrzak et al., 2018). The development of innovative integrated courses with the use of modern technologies develops the competencies necessary for a modern physician in practical activities." That is why the reform in medical education is considered as a collective matter of students, teachers, scientists, doctors, managers, even politicians, in accordance with international standards and processes in educational policy (Cheng et al., 2020; da Silva, 2018).

The organization of the educational process in medical universities is regulated by the current regulatory and legal documents of Ukraine, the standards of higher education of Ukraine, taking into account the principles of the formation of the European area of higher education. The educational process is carried out taking into account innovative educational technologies, mechanisms and procedures determined by the Ministry of Education and Science and the Ministry of Health of Ukraine, which correspond to the principles of medical education of the European Higher Education Area (Komarraju et al., 2018). The content of training of specialists is determined by industry standards of higher education, and the content of higher education in the medical direction is implemented in unified approaches to educational and qualification characteristics and educational and professional programs at the stages of undergraduate and postgraduate training of specialists, developed in accordance with the order of the Ministry of Education and Science of Ukraine. It is important to note that the educational and qualification characteristics of a graduate of a higher educational institution reflect the goals of educational and professional training, determine the specialist's place in the structure of the health care system and the requirements for his competence (Pesapane et al., 2018a).

The educational and qualification characteristics establish branch qualification requirements for social and industrial activity and state requirements for the characteristics and qualities of a person. Though there is no supervisory committee that would monitor and check compliance with all the listed standards in educational institutions and identify gaps in the training of specialists (Idowu, 2018).

Introduction of new methods and technologies in the system of medical education in Ukraine. Despite the fact that institutions of higher education have enough autonomy, conservatism levels modern approaches both to learning and to the cultural and ideological component of the modernization of the teaching process; the passivity of thinking of the teaching staff has a destructive effect on the initiative and creativity of students; insufficient quality control of practical training leads to inappropriate professional competence in the future; improper material and financial stimulation of the work of teachers makes it impossible to desire to form the professional competence of students; insufficient funding of science, outdated or missing educational base inhibit progressive and innovative approaches, etc (Wartman and Combs, 2019).

However, not all teachers use modern information technologies in the educational process; there is no single developed and agreed modern textbook that students could use when preparing for qualifying exams, because most of the textbooks are from the last century, and the educational material is completely outdated and out of date; there are no models on which medical students should improve practical skills, that is, there is a gap between theoretical knowledge and practical skills (Abuzaid et al., 2018).

Therefore, the social significance of medical education involves, first of all, its modernization in accordance with the regulatory, legal and educational and methodological world standards of the field of medicine, preventive measures and preservation of the health of the nation thanks to the actualization of educational policy problems taking into account European standards, ensuring and implementing the latest achievements of medical science. Therefore, professional training in higher education institutions of Ukraine should be aimed at students' mastery of modern competencies, which are based on the culture, morality and ethics of the individual as the basic components of medical education (Duong et al., 2019). The scientist singles out the following components in the content of professional competence: adaptation and civilization; social and organizational; subject-methodical; communicative; value and content, which medical students should acquire in the process of studying in medical institutions of education. Everyone knows that the Ukrainian system of continuous professional development for doctors does not meet the standards of the WFME (Spieler et al., 2020).

Over the past two years, new forms of continuous professional development have been actively developed, discussed and implemented (Smith et al., 2018). The representatives of the European Commission in Ukraine have developed the Concept of higher education, which is based on the following forms: training and internship based on improvement cycles (from one to four weeks), distance learning, internships in Ukrainian clinics and abroad, participation in meetings, congresses, work meetings and other scientific forums, gaining experience in modern clinics, sharing experience, etc (Park et al., 2019).

However, this Concept was not actively supported and implemented in the educational process.

The patient's life and health should be the basic human and professional values of medical professionals. High-quality medical care is impossible without changing the cultural paradigm and creating a new professional environment - self-reproducing and independent (Pesapane et al., 2018b). The implementation of the Strategy is designed for 10 years and involves the creation of a high-quality system of medical education with a high level of training of specialists, namely:

- improving the quality of higher medical education;
- qualitative change in postgraduate education;
- provision of effective financing and management;
- rethinking of academic culture;
- stimulating the development of scientific research.

It is worth noting that medical education should be developed based on the latest achievements of medical science and practical achievements of world medicine, which requires knowledge of a foreign language.

In order to be able to use the achievements of world medicine and be a competitive specialist, one must be motivated, adhere to bioethical and ethical-deontological norms, and be a highly qualified and humanistically oriented specialist (Hall et al., 2020).

It is worth noting that the Internet plays a great role in the training system of a modern specialist in the medical field. Internet self-education has become a new and quite effective form of self-education with the application and use of a computer and the Internet, which must also be used in the process of training medical students. Its possibilities are extremely diverse: from instant access to a huge amount of information to the possibility of taking online courses that allow you to watch video lectures by well-known specialists in various fields of medicine and dentistry, test your knowledge using tests, communicate with other students, teachers, exchange experiences, opinions, participate in forums, conferences (Cassidy et al., 2020).

It is worth noting that continuous professional development is necessary not only for doctors, but also for teachers of medical universities. In order to teach students, one must be aware of the latest news, treatment tactics or diagnostic techniques, innovations in medicine at the international level, etc. That is, educational programs must correspond to the latest achievements of medical science. However, without changing the paradigm of basic secondary and higher medical education in Ukraine, it is impossible to bring the health care system closer to world standards, carry out its reform, and provide quality medical care to the population in the future (Sivarajah et al., 2019).

Therefore, the need to reform the medical field is reinforced by the regularity of overcoming the contradictions that exist in the modern medical education system, since the Ukrainian medical field is in a long process of reformation, therefore the full use of university clinical bases should be a priority direction for students to master important professional competencies and necessary practical skills for undergraduate stage (Bank et al., 2019).

Having analyzed the problems and outlined the directions for the development of medical education, which will be implemented by the Ministry of Health of Ukraine in the future, special attention should be paid to the environment that forms the personality and lays the necessary character qualities (Awan et al., 2019). The educational environment generates motivation regarding the model of behavior that students observe in the educational institution, take an example from teachers, focusing even on the manner of conducting a dialogue or treating a patient (Koontz et al., 2018). Therefore, a successful and cultural environment plays an important role in the formation and development of the future doctor.

Scientists believe that the educational process should correspond to the available scientific and pedagogical potential, the material and educational and methodological base of the university; a mandatory condition should be modern information technologies of education with a focus on the formation of an educated, harmoniously developed personality, capable of constant updating of scientific knowledge, academic and professional mobility, rapid adaptation to changes and development in all areas. That is, the quality of education in higher educational institutions must be improved through effective organization and informatization of the educational process, introduction of advanced scientific developments into teaching practice, ensuring high professionalism of teachers, creation of a modern educational and methodological base in all educational fields, in particular, medical (Randriambelonoro et al., 2018).

Conclusions

The quality of medical education for different specialties in Ukraine and ways to reform and optimize the system of medical education in Ukraine. The authors believe that the main motive for reforming the medical field is the desire of students to master professional skills and practical skills, to deepen the acquired theoretical knowledge and apply it in practice, to develop skills regarding the standards of providing medical care, to gain experience in practical work, which will allow a modern student to successfully work independently in the future. Interdisciplinary and international connections. The implementation of interdisciplinary connections in educational activities is one of the necessary didactic means of forming students' professional knowledge and skills, that is, the opportunity to comprehensively solve the tasks of medical practice based on interdisciplinary integration. Introduction of new methods and technologies in the system of medical education in Ukraine. The updated system of medical education should be based on modern approaches, guarantee quality and ensure compliance with higher education standards, should be focused on informatization and implementation of the high potential of computer and telecommunication information technologies in the process of teaching professional disciplines. It is also necessary to create a group that would carefully study and propose a number of conceptual priority measures related to changes in legislation and aimed at coordination between universities in order to develop a clear, unified strategy for reforming medical education, to ensure the responsibility of higher education institutions for the quality of education and its guarantee, taking into account the interests of society.

We see the prospect of further research in a comparative analysis of the system of higher medical education in Ukraine and the United States of America.

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On the problems of modern philology and the creative methodology of teaching foreign languages in the European educational system

Sobre los problemas de la filología moderna y la metodología creativa de la enseñanza de lenguas extranjeras en el sistema educativo europeo

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Abstract

The modern philology involves many creative methods in the study of foreign languages. European education system used measures related to the involvement of the new technologies and distance learning due to the global pandemic. The aim – to describe the latest methodology in combination with new technologies and creativity. The methodology of creative pauses was conducted among the students in Comenius University Bratislava. Methods: monitoring, testing, data analysis, description, experimental training using multimedia resources. The results showed that non-traditional methodologies (creative pauses) adapted to the FluentU media resource in combination with distance forms of education become an alternative to traditional learning.

Keywords: creativity, foreign language, non-traditional methodologies, innovations.

Resumen

La filología moderna implica muchos métodos creativos en el estudio de las lenguas extranjeras. El sistema educativo europeo utiliza medidas relacionadas con la participación de las nuevas tecnologías y la enseñanza a distancia debido a la pandemia mundial. El objetivo - describir la última metodología en combinación con las nuevas tecnologías y la creatividad. La metodología de las pausas creativas se llevó a cabo entre los estudiantes de la Universidad Comenius de Bratislava. Métodos: seguimiento, pruebas, análisis de datos, descripción, formación experimental con recursos multimedia. Los resultados mostraron que las metodologías no tradicionales (pausas creativas) adaptadas al recurso multimedia FluentU en combinación con las formas de educación a distancia se convierten en una alternativa al aprendizaje tradicional.

Palabras clave: creatividad, lengua extranjera, metodologías no tradicionales, innovaciones.

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Introduction

The European education system seeks to encourage, self-expression, and the comfort of the subjects of the learning process. Teachers are expected to provide quality instruction and to meet the needs and expectations of students. In the university context, teachers are expected to be aware of all educational innovations in their field, in particular the teaching of foreign languages. Given this imperative, the question arises as to what is new in the field of modern foreign language teaching. We are not talking about the application of new technologies, which certainly help to beat grammatical forms or to accustom the distinction of certain sounds, or to understand a written text. These forms do not allow for the full development of spontaneous expression or interaction as a social actor who must perform a communicative task.

As Alfadil (2020) notes, non-traditional methods and innovations are very effective, the mistake, however, would be to assume that technological innovation is necessarily based on or simultaneously provides conceptual innovation. Even if the teacher's role changes, he or she must guide the learner among the linguistic mazes, to find appropriate approaches.

First and foremost, everyone should understand the need to make learning more enjoyable, and less boring (Farrell & Kennedy, 2020). This idea is widely developed (Russell, 2020), where the scholar reveals the basics of "better learning," clearly emphasizing the importance of a mental environment that encourages stress-free learning, varied activities that are both creative and fun, and stimulates students' motivation to be interested in foreign languages. Of particular note is his idea of reusing recess for the benefit of language learning.

In the perspective of this work, non-traditional methodologies that offer practices, preferring different forms of creativity such as theater, music, rhythm, gesture, etc. are interesting. However, despite the great interest in play practices and creative activities, first of all, it is necessary to follow the programs approved by institutions or the educational system. Therefore, there is a dilemma in combining clear academic programs with experience, learning with fun. Creative and recreational breaks in this regard are poised to solve it (Wen & Chen, 2022).

The purpose of this paper is to describe the latest European methodological experience in teaching foreign languages to non-traditional methods, and their creative and original adaptation during creative and recreational breaks in a distance learning environment.

Objectives of the paper: to define different types of pauses; to review the latest non-traditional methodologies; to discuss their possible adaptation during creative and recreational pauses; to determine the advantages of this teaching approach in combination with technical innovations.

Theoretical Framework or Literature Review

Any teacher feels perfectly well the need to pause during the learning process, even if students still seem quite active and able to follow the learning process. Rus (2020) identifies four types of pauses: recreational, simple physical (or biological), creative, and rich physical. According to him, the duration of pauses should always be defined, and it is very useful to create a ritual to signify the end of the pause, for example, to play a certain melody.

In a distance learning environment, there is no need for a detailed description of the possible activities during the physical pauses. Although it is possible to practice this remotely (under the guidance of a teacher, participants satisfy their natural needs, communicate with colleagues, perform stretching exercises or controlled breathing movements).

Pauses of this type are necessary and very useful for further work, however, when teaching foreign languages online, we should focus on recreational and creative breaks, which we can use for educational purposes.

An alternative to traditional breaks can be suggested by non-traditional methods of creative breaks, with the possibility of adapting them to remote learning. Non-traditionalism is seen as the opposite of pedagogical practices typically taken for granted, particularly by students, where the student is viewed as a holistic and creative individual (Caena & Redecker, 2019).

According to Onishchuk et al., (2020), recreational pauses help to relax the atmosphere, reduce tension, which allows to overcome language barriers, forget fear, and get rid of stress. The authors describe several possible options. For example, you can tell a short joke or a funny story, offer a simple game. Such a small activity will allow repeating the material, to break the ice. Rhythmic repetition with visual exercises is very useful. This is very important for students who have to concentrate on their computer monitors all day.

Creative pauses, as the name implies, free the imagination. Short theatrical improvisations, art, drawing in computer applications, music, movies, and household items can serve as the basis for these small breaks from regular distance work (Caena & Redecker, 2019). The practical application of the multiple intelligences' theory used in the paper should also not be overlooked. (Hanzawa, 2021) states that not all students have the same level of intelligence and therefore the same type of activity is not appropriate for everyone and may demotivate some. If the educator finds different approaches to the subject, he achieves better results and avoids boredom, which, according to (Bruno Hurst) does not generate a healthy rebellion or reasonable acceptance, but rather his absorbing apathy sinks the body, sinks into a state of emotional stupor (Dufeu, 2020). In this context, mention should be made of linguistic psychodramatry (Baudracco-Kastner, 2022), which also facilitates the acquisition of a foreign language. Psychodramatry addresses the participant on physical, affective, intellectual levels, in its social and spiritual dimension. More unconventional foreign language learning techniques are described by (Pennycook, 2022). The authors emphasize the importance of positive emotions in the learning process. There are five non-traditional, creative methodologies, in other words, methodologies that offer different strategies for teaching/learning foreign languages: the community method, the silence method, the movement method, the suggestopedia, and the natural approach.

The community method (Macgilchrist, Allert & Bruch, 2020) proposes using a foreign language as a means of social interaction, that is, to introduce activities directed at everyone, not forgetting their emotions and feelings. The goal is to apply to the teaching of foreign languages the same methodology as in psychotherapy. Gradually the class becomes a community that shares its knowledge with each other. The disadvantages of this method are the lack of time and the availability of curricula. Shared class life becomes, unfortunately, a utopian idea. In addition, the use of small groups to accomplish a task as one whole social organism is highly recommended.

The natural approach of Corcoran et al., (2020) promotes speech comprehension and vocabulary development and does away with grammar entirely since when we learn our native language from an early age, we do not teach grammar rules, everything comes by itself.

The method of silence (Weber & Mehandru, 2022), as its name indicates, according to which the teacher should remain silent for as long as possible to allow the students to express themselves, strive, and above all to develop their autonomy.

The method of general physical reaction (Pennycook, 2022), or in other words the method of movement, is very simple, here the gesture plays a very important role. It is based on an imperative, the teacher gives orders, and the students move a lot to perform the assigned task, facilitating vocabulary memorization. But it should be noted the impossibility of this type of work during distance learning. On the other hand, it is possible to resort to this method during a short pause (as a presentation of the imperative inclination or prepositions of place).

Suggestopedia (Macgilchrist, Allert & Bruch, 2020) - the method differs greatly from other non-traditional techniques by emphasizing musical rhythm and classroom decorum. (Caena & Redecker, 2019) are of the opinion that in a carefully organized learning environment, one can accelerate the pace of learning 3 to 10 times, while creating an enjoyable and relaxing environment. The author practiced different reading techniques accompanied by excerpts of music by Mozart, Bach, Haydn, or Beethoven to achieve a state of psychorelaxation and concentration. It is necessary to vary the tone and rhythm of the reading with the musical accompaniment (Worsham & Kalita, 2020). The type and choice of music is very important. Suggestopedia has the disadvantage of being too long.

All of these presented methods are creative because they completely eliminate stress, feelings of inferiority and insignificance, and, of course, routine, which is considered the main obstacle to learning a foreign language. Nevertheless, they are not well studied. We believe that it is important to know them to apply their new adaptation and to practice them during creative or recreational breaks.

Methodology

The experiment was conducted at Comenius University in Bratislava. Comenius University in Bratislava among 1st and 2nd year English

Philology students in English Language and Literature. Students of 1-2 years (two semesters) participated (2 subgroups). The experiment was conducted throughout the 2019-2020 year.

Given learning experimentation consisted of the next stages:

1. the first stage of the experimentation;
2. hands-on learning;
3. transitional observation;
4. questionnaires;
5. post-experimental stage.

The hypothesis is put forward: the process of development of speech competence among full-time the students of the first year in the specialty “English language and literature” becomes more effective if creative pauses with the use of innovative technologies and new, non-standard methodologies are applied. The use of Internet resources using FluentU technologies allows conducting classes and creative pauses, making possible types of activity aimed at forming all components of English speech competence (Fig. 1):

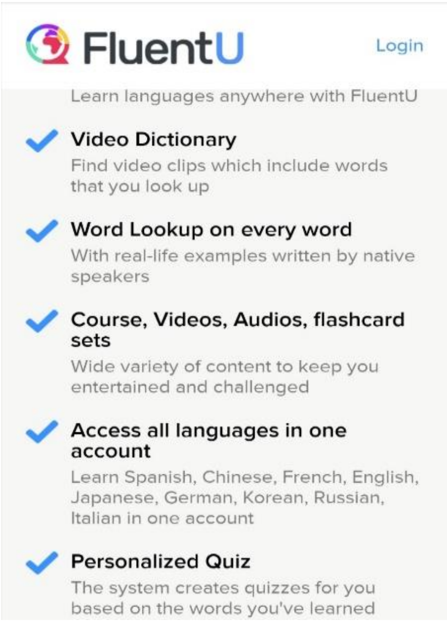

Figure 1. FluentU media resource interface.
Source: Language Immersion Online. (Fluentu, n.d.).

The purpose of the first stage was to identify the initial level of knowledge of the participants of the experiment; the formation of foreign language speech competence to determine the selected group of students’ quantity and quality arrangement. The design of the experiment - the experimental groups were compared at all stages of the study. So, both groups of apprentices were observed for 2 years. One group 2 was engaged in distance learning, according to the traditional, established algorithm of distance learning institutions. Group 1 had creative pauses with the introduction of different types of creative activities in the context. To obtain reliable results, identical pairs of students with extremely similar scores on certain traits were chosen. This made it possible to take into account not only general data but also individual data. To fix the preliminary level of foreign language speech capability between the 1st year students an experimental test was carried out. The experiment was conducted in 2019 (second semester) - 2020 (first semester) during the strict lockdown in two groups of 12 students each. The test materials chosen were a task from the University of Cambridge website, https://www.flo-joe.co.uk/cae/students/tests/. Students were selected according their responses to the exit test. In addition, a questionnaire on the practical use of the FluentU media resource was conducted.

To achieve the results and to prove the hypothesis the following scientific methods were applied: training-experiment with the use of educational media resources FluentU, observation, data counting, description, and presentation of results.

Results and Discussion

The pedagogical experiment had the following objectives: academic (took place during the study); hypothetical (test); natural (experimental groups were chosen randomly); horizontal (control and experimental groups); openness (open questioning). The results of the investigational stage clusters had a regular level of foreign language speech competence. Group 1 should improve their level after working with the educational media resource FluentU and the use of creative pauses.

Pedagogical experiment, during which the developed system of activities for creative pauses with the help of FluentU media resource was tested. The training itself was held remotely, according to the traditional university algorithm. FluentU media resource was involved in the learning process, with the help of which students received additional material, but in a playful relaxed form during the creative pauses. The progress in the development of speech competence was monitored during the experiment. The time of the education experimentation was chosen according to teacher needed extra time to fill in the material in FluentU, as the selection of the material was made, which was coordinated with the curriculum. Consequently, there is no need to describe the work of group 2, which was engaged in the established algorithm of distance learning. Experimental group 1 used the approach of creative pauses based on suggestopedia. It is important to maintain a certain dynamism and creativity that would not have been possible without using FluentU, as the google meet learning platform has much fewer media features and was used for group 1 solely to create a collaborative conference. Of course, FluentU provides many ideas and possibilities for implementing games and other communicative activities in foreign language classes. In this case, it was important to choose the right moment to implement them. A special place is the sound quality, a very important factor in adapting to new sounds. In this sense, FluentU is very convenient because its technical characteristics can be downloaded to any device, while its advanced parameters will not distort the sound.

The combination of technology and creativity is ideal, it allows you to fill the breaks, both recreational and creative.

So, at the end of the experiment, both groups compiled a module from foreign language speech competence. Assessment criteria: Reading (Reading - one hour and quarter), Writing (Writing - one hour and quarter), Listening (Listening - 45 minutes); - 15 minutes). The exam was administered in three phases: the first was Reading and Writing, the next was Verbal Skills, Speaking and Listening, and the other was a short study of the participants. Consequently, when passing all parts of the Cambridge examination, where the maximum was 253 points. The statistical calculation of the results is as follows: high level - 80%-100% - 180 points or more; average - 60%-79% - 151-200 points; low level - less than 60% - 150 points or less. The results were as follows (Tab.1):

Table 1.
Sum of students' points in groups 1,2

First group	Score	Second group	Score
Student 1	196	Student 1	149
Student 2	184	Student 2	175
Student 3	197	Student 3	183
Student 4	177	Student 4	182
Student 5	176	Student 5	185
Student 6	200	Student 6	166
Student 7	170	Student 7	169
Student 8	181	Student 8	144
Student 9	191	Student 9	150
Student 10	181	Student 10	177
Student 11	200	Student 11	189
Student 12	197	Student 12	167

Table: author's own development

Consequently, the average score for group 1 is 187.5 (high); for group 2 - 169.6 (average). The results of the experiment confirmed the hypothesis that the level of formation of foreign language speech competence of students of the 1st year (2nd and 1st semester of study 2019-2020) increased due to the specially developed method of work with educational media resources and with the introduction of creative pauses.

The effectiveness of using digital online technologies is obvious and has been sufficiently researched. There is no doubt about their use to teach English not individually to philological students (as in this case) but also to those, who wish to specialize in other sciences. Of particular practical value according to Blume (2020), cloud computing technologies together with social media resources offer great occasions to learn English, particularly to improve writing skills. The flexibility of using social media or additional programs for learning English is debated (Eickelmann & Gerick, 2020). Other scholars, particularly (Assis Gomes et al., 2017), note the convenience aspect of daily smartphone use with downloaded learning social media, dossier sharing, messengers, and mobile apps. However, very little has been written about creative study breaks. After all, the benefits of this type of activity are enormous; this type of activity facilitates memorization, reduces or eliminates the stress that is significantly detrimental to the learning process (Escobar Fandiño, & Silva Velandia, 2020). It is quite possible to use activities such as gestures, pantomime, drama, and voice games at the beginning of a lesson as a warm-up, icebreaker, or entry to a subject to introduce the grammatical topic you want to work on during that class or, simply put, to surprise and break down the classic dynamics of a language course (Goh & Sigala, 2020). Solidify, they can be done in the middle of a class when students are tired, not too focused. According to Leigh et al., (2020), using some simple techniques improves memorization because anything students learn quickly stays only for a while in short-term memory, to retain the information, it would have to be repeated after 10 minutes. 48 hours, next week, next month, and six months after or before the exam. From this perspective (Asad, Hussain, Wadho, Khand & Churi, 2020) suggests going back to a subject that needs to be repeated every time doing a different activity.

Every educator knows the “problem of finishing a lesson,” Creative Pauses is a great opportunity to fill those few minutes with a rhythmic song that makes you forget the fatigue caused by a heavy topic (Morgan, 2020). In addition to enjoyment, this method of work is becoming an increasingly privileged means of awakening a desire to learn.

Limitation of the experiment: data analysis requires quite a long time. Practical application of the results is conceivable for the teaching course at schools in foreign language departments, not only for the development of foreign language talking competence in English but similarly for other languages. The results can be an addition to the previously presented methods of foreign language education. The results contribute to the extending of research in the field of linguistics, translation studies, and philology. The main requirements of the experimentation can be applied in the exercise of teaching English in the full-time form of education, by correspondence, in foreign language courses. Further research can continue in the direction of theoretical explanation of the combination of technology, creativity, and psychology in education.

Conclusions

The charge of the investigation lies in the development of approaches of working with instructive media resources in combination with creative methods designed for the development of students' creativity; foreign language communicative competence and simply and progressively included in the general context of teaching foreign languages in higher education in a distance learning environment. The main pedagogical conditions of the effectiveness of the method's content application are:

– determination of the peculiarities of the educational environment of higher education institutions;
– improvement of students' language activity as a result of implementing the educational media resource FluentU, improved based on the results of the formation of foreign language speech competence diagnostics;
– learning format - online mode.

The practical use of the method and the results of the experimentation under study can be included in the educational process of colleges at the sections of foreign languages, not only for English but also with suitable adjustments for other languages. The results balance the standard methods of developing foreign language speech competence.

The combination of technical and creative methodologies is extremely necessary during the coronavirus pandemic. Their application makes it possible to:

- encourage students to express themselves passionately, without frustration, and to feel comfortable;
- quickly acquire fluidity of expression by combining grammatical or lexical structures in a dynamic and fun way.
- complement traditional education.
- avoid boredom and routine.
- not contradict the programs developed by the institutions.

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Learning english through YouTube as a self-development factor for future officers

Вивчення англійської мови засобами інформаційно-комунікаційних технологій як чинник саморозвитку майбутніх офіцерів

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Abstract

The aim of the article was to assess the effectiveness of learning English through YouTube as a factor in improving the future officers' language skills. The study involved the following methods: survey, pedagogical experiment, Score-Rating System of Performance Control; Scale of Assessing the Need to Achieve the Goal by Yu. M. Orlov; Adapted Method of T. I. Ilina — Examining Motivation to Study in a higher educational institution (HEI); Diagnosis of the Level of Reflexivity Development by A. V. Karpov. The dynamics of change in the level of foreign language competence is very insignificant for students in the traditional form of education (control group), and it applies only to levels A1 (-8%) and A2 (+8%), that is, the lowest of the represented ones. Learning through the proposed model helps increase student involvement in foreign language learning, which is reflected in the increased number of completed assignments.

Анотація

Метою статті була оцінка ефективністі вивчення англійської мови через YouTube як чинника підвищення мовних навичок майбутніх офіцерів. У дослідженні були використані наступні методи: опитування, педагогічний експеримент, Бально-рейтингова система контролю успішності; Шкала оцінки необхідності досягнення мети Ю.В. М. Орлов; Адаптована методика Т. І. Ільїної — Вивчення мотивації до навчання у вищому навчальному закладі (ВНЗ); Діагностика рівня розвитку рефлексивності за А. В. Карповим. Динаміка зміни рівня іншомовної компетенції дуже незначна у студентів традиційної форми навчання (контрольна група) і стосується лише рівнів А1 (-8%) та А2 (+8%), тобто найнижчий із представлених. Навчання за запропонованою моделлю сприяє підвищенню залучення студентів до вивчення іноземної мови, що відображається у збільшенні кількості виконаних завдань. Зростає якість освіти, що

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The quality of education is growing, which is reflected in the increased level of student performance.

Keywords: Foreign language competencies, learning English, training officers, YouTube in education, linguistic education.

відображається на підвищенні рівня успішності студентів.

Ключові слова: компетенції іноземної мови, вивчення англійської мови, навчання офіцерів, YouTube в освіті, лінгвістична освіта.

Introduction

The informatization and globalization of society set new requirements for the educational process, and new approaches to learning appear. Mass informatization of society has made the Internet an important part of everyday life of most modern people. In a relatively short period of its existence, the Internet has been involved in changing all spheres of society, including education (Order № 466, 2013). The possibilities of using Internet resources to obtain new and improve existing knowledge are endless. Virtual social networks are not only a popular means of communication but also a unique resource for those who learn a foreign language. As one of the available ways to exchange information, social networks and hosting platforms are becoming an effective tool for acquiring foreign language competencies by future officers (Spiriakova, Tokmilenko & Balyuk, 2020).

From the research point of view, the video blogosphere is a relatively new social phenomenon. Still, it has particular prerequisites for theoretical justification, which follow from the provisions of the theory of structural functionalism. The video blogosphere has obvious boundaries in time and space as an element of social structure. As part of the global Internet, the video blogosphere demonstrates all the major subsystems of social structure (behavioural organism, cultural system, personality system, social system) (Maria et al., 2020).

Traditionally, insufficient time is allocated, and insufficient attention is paid to the study of Foreign Language in the military HEIs, because it is not specialized. The education system that existed recently contributed to the acquisition of knowledge, skills, and abilities by students, but this was not enough to form a fully developed personality of the future officer of the Armed Forces. There is a need for close cooperation between the domestic military and the world community due to the growing public interest in international military blocs. The state's desire to join the NATO military bloc necessitates the future officers' communication ability. In today's world of globalization, there is a growing need to connect with other cultures, and learning a foreign language has a special place. A foreign language is no longer an end in itself and can serve as a working language for seminars and lectures during the exchange of experience between domestic and foreign military (Marchenkov, 2021).

As a foreign language becomes a necessary tool for the daily activities of the military, modern students and graduates of specialized HEIs need to master all means of communication with foreign colleagues. This approach leads to a change in attitudes towards teaching foreign languages in non-linguistic faculties of military HEIs. It is necessary to optimize language education, taking into account new realities in the context of informatization and digitalization (Ministry of Education and Science of Ukraine, 2020).

YouTube is a video hosting company that provides users with video storage, delivery, and display services. Users can upload, view, rate, comment, add to favourites and share videos. Due to its simplicity and ease of use, YouTube has become the most popular video hosting and the second-largest site globally in terms of the number of visits. From a computer science standpoint, YouTube is nothing more than a database that allows video to be uploaded to the platform and viewed.

Using YouTube as an archiving platform entails certain media transformations, although some sceptics argue that "there will never be a time when everything is available (online)." Moreover, most archives are interested in receiving the money to preserve or restore old, unique products rather than in their promotion and free distribution (Olimova, 2020).

Therefore, YouTube is a kind of environment that archives and distributes audio-visual media. YouTube can and should be used as a lecture and practical material database, including on Foreign Language (Silveira & Reis, 2022).

Obviously, implementing two main functions — communicative and informational — YouTube presents students with a new format of social platform for the realization of their own creative and educational potential. Internet socialization is a new format of student integration into the globalized world, which was formed under the influence of two processes:

Global informatization of society, which entails a change in the process itself and the emergence of new channels and institutions of socialization;

Changing views on the formation of communicative competence of the future specialist, including in the military field (Sabiri, 2020).

The study aimed to prove the effectiveness of learning English through YouTube to improve the language skills of future officers. The aim involved the following research objectives:

Check the effectiveness of pedagogical conditions to increase the level of foreign language competencies.

Compare the effectiveness of information and communication and traditional technologies for learning a foreign language.

Literature review

Technological, organizational, and pedagogical aspects of e-learning described in Steiner and Mendelovitch (2017) are subject to standardization (IEEE Learning Object Metadata; ARIADNE, PROMETEUS; SCORM), formalized in computer programs for educational purposes (ePront, OpenElms, ILIAS Claroline LMS, OLAT, ATutor, Moodle, etc.). The analysis showed that research is directed toward increasing consistency, fundamentalism, and strengthening the applied significance of teaching social-humanitarian and general professional subjects. This is evidenced by the increased interest in the problem of improving organizational forms (Shinkevich et al., 2020), the implementation of didactic principles (Ryan et al., 2014), stimulating independent activity, and management of self-learning activity (Rosida, Muin & Sakka, 2021). Development of students' readiness for self-learning and its management, as well as the formation and development of the culture of independent activity (Kulieva et al., 2021); various aspects of independent activity (Asad et al., 2020); opportunities for autonomous activity in the development of personal components — as a means of forming subjectivity, self-knowledge, professional self-development (Aborode et al., 2020). Many studies point to the need for greater use of the latest communication technologies to learn a foreign language. Although the education digitalization process is constantly covering higher education institutions, the level of implementation of new technologies is still low. According to Umarova (2020), it is necessary to ensure the development of information and digital resources for learning a foreign language. Particular attention in the scientific literature is paid to the organization of the educational process during distance learning (Liutyi, 2021a, b).

Despite a comprehensive study of various aspects of self-learning a foreign language, innovative processes that are actively taking place at the present stage in HEIs are still insufficiently reflected in the process of its organization. Issues related to the modelling of self-learning activities of students in HEIs, including students who follow an individual plan, need to be addressed.

Uncertainty of the selected theoretical provisions causes several contradictions in the practice of higher military education:

- between the need of the military educational practice for the creation of resource materials for the organization of self-learning activities of students with the help of automated educational systems and the uncertainty of pedagogical conditions for their effective use;
- between the objective need for the introduction of information technology in the educational process and the insufficient development of theoretical and methodological aspects of their use in students' self-learning.

Methods

Design

The experiment aims to test the effectiveness of the introduction of English language learning in the educational process using YouTube. The selection and evaluation of the general conditions of the experiment are considered an integral part of its planning, namely — the means and places of implementation by students and teachers. Particular attention was paid to the evaluation and correct choice of comparable and variable experimental conditions. Equalization is performed in the control and experimental groups to ensure the similarity and invariance of the conditions. In general, they include student composition, teacher's personality, educational material, and educational situation.

The study was conducted in several stages, as detailed in Table 1.

Table 1.
Stages of the study

Stage	Period	Description	Result
1 Preparation. Research of scientific literature. Selection of methods. Preliminary study. Development of experimental material.	June 2020	Analysis of scientific and methodological literature on the organization of learning English. Definition of the objectives and methods of research. Analysis of the current state and prospects for the development of informatization of educational processes. Development and substantiation of the structural and content model, software and methodological support, as well as pedagogical conditions for the organization of English learning with the help of YouTube.	Scientific and methodological literature was reviewed. The concept of scientific research is formulated, the objectives and methods of their fulfilment are defined. The possibilities of automated learning systems and distance learning systems, which are used in English language learning, were identified. The pedagogical conditions necessary for realization of pedagogical model are defined.
2. Main pedagogical experiment	September 2020 – June 2021	Approbation of pedagogical conditions. Testing.	A model of organizing English self-learning with the help of YouTube was introduced into the educational process.
3 Statistical data processing. Summarizing the results of the pedagogical experiment	September – December 2021	Data processing. Summarizing the results of the pedagogical experiment.	The results of experimental work were used to write the article.

Source: Authors

Participants

The general sample consisted of students of HEIs in Ukraine aged 17 to 26. The sample consisted of students of military HEIs who agreed to take part in a pedagogical experiment — a total of 150 respondents who formed an experimental group. Pedagogical conditions were applied to the experimental group. Namely, a programme for learning English via YouTube was proposed. The control group consisted of students of non-military HEIs who studied English by traditional methods. The control group involved 150 students. Students of the control group studied English by the method of blended learning.

Instruments

Google Forms were used for the survey. The data were entered and processed in Microsoft Excel and SPSS Statistics 18.0. All data are given in relative (% of the number of respondents) values. All instruments meet the criteria of validity, scientific, and verifiable results. The proposed test meets the criterion of validity in content because it fully covers the research subject. The test also complies with the principle of convergent validation. Namely there is a relationship between test results and other study indicators. The test does not measure any trait that it should not measure and thus complies with divergent validation. Based on this, you can unambiguously ensure that the test meets the requirements of science and academic ethics.

Data collection

1. The study used an author's online questionnaire developed through Google Form (http://surl.li/azjiu). Such diagnostic pedagogical methods as Scale of Assessing the Need to Achieve the Goal by Yu. M. Orlov (Studwood, n.d.); Adapted Method of T. I. Ilina — Examining Motivation to Study in a higher educational institution (HEI) (Psitesterua, n.d.); Diagnosis of the Level of Reflexivity Development by A. V. Karpov (Psycabi, n.d.).
2. The pedagogical experiment is a method of complex scientific research, and the essence is to use a set of didactic research methods. The pedagogical experiment was conducted in stages, comparing the initial and final indicators of the

control group and the experimental group. The study involved summative and formative pedagogical experiments (Plomp 2020).

Score-Rating System of Performance Control was used to determine the level of cognitive component and its indicator "mastering the system of multilateral knowledge in the process of self-learning a foreign language". Learning a foreign language is based on extensive use of the YouTube hosting platform. The maximum points that a student can score per semester in the subject is 100% (100 conditional points). The maximum score obtained on the exam/test can be 30 conditional points (percent). The total score for the subject is translated into its national numerical equivalent and European Credit Transfer and Accumulation System (ECTS). Rating points scored by students are converted according to Table 2. The article uses reliable and proven research methods and data processing tools.

Table 2.
Scale of conversion of points into the national numerical equivalent, the international letter system

Sum of points for current control	**Sum of points for intermediate examination**	**Sum of conditional points (percent)**	**Numerical equivalent**	**Grade**	**Level of development**
68 – 70	29 – 30	97 – 100	5	Excellent	
66 – 67	27 – 28	93 – 96	5	Very well	High
56 – 65	21 – 26	77 – 92	4	Good	
45 – 55	18 – 20	63 – 76	3	Satisfactory	Medium
35 – 44	15 – 17	50 – 62	3	Middling	
20 – 34	12 – 14	31 – 49	2	Unsatisfactory	Low
0 – 19	0 – 11	0 – 30	2		

Source: Authors

Data analysis

Mann-Whitney U test. The Mann-Whitney test does not impose restrictions on the range of changes in the values of the characteristics in both samples, that is, the mutual placement of the studied samples does not matter.

$$U = W - \frac{1}{2} m (m + 1) = \sum_{i=1}^{n} \sum_{j=1}^{m} \delta_{ij}; \quad (1)$$

When applying the Mann-Whitney test, the sample sizes must meet the following requirements: $n_X \geq 3$ and $n_Y \geq 3$ or $n_X = 2$ i $n_Y \geq 5$. In this case, the first is the sample, which is more important according to preliminary estimates.

Ethical criteria

The research was conducted considering the requirements for academic integrity in scientific activity. The data from the research participants were obtained in the manner prescribed by the rules of scientific research work. Respondents were warned that the study results would be published as a scientific article. Respondents provided informed consent for the use of research results. Personal data of respondents remain known only to the author's team of researchers. All research methods are selected following the academic requirements of respect for the individual and prevention of discrimination on any grounds.

Results

In 2020, students of the control and experimental groups passed the input test in an exam format, which included 5 sections: reading, lexical and grammar test, listening, writing and speaking. The final testing in the format of the exam was conducted after the end of the 2020/21 academic year — in May 2021. The data were processed by mathematical methods. Not all data had a normal distribution, it was decided to process all data by estimating non-parametric odds according to the Mann-Whitney test. Sections such as writing and lexico-grammatical test were of interest for this study. Probability values with an explanation of the statistically significant difference and dynamics are presented in Table 3.

Table 3.
Dynamics of success in completing the assignments of sections "writing" and "lexico-grammatical test" for the period of experimental training

Section	Assignment		P-Value on the Mann-Whitney test at the beginning of the experiment	Statistically significant difference	P-Value on the Mann-Whitney test at the end of the experiment	Statistically significant difference	Dynamics
	Multiple choice	EG and CG	0.0379	Yes	0.7726	No	
	Open cloze	EG and CG	0.0217	No	0.5576	No	
	Word format	EG and CG	0.4792	No	0.4803	No	
	Sentence transfion	EG and CG	0.9256	No	0.1241	No	
Writing	Summary	EG and CG	0.1055	No	0.0214	Yes	++
	Essay	EG and CG	0.9276	No	0.0222	Yes	+++
TOTAL		EG and CG	0.4966	No	0.035	No	+

Source: Authors

The data analysis shows that according to the input test results, the students of the experimental groups coped with the multiple-choice assignment Use of English Multiple Choice better than the students of the control group. Students in traditional CG classes coped better with the assignment of filling in the blanks with the appropriate words Use of English Open Cloze than EG students.

The trend, however, changed during the final exam: EG students on showed better results in the assignments of Use of English Multiple Choice and Use of English Open Cloze compared to CG students. It can be noted that the data show changes in writing and speaking skills, that is, in assignments for abstracting and essay writing.

Besides, it is worth noting the tendency for a statistically significant difference in the overall score of EG students. Although the P-value in the Mann-Whitney test — 0.0835 — does not indicate a statistically significant difference, it is important to note that this value is close to the specified figure of 0.05 compared to the order of magnitude input test (0.4966), which indicates a trend of more successful learning of EG students.

The analysis of the change in the sum of points by sections is of great interest, when all types of assignments are combined. For example, the scores on four assignments — Multiple-choice cloze, Open cloze, Word formation and Sentence transformation — will be summed up for the "lexico-grammatical test" section. Next, the scores obtained by the students of the group in this section were added up, and the relative difference between the values obtained was analysed (Figures 1 and 2).

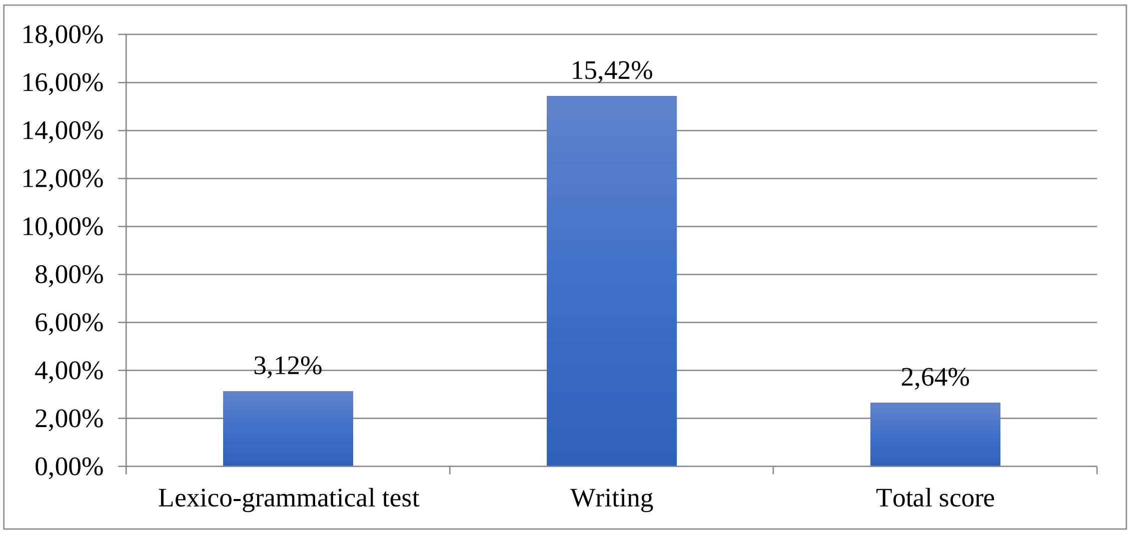

Figure 1. Comparison of the results of the input test and the final exam for students of the control group.
Source: Authors

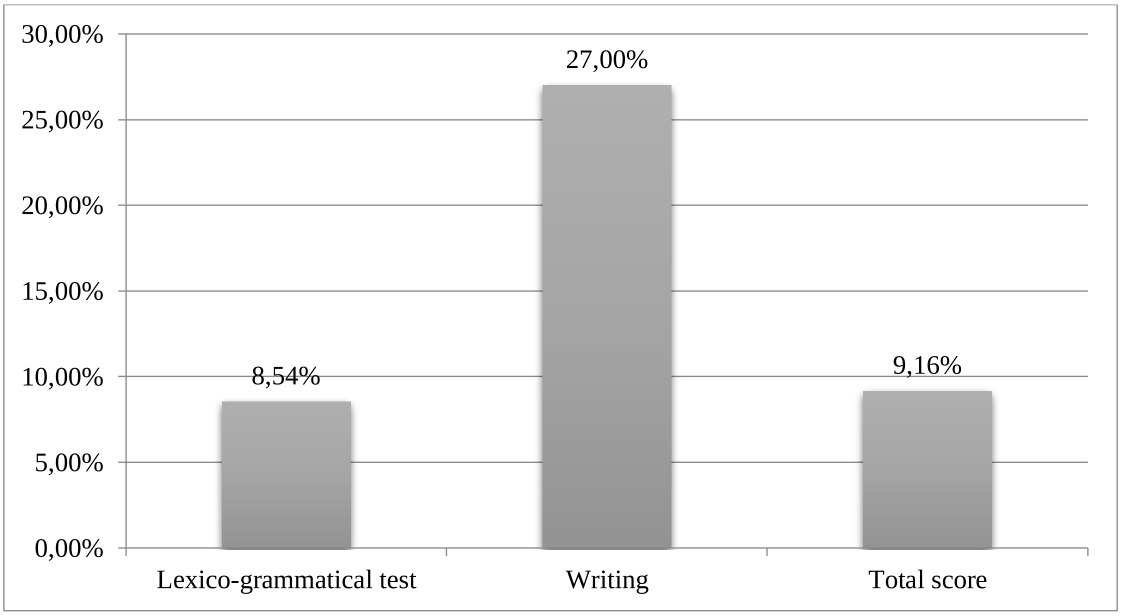

Figure 2. Comparison of the results of the input test and the final exam for students of the experimental group.
Source: Authors

The analysis of the diagrams shows how the total values on the sections “Lexico-grammatical test” and “Writing”, including the Total score, have changed in all groups. Students were engaged in self-learning outside the classroom during the study and submitted the results to the teacher: the control group — on paper and the experimental groups — online. It is noted that the positive dynamics in all sections are observed in students studying through YouTube, while in the control group — only in the section “Lexico-grammatical test”. This is due to the possibility of copying the answers of other control group students, who completed the assignment of independent work on paper and submitted it in class.

The assignments were checked as follows: the student posts the answers on his/her personal page, the teacher checks the answers and selects the wrong ones, leaving comments on the type of a mistake, if necessary (indicating the area of error). Then the student can complete this assignment again and get extra points for corrected mistakes. If the student does not understand what exactly is wrong, he/she can ask questions. The combination of the ability to make adjustments to the work and the lack of opportunity to read other students' work explains the achievement of the best results in the development of writing skills on closed pages. As for the dynamics of the overall score, all groups showed an improved effect.

If we compare the level of foreign language communicative competence in students when passing the input test in the format of the exam in 2020 and the level achieved after the course in May 2021, we see the following picture (Table 4).

Table 4.
Changes in the level of foreign language communicative competence of students during the experimental training from input control to final control

	Input control	Final control	Dynamics
EG	A1 – 10% A2 – 21% B1 – 53% B2 – 16%	A1 – 0% A2 – 16% B1 – 31% B2 – 52%	A1 – -10% A2 – -5% B1 – - 22% B2 – +37%
CG	A1 – 8% A2 – 25% B1 – 42% B2 – 25%	A1 – 0% A2 – 33% B1 – 42% B2 – 25%	A1 – -8% A2 – +8% B1 – - B2 – -

Source: Authors

The dynamics in CG students of a traditional form of education are very insignificant, and it concerns only levels A1 (-8%) and A2 (+8%), which is the lowest of the represented ones. Changes in levels B1 and B2 were not recorded. The most favourable picture is observed in the experimental group: the share of students with initial levels A1, A2 and B1 decreased (-10%, -5% and -22%, respectively), and the share of students with the highest of the represented levels — B2 — showed a significant increase of 37%. We can say that students who used YouTube achieved the greatest success.

Discussions

Analysis of the exam results showed that students of the experimental group did no worse and, in some respects, even better than students in the traditional form of education. When comparing scores for assignments in different sections, students who studied the use of information and communication technologies showed an increase in all indicators, including the Total score. Ifeakor (2021), Mazurenko (2021), Poddubnaya et al., (2020) noted high rates of students studying English through information and communication technologies. At the same time, students with traditional forms of education showed negative dynamics in some sections. According to studies by Hodges et al. (2020), Lemeshchenko-Lagoda, Kryvonos and Kolodii (2020), acquiring a high level of communicative competence is not possible in today's world without the introduction of innovations. The study showed that the use of such a popular platform as YouTube could increase the English language level of future officers of the Armed Forces.

YouTube has been found to be a didactically justified tool for creating an information and educational environment in distance learning. The proposed model uses YouTube to post learning material, organize various types of active assignments, implement collaborative learning, and provide online feedback via interactive chat. The importance of interactivity in foreign language learning is noted by Aripova (2021). The researcher notes that active and interactive methods allow the development of future specialists' communicative competencies. The optimal number of participants for the organization of work is determined. The efficiency of pair interaction is proved. Learning foreign language writing and speaking activities within the proposed model helps to increase students' motivation by creating a virtual learning space, implementing of interactive group assignments, implementation of mutual evaluation technology, transparency of evaluation procedures, access to quality electronic specialized educational resources, and the possibility of feedback from the teacher and other students. Studies by Chernova et al., (2021), Chisango et al., (2020), Czerniewicz (2020) etc. note that the traditional form of learning remains indispensable. According to researchers, comparisons of traditional and innovative forms give approximately the same results.

The theoretical significance of the research results is that they expand and deepen knowledge about the nature of the use of YouTube in foreign language learning, its theoretical and methodological principles, and organization through the use of computer technology. The study's practical significance is because today, the Internet has entered all spheres of human activity. This is the largest source of information. With the help of the Internet, you can use all sorts of educational and methodological information when learning a foreign language, including video content. Every day on the Internet you can meet new phenomena, to understand this you need to have a basic knowledge of English. More and more people want to participate in intercultural communication via the Internet or live communication. Learning a foreign language is designed to form a person capable of it. The purpose of learning a foreign language is the formation of communicative competence. Communicative competence includes not only linguistic but also socio-cultural competence, as without knowledge of the cultural background it is impossible to form communicative competence even within limited limits. This study provides an understanding of the importance of using YouTube in foreign language learning in freelance education.

The practical significance of the model proposed in the study lies in the analysis of the experience of using computer technologies to improve the training of military personnel. A significant advantage of the article is comparing the use of YouTube in foreign language learning by students of various fields of study. This will make it possible to adapt the methodological basis of the article for conducting similar studies among students of not only military specialties. The practical significance of the research was also achieved through developing a methodological base for researching the effectiveness of computer technologies in foreign language learning. The practical results of the study can improve the methodological and didactic basis of English language teaching in higher education institutions.

The main limitation is the inability to cover a large number of respondents. This limitation arises against the background of the specifics of the mode of operation of the military HEI. Therefore, it was possible to reach only some respondents, making it possible to unequivocally assert the validity and consistency of the data obtained. Quarantine restrictions related to the COVID-19 pandemic should also be mentioned. However, despite all the difficulties, it is possible to assert the representativeness of the obtained data.

Conclusions

The use of YouTube video hosting has been suggested as an effective tool for foreign language learning for future Armed Forces officers. The research results showed that the dynamics of level change in CG students is very insignificant. In particular, it is observed at levels A1 (-8%) and A2 (+ 8%), which is the lowest of the represented ones. When processing the study results, changes in B1 and B2 in the CG were not recorded. The most favourable picture is observed in the experimental group: the share of students with initial levels A1, A2 and B1 decreased (-10%, -5% and -22%, respectively), and the share of students with the highest of the represented levels — B2 — showed a significant increase of 37%. The research can be helpful to all interested organizations and individuals whose activities are related to increasing the level of foreign language competence of future specialists. Of course, this study does not cover all aspects of this problem. Further research may deal with the formation of the students' readiness to work independently with the help of video hosting.

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Structural and functional model of the successful person training in USA colleges and universities

Структурно-функціональна модель підготовки успішної людини в коледжах і університетах США

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Abstract

The purpose of the article is to study the training of a successful person in the colleges and universities of the USA as a holistic process and to create a structural and functional model. The methods of retrospective analysis, systematization and generalization, abstraction and specification, modeling and graphic visualization are applied. A structural and functional model of successful person training in colleges and universities of the USA has been created. The focus groups of this process have been defined, in which the work is aimed at applicants, first-year students, second-fourth years students and a special category - students of the last year and graduates, as a significant part of students do not complete their studies on time. Examples of effective use of models and strategies of student training by American institutions of higher education are given. Five stages of successful person training in American institutions of higher education are proposed. It is summarized that the created structural and functional model is the basis for creating a

Анотація

Метою статті є дослідження підготовки успішної людини в коледжах і університетах США як цілісного процесу та побудова структурно-функціональної моделі. Застосовано ретроспективне аналізування, систематизацію і узагальнення, абстрагування та конкретизацію, методи моделювання та графічної візуалізації. Побудовано структурно-функціональну модель підготовки успішної людини в коледжах і університетах США. Визначено фокус-групи підготовки, у яких робота спрямована на абітурієнтів, студентів першого року навчання, студентів другого-четвертого років та окрему категорію – студенти останнього року та випускники, позаяк вагома частка студентів не завершують навчання своєчасно. Подано приклади ефективного використання американськими закладами вищої освіти моделей та стратегій підготовки студентів. Запропоновано п'ять етапів роботи американських закладів вищої освіти щодо підготовки успішної людини. Узагальнено, що розроблена структурно-

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strategy for the development of an educational institution and will contribute to the high-quality organization of the training of specialists in colleges and universities.

Key words: success, professional training, students, higher education of the USA, modeling.

функціональна модель є підґрунтям для створення стратегії розвитку закладу освіти та сприятиме якісній організації підготовки фахівців в коледжах і університетах.

Ключові слова: успішність, професійна підготовки, студенти, вища освіта США, моделювання.

Introduction

Higher education plays a crucial role in the modern world due to its contribution to the progress of humanity in the form of economic, scientific and technological achievements. The mission of higher education is to form highly qualified specialists, promote their successful professional and life realization. The task of higher education is not only to provide a young person with the necessary knowledge, competences and skills, but to enhance the comprehensive development of personality, to cultivate necessary qualities and character traits. The more thorough analysis of the efficiency of higher education institutions' work is encouraged by some reasons. Firstly, the problem of figuring out of student's achievements after college and university's graduation. Secondly, the realization of a person in the future life and career. Thirdly, the development of own abilities and formation of necessary life skills and important competences. The training of a really successful person depends on a range of factors, among which personal, social, psychological, pedagogical, economic ones play an important role. The process of studying in higher education institutions provides such training that gives to a young person benchmarks for success achievement, self-confidence in the future, effective self-realization. The experience of other countries in this process, especially the USA, is a quite useful. The developed system of American higher education achieved certain progress in this sphere and occupies a leading position among world institutions of higher education (Kozmenko, 2020). Therefore, the training of a successful person should be considered as a holistic process, covering educational achievements and personal development, and according to P. Jones et al., (2008) successful graduates should not only be well employed, but also they should develop the qualities of well-bred and responsible citizens with a vast outlook who are able to make a positive contribution to the development of society.

The problem of student success and life achievements is not thoroughly investigated in psychological and pedagogical science. Currently, success is a difficult term to define because of numerous personal and institutional factors that affect the training of a successful person. The success of a higher education institution directly depends on its students and graduates success, fruitful work of academic staff and administration. US educators have achieved significant results in this direction and their experience is valuable for implementation in the higher education system of other countries.

The main conceptual idea of the research is a statement that starting from the end of the first decade of the XXI century, the mission of colleges and universities in the USA is "not how to enroll the best students", but "how better to teach non-traditional students" (Calcagno et al., 2008). That is, the training of a successful person in the colleges and universities of the USA in the XXI-st century involves the creation of necessary conditions for learning, upbringing and development of the student's personality. It means providing students with the necessary knowledge and skills, the formation of competences, the realization in their future life and career, the development of students' abilities and the formation of necessary vital skills.

American society always demonstrates interest in increasing the number of citizens who receive a higher education degree, obtain high-quality knowledge and skills, achieve certain personal development, and receive documents that confirm professional qualification. This is the goal of any developed society and this opinion is shared by a wide range of stakeholders, among whose educators, politicians, scientists, employers, students and their parents, various organizations and foundations. A specialist with a higher education degree not only has a high qualification, but also meets the criteria of certain modern trends in the conditions of world globalization. It means this person is professionally mobile, is able to successfully realize himself/herself in the conditions of an unstable socio-economic society. This person is also creative, active and capable of overcoming life's challenges with dignity as well as freely navigates in the world information space. However, the lack of a comprehensive study of the outlined problem, the importance of theoretical substantiation of the problem of training a successful person and the need for practical use of positive foreign experience taking into account the uniqueness of higher education became the basis for this study.

Purpose is the research of the successful person training in US colleges and universities as a holistic process and the construction of a structural and functional model.

Hypothesis. The construction of the structural and functional model will contribute to the optimization of the study of a successful person's training in colleges and universities of the USA. The received scientific conclusions will become the basis for creating a strategy for the development of a higher education institution and will contribute to the high-quality organization of the training of specialists in colleges and universities.

Literature review

It has been done various studies of college and university work that contribute much to the process of operationalizing the concept of student enrollment in ways that can be reliably measured and, accordingly, applied preventively to improve student success. The important data about significant factors that influence success are given. They are the importance of the first year of study, the development of persistence, the process of student retention, the impact of the university campus and the engagement of students in active social activities that lead to experiences that affect student success positively.

It is appropriate for scientific research to use a broad definition of success, according to which student success refers not only to the process of graduation, receiving a degree and appropriate document, but more to experience positive emotions and satisfaction during learning (Braxton, 2006; Kuh et al., 2006).

According to the researchers, success should be observed as a holistic concept that encompasses academic achievement and personal development. Defining success in this way, scientists point to a perspective that goes beyond understanding this concept only as the achievement of any result, determination of the level of persistence or completion. This concept, in addition, should express personal feelings of achievement significance for a student (a qualification, a prestigious job, or any other success) and/or a sense of civic duty to society. Over the past fifty years, the popularity as a subject of research on student success in higher education has gained this personal perception of the fact of achievement, the feeling of its significance.

The result of scientific investigations was the generalization of scientific theories, which made it possible to formulate a comprehensive theoretical point of view on success and its correlates, to identify important problems, as well as to include various perspectives of research and its implementation, to propose new models and recommendations for promoting student success. In 2006, G. Kuh with colleagues presented a scientific report on important areas of practical university work (Kuh et al., 2006). Due to this work, it was confirmed the importance of several groups factors in successful person training: institutional, student, external, etc. Among them, the researchers single out the influence of previous student experience, the training expectations, and experience outcomes, gained in college and presented by student behavior. In addition, it is very important to consider academic and social conditions, educational institution policy, outcomes of higher education, the conditions and obstacles with which students can face during the training. One of the main conditions of success achievement is the active engagement of students in the academic life (Kuh et al., 2006).

V. Tinto and B. Pusser (2006) presented the research of effective leadership of campus activities to promote persistence and student success, which showed that the personal experience of a student who he (she) brings to an educational institution becomes very important. The unique context of student success is formed by diverse contextual factors: demographic, historical, cultural, psychological and pedagogical, personal, economic and even political ones. External context, the competition of interests causes the creation of requirements for institutional, federal and local policy, which can redirect student success possibility. The authors express concern because the institutional factor can affect student success achievement, especially among at-risk students, without providing sufficient support for such students. Therefore, according to researchers, for colleges and universities, it is extremely important to have the favorable academic, social and financial climate for students. It is provided by well-organized institution's activities and high expectations from students, staff and administrators; giving effective, large – scale support for students; providing effective feedback to students from teachers (through result monitoring, assessment and "early warning" systems); organizing of effective events which attract students as important members of institutional communities.

V. Tinto and B. Pusser (2006) considered that learning and extra-curricular activities of students are the most important, they play the main role in the student success formation. Within the framework of the proposed model, the effective means of promoting student success are active actions to create national and local policies. It is necessary to 1) develop an interconnected system of competency standards required for high school completion and enrollment to a higher education institution; 2) support the development of both primary and secondary school teachers; 3) provide academic performance development for insufficiently trained students; 4) develop institutional programs focused on traditionally underrepresented students; 5) improve communication between two- and four-year institutions; 6) establish an early and continuous assessment of students' readiness for entering the university and the formation of competencies necessary for success due to providing of relevant information to all stakeholders; 7) develop innovative financial policy (including institutional and state support, federal aid, tax policy and tuition discount policy) that directly provide assistance to students with financial difficulties. The key idea of researchers is the opinion that the educational system is a holistic concept and does not need to be separated into parts (Tinto & Pusser, 2006).

The work of L. Perna and S. Thomas (2006) is about the basics of student success. They offered a conceptual model of students' success according to race and ethnicity affiliation and socio-economic status. This model aims to raise level of success for all students and reduce disagreements among them. Using theories and research on sociology, economics, pedagogy and psychology, the authors created a basic framework for management of development, implementation and evaluation strategy that would help scientists and practitioners to eliminate obstacles and reduce differences in student success. The structure of this model outlines that: student success is long-term process; various theoretical approaches provide the understanding of student success; it is formed under the influence of personal, social, economic and political factors; pedagogical, psychological, social and economic theories influence on the understanding of student success; various methodological approaches contribute to knowledge about the student's success; the achievement of success differs according to the features of student groups (Perna & Thomas, 2006). The importance of consideration of multifaceted aspects of differences between students allows reminding of the impossibility of using the only approach to study and define student success (Kinzie & Kuh, 2016). To summarize, the significance of these works is in the fact that the proposed structures are a kind of guidelines for the basics of the development, implementation and evaluation of the theory and practice of student success, and also they aim to encourage politicians, researchers and educators to consider preventive and corrective means of intervention in student success as the part of a broader and longer-term process.

Materials and methods

Methodology. The methodological basis of the research is the philosophical propositions of the theory of knowledge about the unity of processes (Plokhikh, 2021; Plokhikh et et al., 2021; Popovych et al, 2020b), mutual influence and interdependence of the phenomena of the surrounding reality in specific historical conditions (Popovych et al., 2021b), determined by the socio-cultural, historical-cultural, socio-economic and political context (Blynova et al., 2020a; 2020b; Popovych et al., 2020c; 2021a). A synergistic approach is taken into account, in the context of which the training of a successful person in higher education institutions of the USA is analyzed as a psychological and pedagogical system with its factors and subjects. Tested samples are taken as an example and presented in scientific works as a unity of historical and logical (Tinto & Pusser, 2006); modern psychological and pedagogical theories of success, conceptual ideas of modern higher education, regularities of the establishment of the educational space of a higher school (Hudimova, 2021; Hudimova et al., 2021; Khmiliar et al., 2020; Shevchenko et al., 2020a; 2020b); patterns of creation and examples of the application of the modeling method in social practice (Nosov et al., 2020) and scientific research (Kononenko et al., 2020; Popovych et al., 2020a).

Procedures and instruments. The following methods were used to reach the goal and check the research hypotheses. They are the analysis of American historical – pedagogical and psychological literature, as well as research materials that were synthesized into a holistic system of views on training a successful person in colleges and universities in the USA. Abstraction and concretization during the study of monographic studies on the theory and practice of organizing the training of a successful person in American colleges and universities, generalization and systematization of information. A modeling method for creating a high-quality prototype – a structural and functional model of a successful person training in US colleges and universities.

Statistics analysis. Graphical visualization was performed using the "MS Word" and "MS Excel" programs.

Results

The new strategy of universities to achieve student success involves creating such learning conditions that will allow them to achieve their learning goals, be successful and enjoy the learning process. The modern vision of student success involves both high rating indicators of learning, as well as personality development, the formation of professional competence and sufficient self-realization in society. Studies of the influence of the educational space of universities have provided information about important factors that have an impact on achieving success. They are student involvement; the importance of the first year of study; the development of persistence; the student retention process; the influence of the campus environment. Taking these factors into account at educational institution work leads to the development of strategies that have a positive effect on student success.

The training of a successful person in higher education institutions of the USA begins from the moment of enrollment, and sometimes, even at the stage of work with the future applicants and ends with the support after graduation from an educational institution. This process is possible to demonstrate in the form of a structural and functional model of a successful person training in colleges and universities in the USA (Fig. 1). This model is possible to use in higher education institutions for four-year bachelor's educational programs.

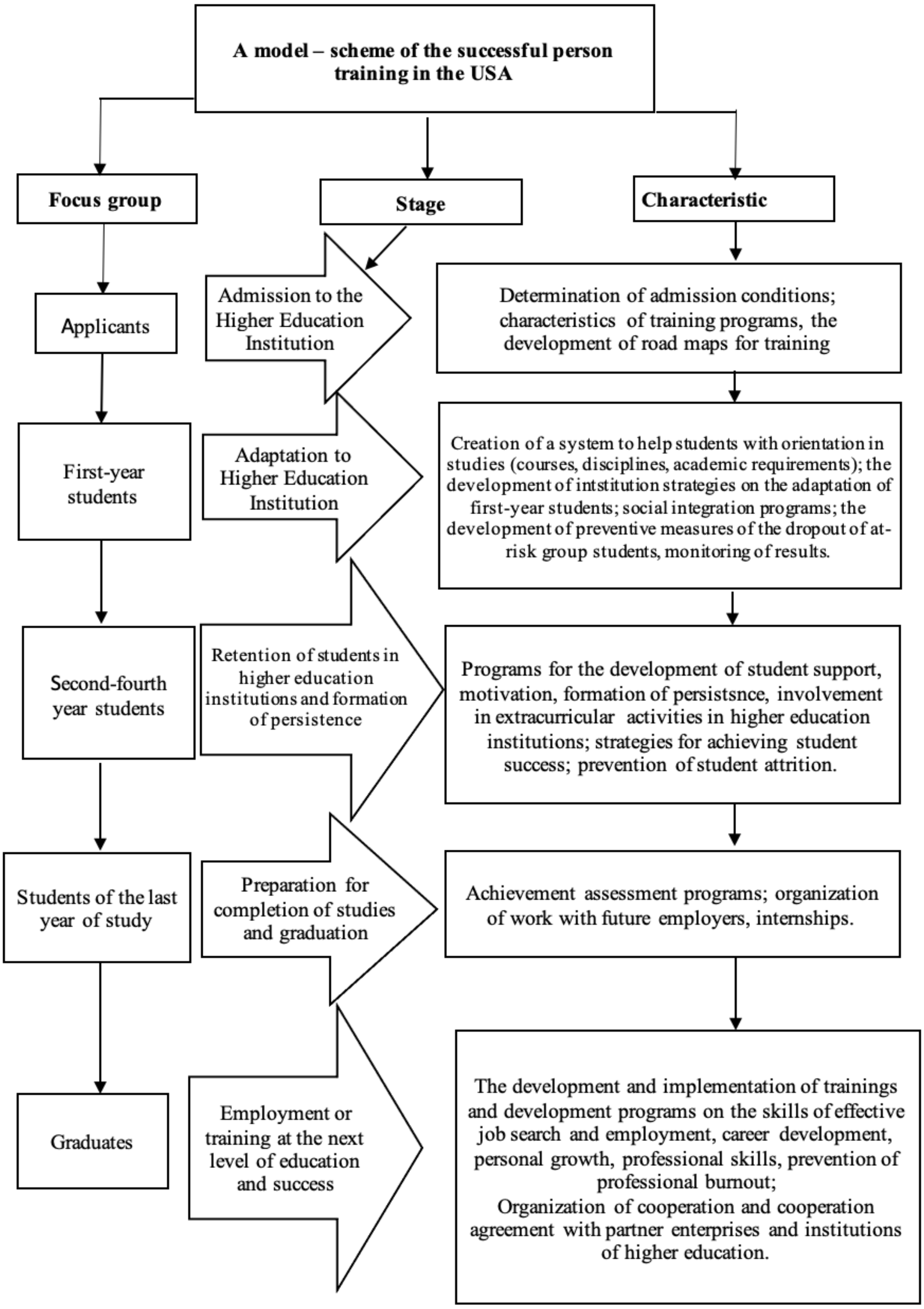

Figure 1. Structural and functional model of successful person training in the USA
Source: Personal elaboration, 2022.

The model consists of focus groups, consequent stages and characteristics of work on training in US higher education institutions. The characteristics of the first stage are the determination of admission conditions, survey and identification of key features of educational programs, assistance in defining short-term goals and development of training roadmaps. The main tasks of adaptation in colleges and universities are the creation of a system of assistance to students in learning orientation (courses, disciplines, academic requirements), development and implementation of the institution’s strategy for the adaptation of first-year students, social programs of integration in the educational space; development of preventive measures for the dropout of at-risk students, monitoring of results. At the third stage, it is important to keep students in the educational institution and to form the persistence to study. For this purpose, it is appropriate to apply student support programs, conduct motivational training programs, form perseverance, actively involve students in extracurricular activities at the educational institution, and use activities to prevent student burnout. Considering the fact that the duration of studies in institutions of higher education can go beyond the planned term, the next stage involves the support of the final year of studies in order to build persistence in completing studies. For this, work with students includes the development of achievement assessment programs, the demonstration of the benefits of the obtained results, the involvement of future employers in cooperation, and internships. After graduating from college, students face the problem of further employment, and here, within the framework of the model of a successful person training, it is possible to direct the student to further study at the master's level or to involve a student in the process of job hunting. In this process, the development and implementation of trainings and programs for the development of necessary skills for effective job search and employment are useful as well as attending courses and trainings on career development, personal growth, and professional skills. Prevention of professional burnout is an effective means of working in this direction. An additional incentive for completing studies and achieving success is the search for work partners and the congluding of cooperation agreements with enterprises and institutions of higher education about further work.

Discussion

In a discursive form, we will analyze the sequence and advisability of the stages of work of American institutions of higher education in a successful person training.

Stage I – admission to a higher education institution. The way to success starts with the admissions campaign, which according to researchers, happens lately due to efforts to simplify enrollment opportunities. It involves lowering admissions requirements and academic performance standards. The creation of admission standards, definition of visions and missions is the task of higher education institutions without nationwide regulation. Therefore, the general policy of applicants enrollment to American institutions of higher education is built taking into account such indicators as traditional academic indicators (average point of the certificate, rank of the student in the class, test results); indicators depending on the socio-economic status of the applicant's family; indicators of personal factors (level of motivation (checked by the quality of the motivation letter), abilities (choice of specialty), teachers' recommendations, interview results.

In the conditions of high competition between institutions of higher education, the issue of sufficient enrollment of students remains relevant. Innovative strategies allow some colleges and universities to enroll more students than their competitors. An example of such a strategy is the creation of partnerships between community colleges and high schools in the United States. Cooperation can take place in the field of diagnostics of readiness to study in higher education institutions and assistance in academic preparation for admission, creation of joint study programs, specialized classes, preferential conditions for admission, organization of mentoring assistance, participation in joint projects and initiatives.

Active career guidance work is carried out through the involvement of high school students in extracurricular activities of higher education institutions (sports competitions, contests, creative initiatives, conferences, excursions). According to American researchers, programs based on high school and college partnerships can promote retention and success of students, showing certain advantages. This involves saving certain resources when students participate in compatible credit programs, getting the necessary college credits in their senior year of high school, saving high school students' time and money. It is also beneficial to keep students in college by creating "transition programs" that facilitate a smooth transition from school to college, improving opportunities for potential students. Early acquaintance of high school students with the academic and scientific environment contributes to the increase in the number of school graduates who, having certain circumstances and obstacles, did not have sufficient motivation to finish school, but after working with college representatives, wanted to get a higher education. In addition, a positive aspect of cooperation between schoolchildren and a college or university is participation in activities aimed at identifying the leadership potential of high school students. It also helps the college administration to know the characteristics of the future contingent. For example, Broward College (Florida) actively uses several programs for future students. The college offers a “Summer bridge” program for effective enrollment and a new “JumpStart” orientation and registration program that facilitates the process of registering an applicant’s documents at the time of admission (Coley et al., 2016).

So, thanks to the easy requirements for admission to most higher education institutions, the number of students in the USA is growing every year. However, it is a well-known fact that, having easily entered college, a significant percentage of students do not complete their studies and leave the institution already in the first year of study. This emphasizes the importance of the next stage of our structural and functional model (see Fig. 1).

Stage II – adaptation to the institution of higher education. The first year of college is a critical, transitional period in the life of students. The first experience of higher school has a decisive influence on students’ academic self-efficacy and further success. The transition period can cause anxiety of low self-esteem in students, so there is a need to effectively adapt both psychologically and emotionally. Unsuccessful integration into the space of the institution of higher education can cause psychological difficulties, depression, and low performance, which can lead to drop-out. As a result, many institutions are implementing strategies at the beginning of studying to ease adaptation, boost student confidence, and promote success.

In order to help students to achieve success, it is appropriate to use a variety of preparatory as well as first-year courses for students. The models of these courses can be as diverse as the characteristics of the students for whom they are designed. They are often called orientation courses, first-year seminars, freshman seminars, or study skills courses, and they are quite common and increase students’ self-efficacy, and the possibility of future success (Tinto & Pusser, 2006). The courses are aimed at developing time management skills, study skills, anxiety management techniques, etc. They proposed strategies that help build students' confidence and facilitate the educational process. An example of such initiatives is the work of Broward College (Florida), where it was developed a system to help students navigate courses and make smart academic decisions (Coley et al., 2016). By providing students with the necessary support and connections, as well as the information needed to make early career decisions, the institution sets students up for success in their major. The First-Year Orientation Program offers organized activities to help new students join the college community. These activities are part of a strategic approach to help new students to adapt to a new environment by providing important information and managing goals and expectations (Coley et al., 2016). Consequently, in colleges and universities, a lot of attention is now being paid to the first-year experience, as it has been stated that high dropout and expulsion rates are increasingly recorded at the beginning of studying. To describe this process in American higher education, the term “drop out” is used, but some authors believe that in this context neutral definitions are better (attrition, discontinuance, withdrawal, non-completion). The basis for success in life is developed study skills that enhance student’s self-confidence and self-efficacy. Readiness for studies, acquaintance with academic culture and campus environment, openness to new knowledge, a desire to receive help when needed and support from family and academic staff are the key to a student’s success.

Stage III – the retention of students in the higher education institution and the formation of persistence. Within this stage, it is advisable to develop and implement in educational process own strategy for student success. American researchers determined that four key areas of higher education play a decisive role in a successful person training (Tinto & Pusser, 2006) (Tabl. 1).

Table 1.
Key domains of higher education

Preparation	Finances	Availability	Responsibility
Preparation for higher education institutions	State support	Outreach	Assessment
Early assessment	Institutional aid	Capacity	Accreditation
Preparation teachers	Federal student aid	Articulation/transfer	State mandates
High standards	Loyal tax policy	Remediation	Market competition
Alignment of standards and assessments	Tuition policy	-	-

Source: Personal elaboration, 2002.

"Achieving the Dream" (ATD) project of the Lumina Foundation became an example of special attention to student success in community colleges. This initiative had a clear goal to give these institutions of higher education the support to be successful both in retaining and graduating students as well as enrolling those students, including ethnic, racial, and low-income students. The ATD student success model encouraged them to succeed by providing regular analysis' evidence of both student and institution of higher education performance. In order to help students achieve academic success, based on this analysis, institutions are making necessary large-scale efforts to improve student outcomes. The main idea of the project was to show the following: community colleges should adopt a "culture of evidence" by using student records and other data to examine why students are forced to spend more time studying and identify barriers to academic progress. Then they can use these findings to design intervention strategies to improve student outcomes, facilitate further research on student performance, and design effective programs. The conclusions of this project formed the basis of the development of a certain strategy, which contains five principles (Mayer et al., 2014: 47-50):

To develop the policy and distribute resources to support efforts aimed at improving student success. 2. To use research data in order to understand how successfully students study, to identify so-called "risk groups", those groups that may need additional support and to draw up an action plan. 3. To involve faculty, staff, and stakeholders in the using of data and conducting research in order to develop intervention strategies aimed at solving the problems identified as priorities by the college. 4. To implement the strategies for improving the effectiveness of higher educational institutions and their evaluation in order to use the results of the evaluation to make decisions about the expansion or improvement of these strategies. 5. To create an infrastructure to support continuous systemic improvement by the way of institutionalization of effective policies and practices. Program review, planning and budgeting should be based on research evidence about what works best for students.

The first two reports evaluating the effectiveness of this project indicate progress in colleges' foundation construction necessary for student success, particularly in the development of data systems, intervention methods to improve student success, and increased administration attention to student success (Mayer et al., 2014).

The world-famous Ellucian corporation, which has been working in the field of providing services to higher education institutions for more than 40 years in order to achieve success, in 2016 presented the development of a new strategy for student support, analyzing the experience of many American universities. The proposed strategy is briefly presented in Tabl. 2.

Table 2.
Ellucian Success Strategy

Stage	Characteristic
Creation of a unified concept of the vision of student success	Determination of priorities; development of "risk group" criteria; creating a system of help and support for students
Informing students about the possibilities of achieving success in a higher education institution	Consulting on education issues; psychological help for first-year students conserning adaptation; orientation in educational courses and programs, requirements for academic success; determination of learning goals and opportunities for their achievement; financial aid or scholarship.
Creating a clear early intervention strategy	Identification and recording of the signs of at-risk students, actual necessary help and support to students from this group, and further monitoring of the situation with appropriate corrective intervention
Reviewing all existing programs and initiatives to support student success for effectiveness and efficiency	Search for effective programs, assessment of their work efficiency; dissemination of successful experience
Cooperation with all units of the university	Effective communication between all participants of the educational process for the identification and productive solving of problems of any nature; creating safety nets for students.
Analyzing the results and using the obtained data to achieve progress	Conducting research; analysis of the received data, empirical evidence of the effectiveness of strategies

Source: Personal elaboration, 2022.

The creation of this strategy was prompted by a study conducted by the corporation in 2009, which showed the problem of identifying students who are at risk for academic success, as well as the inaction of most university administrators to involve such students in support programs. Another challenge identified by the survey is that higher education institutions have limited resources to provide appropriate interventions. The problem is exacerbated when higher education institutions do not have a systematic way to identify students who may drop out for various reasons at a sufficiently early stage, and this can really affect the student's attitude to education and worsen the situation significantly (Coley et al., 2016).

Another direction of college and university work to achieve success is to facilitate access to education for different groups of students. It is crucial to support higher education for historically underrepresented students as well as develop culturally meaningful models of student success. With such students, it is extremely important to maintain high expectations for the success of historically underrepresented students – especially first-generation students – and provide the help of "cultural navigators". The function of cultural navigators can perform staff who will support and guide students on the right path to success. Other initiatives point to the importance of building and sustaining effective local efforts using local initiatives and evidence-based programs to support the success of Latino, Asian, African American, other, and low-income students. Evidence from a range of initiatives aimed at improving success rates among historically underrepresented students, including students of diverse ethnic backgrounds and low-income, as well as academically underserved students, indicates that success rates can be increased through the systematic implementation of guided pathways, effective practices, and accelerated educational programs (Center for Community College Student Engagement, 2013).

Therefore, the process of achieving the ultimate goal of universities - student success can be difficult and painstaking both for the administration of the institution and for the students themselves. Through concerted efforts, higher education institutions can make significant improvements and outperform other institutions through a focused and coherent approach, achieving sustainable and measurable results in improving learning and student achievement.

Stage IV – preparation for completion of studies and graduation. The development of models of success in higher education is also a concern of various foundations and organizations that are not directly related to the educational process. For example, Student Success Collaborative from The Education Advisory Board (EAB) combines technology, consulting, and best research practices to help institutions use data and analytics, optimize intervention effectiveness and improve student success EAB has created its own models of student success based on a synthesis of research, empirical experience, and evaluation of the effectiveness of implementing these models in the wide range of institutions of higher education which created EAB (Kinzie & Kuh, 2016). From career planning and financial issues to mental health and instability in the recognition of basic needs, students need more extracurricular help to complete their education and achieve their goals (EAB, 2020). To provide the necessary assistance, higher education institutions should align goals, develop targeted student support programs, foster engagement and accountability across departments, and adopt an evidence-based approach to evaluate success. Hobson's Holistic Student Success Framework includes core components such as dimensions of holistic student success (academic goal; career aspirations; life well-being) and holistic strategies for student success (setting goals; developing strategies; campus engagement; influence measurement (EAB, 2020).

In the US, faculty and staff at most institutions are generally aware of a number of policies, programs, and practices related to promoting student success. For example, in 2009, the national non-profit organization "Complete College America" (CCA) was founded, which is aimed at increasing of the number and quality of college graduates. This organization works with colleges almost throughout the United States (see www.completecollege.org) in order to apply a systemic approach to transformation in higher education, designed to change policy, and conditions, and implement effective strategies.

Stage V – employment or study at the next level of education, achievement of success. In 2005, a group of scientists presented the "Inclusive Excellence" model, the name of which can also be interpreted as "integrated success". This model shows that the most important areas of work of colleges and universities within a successful person training are the intellectual and social development of students, organizational resources to improve the training of students, cultural diversity and recognition by the community of the importance of this diversity. From this point of view, the concept of diversity is considered as an important component of the overall comprehensive plan for achieving institutional excellence. It involves teaching students to achieve success in a diverse society, and developing intercultural communication skills (Williams et al., 2005). The Inclusive Excellence model offers a comprehensive approach to educational reform based on research and theory about what "works" to help all students succeed and what makes colleges and universities more effective. The necessary information about the achievement of short-term goals stimulates student success. In particular, higher education should provide greater access to studying for historically underrepresented categories of students (Kinzie & Kuh, 2016).

Also, as an example, in order to make higher education more accessible to its students, Ocean County College has developed several strategic partnerships with other institutions. In order to improve the most important situation for the college in the training of junior specialists in the field of health care the college has signed an agreement with Kean University to develop a joint general bachelor's degree in nursing on the basis of the college for a period of two years at a reduced cost of tuition. It was done because health care institutions prefer hiring personnel with a bachelor's degree to an associate's degree. It was an innovation, as up to that time studies in bachelor's programs involved a two-level education (two years at a college and two years at a university) (Coley et al., 2016).

To sum up the American experience represents many years of research and specific models of higher education successful person training.

Conclusions

1. A structural and functional model of training a successful person in colleges and universities of the USA has been created.
2. It was analyzed and stated that successful person training begins with admission to a higher education institution, and sometimes, even at the stage of working with future applicants and ends with support after graduation from an educational institution.
3. Five stages of the work of American institutions of higher education regarding successful person training are proposed. It is summarized the implementation the American experience is useful for the development of the world system of higher education.
4. The goal has been achieved and, the hypothesis has been proven. The created structural and functional allowed to study the training of a successful person in colleges and universities in the USA. The formulated conclusions about the successful practices of the functioning of colleges and universities in the USA should be operationalized in the strategy of the development of higher education institutions of those countries that strive to train and create a successful person.

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Modern European trends in the development of the higher education system in the realities of large-scale military aggression (the experience of Ukraine)

Tendencias europeas modernas en el desarrollo del sistema de educación superior en las realidades de la agresión militar a gran escala (la experiencia de Ucrania)

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Abstract

The article describes modern European trends in the development of higher education in the realities of military aggression (using Ukrainian experience). General scientific methods are used in the article. Using the comparative method, the key foundations of educational reforms in some European countries close to Ukraine (Poland and Georgia) were determined. In the article also was use the prognostic method. Additional research methods were retrospective, functional, systemic, etc. In the results, the Polish and Georgian experience of regulating higher education against the background of military aggression, the peculiarities of the use of distance education in wartime conditions, and media education are characterized as a key trend in the development of the higher education system in the conditions of the Russian-Ukrainian war. In the conclusions, it is stated that Ukraine will need certain structural transformations in higher

Resumen

El artículo describe las tendencias europeas modernas en el desarrollo de la educación superior en las realidades de la agresión militar (utilizando la experiencia ucraniana). En el artículo se utilizan métodos científicos generales. Utilizando el método comparativo, se determinaron los fundamentos clave de las reformas educativas en algunos países europeos cercanos a Ucrania (Polonia y Georgia). En el artículo también se utilizó el método de pronóstico. Otros métodos de investigación fueron el retrospectivo, el funcional, el sistémico, etc. En los resultados, la experiencia polaca y georgiana de regulación de la educación superior en el contexto de la agresión militar, las peculiaridades del uso de la educación a distancia en condiciones de guerra y la educación en los medios de comunicación se caracterizan como una tendencia clave en el desarrollo del sistema de educación superior en las condiciones de la guerra ruso-ucraniana. En las conclusiones se afirma que

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education. The Ukrainian experience of the functioning of education against the background of the Russian aggressor demonstrates that distance education is of particular importance today. The fundamental trend of the development of the higher education system in the realities of the Russian-Ukrainian confrontation is media education. The developed recommendations will be useful in overcoming the future crisis of higher education in Ukraine.

Keywords: Ukraine, higher education, mediaeducation, experience, Russian-Ukrainian confrontation.

Ucrania necesitará ciertas transformaciones estructurales en la enseñanza superior. La experiencia ucraniana del funcionamiento de la educación en el contexto del agresor ruso demuestra que la educación a distancia tiene hoy una importancia especial. La tendencia fundamental del desarrollo del sistema de educación superior en las realidades del enfrentamiento ruso-ucraniano es la educación a través de los medios de comunicación. Las recomendaciones desarrolladas serán útiles para superar la futura crisis de la educación superior en Ucrania.

Palabras clave: Ucrania, educación superior, educación mediática, experiencia, confrontación ruso-ucraniana.

Introduction

The COVID-19 pandemic has been dictating the rules of higher education development for several years. Distance learning gave rise to a number of problems related to the organization of faculty work and student learning but led to a positive change. Modern trends of university education are focused on the formation of an individual educational trajectory, which is also associated with independent learning and the development of practical work skills, which is valued by modern employers. At the same time, working with digital technologies required both students and teachers to master digital competencies, continuous self-improvement, and mastery of new teaching methods. It should be noted that these practices were generally approved in the professional environment, but their effectiveness is still a pressing problem.

At the same time, the open military aggression of the Russian Federation against Ukraine poses new challenges to university education, including responding to the loss of the material base, working in dangerous conditions, dispersal of students, etc.

The article considers possible ways to deal with these and other challenges. Consequently, the paper aims to analyze current European trends in the development of higher education in the realities of large-scale military aggression and the possibility of using these paradigms for Ukraine. In particular, it is proposed to consider media education as a key trend in the development of European higher education, the experience of the use of which can be valuable for Ukraine.

Theoretical Frame work or Literature Review

The article is based on a thorough review of modern pedagogical literature on current educational problems. In particular, Mas-Verdu et al., (2020) characterized the features of the European higher education system. They compared the effectiveness of learning in local and national universities. Kelly (2021) studied the main competencies in demand in the modern educational field. Demiray (2017) characterized the importance of distance learning in today's globalized education system. At the same time, Kem (2022) analyzed the main opportunities of online education, characterized the key trends of person-centered learning.

Note that for our study the works of those authors who have studied the functioning of higher education in crisis (military) conditions are also important. For example, Rajab (2018) characterized the problem of the effectiveness of distance learning compared to traditional forms. His research is based on the analysis of educational technology at the University of Najran. Note that this university conducted distance learning because of the war between Saudi Arabia and Yemeni insurgent groups. On the other hand, Chankseliani et al., (2020) characterized the situation of higher education in Georgia, paying special attention to the peculiarities of education in the Russian-occupied Georgian territories (it refers to Abkhazia and South Ossetia).

For this article, the results of researchers who have studied the impact of Russian aggression on Ukraine's main spheres of activity are valuable. For example, Herbst, Aslund, & Kramer (2022) characterized the consequences of the Russian-

Ukrainian confrontation in 2014-2015 and described the destruction suffered by the social sector of Ukraine. Ghilès (2022) explored the specifics of the unfolding of the Russo-Ukrainian war and characterized the main changes in international politics. Notably, Abbasi (2022) also summarized that the Russo-Ukrainian war goes beyond the local war and therefore has an impact on the whole world. At the same time, Kuzio (2021) characterized the peculiarities of the spread of Russian aggression in Ukraine, describing the main destruction suffered in key areas of Ukraine.

At the same time, the task of characterizing modern European trends in the development of higher education based on Russian military aggression in Ukraine remains relevant. This is primarily due to the development of the war and the corresponding transformation of the educational system in Ukraine. Despite this, it is not exactly clear how much the Ukrainian authorities will be capable of structural transformation and rapid response to the challenges of the situation during the war. In addition, due to the duration of the Russian-Ukrainian war, the real consequences of the war on the educational sphere remain unknown.

Methodology

Several general theoretical methods of research were used to write this article: analysis, synthesis, induction, and deduction. Based on the analysis we managed to divide the subject of research into smaller parts (coverage of the European experience of educational reorganization (Poland, Georgia), the characteristic of distance learning in the conditions of war, the study of the peculiarities of the implementation of media education). With the help of synthesis, it was possible to combine the previously divided parts and form its own conclusions and perspectives. Thanks to the use of the method of concretization the peculiarities of the implementation of distance European trends in higher education in Ukraine were investigated. In addition, the work used the method of abstraction, which involves the transition from the abstract to the concrete in order to form their own conclusions. This method was used in the discussion while taking into account the main tendencies of higher education development against the background of Russian aggression in Ukraine. With the help of the comparativist method, it was possible to determine the basis of educational reforms in some European countries close to Ukraine (Poland and Georgia). Based on the prognostic method, an attempt was made to outline an indicative list of functional actions capable of resolving the crisis in higher education in Ukraine. In addition, the work is based on the use of a systematic method of research, based on which higher education is considered as a complex set of different elements. Also in the work, the following additional methods of research are used: retrospective, functional, and structural.

Results and Discussion

Polish and Georgian experience in reorganizing education

Note that in the twentieth century not many European countries have faced hostilities on their territories. A certain tension exists on the territory of the Balkan Peninsula, where the stages of national genesis have not yet been completed, and here the conflict between the former parts of united Yugoslavia is possible. At the same time, the experience of the two countries, which can be implemented in Ukraine, seems useful to us. Poland did not have military conflicts, but now it is a neighboring country to Ukraine, has received many refugees, and provides humanitarian and military support. Neighborly relations have intensified throughout the 21st century, and Poland's integration into the European Union has become a model for Ukraine. Georgia is not exactly a European country. It also has strong diplomatic ties with Ukraine. However, in 2008. Georgia experienced military aggression from Russia, so the development of its higher education system with appropriate accents may become paradigms (or at least general guidelines) for the restoration of Ukrainian university education.

So, a vivid example of European reforms in the field of education is the experience of Poland. This country, one of Ukraine's biggest geographical neighbors, supports it in its war against Russia. Back in the mid-1990s, the Organization for Economic Cooperation and Development made recommendations for the development of state educational standards, changing the criteria for determining competencies, potential and individual characteristics of Polish higher education institutions. The wide-ranging reform covered not only the university sphere but also the entire structure of training future specialists, the management system, quality control of education, and the formation of knowledge, skills, and competencies. These transformations were positively received in the Polish society because the former model of education contained certain remnants and was not oriented towards the construction of modern democratic society. The usual system of control and evaluation was aimed at emphasizing deficiencies in skills or knowledge.

These educational paradigms were at odds with ideas about the role and importance of higher education. At the end of the twentieth century, universities in the leading countries were not adapting young applicants to reality but were “on course” to develop creative and creative individuals (Kelly, 2021). Accordingly, using this experience, the best Polish universities use Polish and English for teaching. Thanks to the transition to the ECTS system, Polish students can study mobility in other countries and other universities.

The main principle of the Polish reforms was the democratization of education. Using local experience, there were formulated principles that guaranteed universality, continuity, and succession of education, its unity and differentiation, replacement of narrow-profile training by broad-profile, principles of comprehensive development and education, formation of a modern flexible and quickly adapted specialist (Puriy & Kuznetova, 2020). Let us note that for the modern Ukrainian reality the principle of continuity is extremely important - it is said about the absence of obstacles in the transition from one university to another due to the consistency of industry training and curricula. At a time when some of the Ukrainian universities have been seized or destroyed, the opportunity for a student to continue his or her studies at another institution of higher education is extremely relevant (Rajab, 2018). Let us also pay attention to the principle of continuity, which provides general access to the forms and means of education. Poland has also replaced narrowly focused training with broader training, making it possible in Ukrainian realities to quickly retrain workers - in a war-ravaged economy, demand for certain specialties may decrease, while others grow rapidly. We should also note the large percentage of practical training at Polish universities. This allows future specialists to get acquainted with their subject of study, which will facilitate their integration into the work environment in the future.

In Georgia, higher education is not free of charge, but it is open to all comers. The total cost of education is quite high as for the local level, and in private higher education institutions, it can be even higher. Teaching is conducted in Georgian, but special emphasis is also placed on learning English (there are branches of several American universities in Georgia) (Chankseliani et al., 2020) State grants allow for the inclusion of the best students. In particular, if a student gets the highest marks on the unified entrance exam, the state subsidy will be 100% of the cost of tuition, with lower results it is possible to compensate 70% or 50%. Note that Georgian students are mobile. They are acquiring up-to-date knowledge with the help of the latest digital technologies. Georgian youth are spreading ideas about the reality of the Russo-Georgian war around the world (Chankseliani et al., 2020). Note that the active use of English in education and the formation of “agents of influence” around the world are quite adequate tasks for Ukraine.

Peculiarities of the Use of Distance Education in the Context of Armed Aggression: Ukrainian Experience

We believe that education is a significant part of a social system plagued by war. The large-scale Russian invasion of Ukraine in February 2022 demonstrated that it is dangerous to study on a regular full-time basis (Aladekomo, 2022). In addition, refugee students who have left Ukraine can study on distance learning platforms from their own universities, which is developing primarily an online distance education system (Demiray, 2017).

To support Ukrainian students in a difficult period, the powerful online education platform “Coursera” gave Ukrainian universities free access to more than 3,500 courses (Ayoub et al., 2020). For this reason, many Ukrainian institutions of higher education were able to use it based on the digital base of Coursera for Campus.

Ukrainian authorities, after the full-scale Russian invasion on February 24, 2022, formed an expanded network of state digital platforms for online learning. In particular, based on the initiative of the Office of the President of Ukraine and the capabilities of the international organization UNICEF, several digital resources for students from Ukrainian universities were formed (Ministry of Education and Science of Ukraine, 2022). It should be noted that at that time was created a free online platform “United Ukrainian University (UUU)”, promotes the acquisition of key educational skills and competencies. United Ukrainian University also has a special “helpline”.

In addition, the Ministry of Education and Science of Ukraine has formed other distance platforms for the development of education. For example, the Learning Without Borders system was formed in common with Ukrainian TV channels and various online platforms. It is noteworthy that almost all Ukrainian universities have switched to distance work since the beginning of the large-scale invasion. Teachers teach classes on such remote platforms as Zoom, Microsoft Teams, Google Meet, etc. (Kem, 2022). Students have been familiar with these platforms since the beginning of the Covid-19 pandemic when all institutions in Ukraine (following European practices) switched to distance education. Since 2022 Canvas Network online platform forms free courses for Ukrainians. “Prometheus”, a Ukrainian system of online learning, organizes events for Ukrainian students, in addition, provides opportunities for universities and individually known professors to publish personal courses and lectures. At the same time, practical classes, seminars, or lectures on the Prometheus site are available online. To optimize the resource, Prometheus also has a mobile app for iOS and Android systems. At the same time, the online resource “Iversity” also provides free training materials for Ukrainian students. In addition, “Iversity” is engaged in a variety of interactive lectures and seminars for students as well as for higher education institutions in general. Note that Iversity's working website provides free educational information on a variety of subjects. Stanford OpenEdx is another remote platform that provides learning materials for Ukrainian students. This resource also provides an opportunity to attend various online meetings and participate in video lectures or seminars organized by Stanford University staff for free. At the same time, the Ukrainian resource Maidan Open University is also an educational site that disseminates knowledge among students on history, philosophy, defense of the Fatherland, and civic education (Ministry of Education and Science of Ukraine, 2022). This resource has 30 free topics for students from Ukraine. Note that lectures or open seminars are generally taught by well-known professors or scholars. As a result of successful completion of the selected course, Maidan Open University issues an appropriate certificate.

Media education as a key trend in the development of higher education in the realities of modern military aggression.

The experience of the Russian-Ukrainian confrontation with the mechanisms of information warfare confirms that in a world where information reigns, university students must be able to evaluate and verify it rigorously, learn what information can be trusted, know about fake news and ways to protect themselves from dangerous manipulation. For this reason, they need to know about media literacy (Herbst et al, 2022). The information students receive every day through media and popular social media shapes their minds. Accordingly, today's students must acquire skills related to working with media products. Media education integrated into higher education will allow students to think rigorously, learn how to find and verify information, analyze media messages, and create such media products themselves.

Turning to media technology in education means restructuring the entire learning system. It requires new approaches to teaching and perception of information, a restructuring of teaching ethics, and additional attention on the part of teachers. We believe that the process of studying these transformations is relevant, which will allow us to highlight the positive and negative consequences of such transformations in the future, to work with them, and, if possible, to eliminate unnecessary ones. In addition, experiments with the use of media products will make it possible to analyze these factors in detail in practice.

Today, the problem of introducing media educational technologies in the educational space is ambiguously covered in the scientific literature. However, the need to study this topic is due directly to the reform of the educational system in Ukraine in the conditions of Russian aggression. We are talking about updating the content of education, media informatization of Ukrainian society, and increasing the importance of media technologies in the learning process of a modern person.

Note that in Europe, the media educational technologies are actively implemented since the twentieth century, in the Ukrainian studios this topic is somewhat new. However, today there is an active analysis of the introduction of media in the educational process, developing algorithms for solving certain educational problems using media technology and generally predicting the results of the introduction of media in education. The topic of media educational technologies in the educational process is particularly popular among foreign language professionals who, working with foreign sources, can characterize the mediatization of education in Europe and demonstrate this experience based on Ukrainian systems.

Let us note that media education is the integration of the latest technologies in the educational process based on the use of certain techniques, which will lead to the implementation of media literacy in students. However, the phenomenon of media education is relatively new for pedagogical science. UNESCO has played a leading role in the formation of media education. It is believed that the concept of media education was first used at a general meeting of the UNESCO information sector. However, it is noted that the first curriculum on media-education was formed by M. McLuhan in 1959. However, its main use in the educational process was in the 1960s in Canada, Great Britain, the USA, Germany, and France.

Consequently, media education is a direction in pedagogy aimed at the study of special patterns of mass informatization. We believe that the fundamental tasks of media education are: to form a new generation, ready to exist in modern information and globalization conditions. Students must master the means of communication based on non-verbal means of communication and through technical means.

We believe that media education meets the needs of pedagogy in a crisis (military) environment (Manolea, 2021). At the same time, it also affects the development of personality, expands the range of methods and forms of conducting classes with students in higher education. We believe that the integrated study of print, film, television, video, the Internet helps to correct such significant shortcomings of traditional education as a one-sided, isolated, isolated type of learning. In addition, this system of education assumes a methodology of classes based on the problem, heuristic, game, and other productive forms of learning, developing the individuality of the student, the independence of his thinking. At the same time, it affects the formation of media critical skills, influencing students to understand which sources to trust and which not, which is extremely important in the context of war (Martz, 2022). At the same time, media education that combines lecture and hands-on activities represents a kind of inclusion of students in the process of media culture production, that is, it immerses the audience in its own laboratory of basic media competencies, which is possible both offline and in the process of integration into familiar academic subjects.

Note that when a student understands the influence of media, it helps him or her to actively use the information field of television, radio, video, cinema, press, and the Internet not only for learning but also for their own development. In addition, it helps him better understand the language of media culture. Media education becomes especially important in the context of globalization. Note that the current state of the global and information society leads to the influence of information dangers on all areas of human activity, society, and country. For this reason, the use of media education technologies in higher education is of particular importance.

Conclusions

So, as the experience of the nearest European countries (Poland and Georgia) has shown, Ukraine will require, first of all, certain structural transformations, in particular, emphasis on foreign language learning at all levels of education, a flexible system of retraining, and continuity of educational processes. Separately, let us emphasize the Georgian experience of involving students in disseminating truthful information about the Russian aggression in 2008.

The Ukrainian experience of the functioning of education against the background of the confrontation with the aggressor demonstrates that distance education is of particular importance at present. The large-scale Russian invasion of Ukraine has demonstrated that it is dangerous to conduct education in the usual face-to-face mode. Consequently, Ukrainian universities have switched en masse to an online system. Consequently, refugee students who have left Ukraine can study on distance learning platforms from their own universities. This also develops the potential of educational information and communication technologies in Ukraine. Despite this, the Ministry of Education and Science of Ukraine, with the assistance of international organizations, has created many distance learning platforms for the development of education at all levels.

Despite this, the experience of the Russian-Ukrainian war on a variety of mechanisms of information warfare (as well as manipulative-propagandistic) confirms that university students must be able to strictly assess and verify information flows that arrive and circulate in the communication network every day. At the same time, it is also important in a military environment that students should learn how to recognize what information should be trusted, know about fake messages, and key methods of protection against dangerous information manipulation. For this reason, we believe that media education, which demonstrated its effectiveness in Europe in the late twentieth century, is particularly important. XX century. The paper notes that media education meets the needs of pedagogy in a military environment. Despite this, the use of influential media-education technologies also affects the development of personality in general. Media education also expands the range of methods and forms of conducting classes with students in higher education. Consequently, it affects the formation of media critical competence, which is now in demand in the European educational space. At the same time, the application of media education also affects the fact that students begin to understand the mass flow of information, critically analyze and verify information, which is very important in war conditions.

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Modernization of theoretical and practical aspects of the development of higher medical education in Ukraine

Modernización de los aspectos teóricos y prácticos del desarrollo de la educación médica superior en Ucrania

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Abstract

The coronavirus pandemic has become a challenge for national health care systems, a global problem that has accelerated the processes of reforming medical education in many countries. The purpose of the article is to analyze the modernization of theoretical and practical aspects of the development of higher medical education in Ukraine. The research uses general scientific (analysis, synthesis, deduction and induction) and specialized methods (prognostic, axiological). The results trace the transformation of the state regulation of higher medical education, the use of research methods in education, the use of modern teaching methods aimed at making the medical education sector in Ukraine more efficient. It has been proven that transformations in higher medical education were hampered due to a lack of funding. During 2015–2017, the first changes occurred: the "KROK" testing system, based on American samples was implemented. The latest teaching

Resumen

La pandemia de coronavirus se ha convertido en un reto para los sistemas nacionales de salud, un problema global que ha acelerado los procesos de reforma de la educación médica en muchos países. El propósito del artículo es analizar la modernización de los aspectos teóricos y prácticos del desarrollo de la educación médica superior en Ucrania. La investigación utiliza métodos científicos generales (análisis, síntesis, deducción e inducción) y especializados (pronóstico, axiológico). Los resultados trazan la transformación de la regulación estatal de la educación médica superior, el uso de métodos de investigación en la educación, el uso de métodos modernos de enseñanza dirigidos a hacer más eficiente el sector de la educación médica en Ucrania. Se ha demostrado que las transformaciones en la educación médica superior se vieron obstaculizadas por la falta de financiación. Durante 2015-2017, se produjeron los primeros cambios: se implementó el sistema de

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methods, updated in recent years, are also actively implemented in teaching practice. In the conclusions, it is noted that in the future, employers should play a more active role in the formation of educational programs, as is customary in the leading countries of the world. In Ukraine, due to the aggression of Russian troops and the destruction caused by them, the further commercialization of medical education may become an important trend for further development.

Keywords: modernization, theory, practice, higher medical education, Ukraine.

pruebas "KROK", basado en muestras americanas. Los últimos métodos de enseñanza, actualizados en los últimos años, también se aplican activamente en la práctica docente. En las conclusiones, se señala que en el futuro, los empleadores deben desempeñar un papel más activo en la formación de los programas educativos, como es habitual en los países líderes del mundo. En Ucrania, debido a la agresión de las tropas rusas y a la destrucción causada por ellas, la mayor comercialización de la educación médica puede convertirse en una tendencia importante para el desarrollo futuro.

Palabras clave: modernización, teoría, práctica, educación médica superior, Ucrania.

Introduction

The quest to update medical education is urgent because of the rapid spread of the coronavirus pandemic around the world. The new challenges of declaring a global quarantine, finding and producing vaccines, and other treatments have entailed the emergence of updated training methods for specialists. The COVID-19 problem has re-presented the prestige of medical work, so even in Ukraine, university education in this field has interested a considerable number of potential entrants (although medical professions have traditionally been in steady demand). At the same time, the experience of training specialists has become the foundation stone for the formation of medical systems in many countries. Ukraine in this respect has been on the marginsof similar trends for a long time, as healthcare reform has been extremely protracted in time, the traditional lack of funding has significantly narrowed the possibilities for improving the professional training of future specialists. In addition, the ability to join already applied programsand the use of their own experience shows the promise of similar endeavors. The main directionsof such structural transformations are relevant problems for the study because on the basis of their consideration it is possible to form specific proposals.

The article aims to analyze the modernization of theoretical and practical aspects of higher medical education development in Ukraine. When considering this issue, smaller aspects are highlighted, the study of which allowed to generalize certain results and summarize the results. We are talking about changes in the state-regulatory aspect of higher medical education, the organization of research work as an element of modernization, the use of the latest teaching methods capable of changing the medical educationindustry in Ukraine. We should note that the proposed analysis is of additional importance due tothe absence of similar studios in Ukrainian medical science: against the background of the pandemic and the deployment of the Russian army aggression, the ways of reforming the medical industry may be an important material for European and American scientists to study.

Theoretical Framework or Literature Review

The scientific understanding of the role of medical education has been active since the end of the twentieth century. The problem of reforming or modernizing the educational process in medical educational institutions was mainly of interest to European authors. However, the problem of reforming or modernizing the educational process in medical educational institutions was mainlyof interest to European authors. In particular, Custers & Cate (2018) highlighted the problem of modern medical education through a historiosophic prism. However, these authors conclude in their article that “given the high cost of medical care today and the increasing demand for patientsafety and teaching effectiveness, the continuation of historical models of non-standardized practices will no longer be possible. Efforts are needed to limit, restructure, and individualize training and licensure times to optimize training. both in the United States and Europe” (Custers& Cate, 2018, 49). At the same time, Ayaz & Ismail (2022) characterized the main innovative technologies to be used in medical education. They focused on the problem of integrating simulation technology into training programs. Ayaz & Ismail (2022) believe that “this technology will become important in medical education by providing the means to practice and teach under the supervision of qualified facilitators" (p. 301). The outbreak of the Covid-19 pandemic has led to a new rethinking of previously accepted concepts. Distance learning began to take center stagein the educational process. A lot of new author's concepts of rethinking modern education appeared in scientific literature, the authors began to focus on the analysis of the effectiveness ofdistance education and its reorganization. In particular, Laufer et al. (2021) characterized the features of the implementation of distance models in the field of education. In addition, Lekic et al. (2019) investigated the impact of evidence-based medicine on learning and decision-making in medical practice through the lens of contemporary globalization issues. Roberts (2020)explored the impact of COVID-19 on the development of medical education and outlined how medical teaching competencies will help overcome the coronavirus outbreak. Specifically, he believes that higher medical school should incorporate last-year medical student volunteers into practical clinical services during a pandemic as "medical assistants". This would improve not only the practical skills of the latter but also help to increase the staffing of medical institutions. Also valuable to this study are the findings of educational authors who have generally studied a variety of educational innovations. In particular, Demiray (2017) investigated the characteristics of the implementation of distance education, which are also relevant to the current development of the medical industry. Pinheiro & Santos (2022) characterized the potential development of distance education and analyzed the use of various modern E-learning platforms. At the same time, Ungerer (2019) also investigated the specifics of the use of open-distance e-learning platforms.

So, as can be seen from the analysis of the literature, many European authors were interested in the problem of modernization of the educational process in the field of medicine. Their developments serve as a valuable foundation for this study. Taking into consideration the European experience of medical education reform, we can characterize the possible prospects of medical education development in Ukraine through both theoretical and practical planes.

Methodology

When writing this work, both general theoretical (logical) methods of research and special pedagogical methods were used. Among the general theoretical methods, we will distinguish analysis, synthesis, induction, and deduction. The method of analysis involves the division of the subject of research into certain parts (coverage of scientific understanding of the problem, characterization of the main transformations in medical education in Ukraine through the prism of state-regulatory aspect, etc.). At the same time, the method of synthesis implies combining the above-mentioned selected parts. Such methods as abstraction and concretization are also used in the work. The principle of abstraction implies the study of general theoretical problems. At the same time, based on using the method of concretization it was possible to study the problem of changes in medical education in Ukraine based on the analysis of the main state-regulatory mechanisms. Among the special pedagogical methods, we shall single out observation, prognosticand axiological methods of research. In particular, by means of the prognostic method of research,it was possible to forecast the main vectors of development of medical education in Ukraine in the future. The axiological method of research assumes the highlighting of the main values and reference points of the medical education system of Ukraine. Based on systematic method of research the field of medical education is considered as a complex system consisting of many components, and the research of some of them are the key task of this work. Additional methodsof research are systemic, functional, comparativists methods. At the same time, the main empirical data of this study are materials of the Ministry of Education and Science of Ukraine, the Ministryof Health of Ukraine. Analysis of the data is a valuable source for the article. Consequently, thiswork is based on the principles of consistency, objectivity, retrospective, and scientific.

Results and Discussion

The system of Ukrainian medical education since the end of the XX century is still in search of new ways of modernization and reforming. The system of Ukrainian medical education by the end of the XX century is still in search of new ways and methods of modernization and reforming in accordance with the changes occurring in the history of the state and society, the requirementsof the European Union on the quality of professional training, the direction of the introduction ofnew models of education. New challenges put new demands on the educational system to act effectively. For this reason, one of the main problems is the professional burnout of medical education specialists, which is a complex consequence. Outlining the key objectives facing modern education, many scientists admit the optimal solution to this problem is to apply the principles of humanitarianization, to promote diverse individual (it is said about creative, cultural) development of education applicants.

Changes in Medical Education: State-Regulatory Aspect

The need to reform the system of medical staff training in Ukraine has been discussed at the highest state level. In particular, an important function of the Ministry of Health of Ukraine is to establish requirements for quality control of professional training of medical and pharmacological specialists. Specialists of the state management of the medical industry found that a critical need is forming to improve the system of university training, its harmonization with the leading modern standards operating primarily in European countries and the United States (Lekic et al., 2019). Achievement of relevant indicators was considered in 2017-2018 a condition for the successful implementation of the reform of the whole industry, which was actively implemented. Expert interdepartmental working groups, which have been working for a long time on solving strategic problems of adapting national higher medical education to the leading standards of our time, haveidentified the main backbone areas of overcoming the current educational crisis and formed recommendations for short- and long-term development perspectives:

1. To organize and conduct a comparative assessment of the content of Ukrainian higher medicaleducation in comparison with international standards, in particular those adopted in the United States. Assessment of the Ukrainian system of medical higher education based on the formation of generalized conclusions.
2. Reducing the number of students trained at the expense of the state budget. It is a question of gradually replacing quantitative indicators with qualitative ones - also by increasing the funding of higher medical education institutions.
3. The formation of more transparent conditions for the competitive selection of the best applicants, who in turn have demonstrated the best results in drafting, will allow the selection of truly talented students for the future medical profession.
4. Development of an incentive system for students, and employment of capable graduates in state medical institutions (Roberts, 2020).
5. Establishment of unified requirements for the formation of professional competencies of graduates and teachers (Kelly, 2021).
6. Introduction of predetermined requirements for the final objective assessment of the level of theoretical and practical training of students and interns. We are talking about conducting an evaluation of their knowledge, skills, and abilities in front of an independent commission capable of assessing their competence (Kelly, 2021).
7. Ensuring the implementation of updated standards of higher education, reforming the state of educational and methodological support, and bringing it in line with modern requirements for highly qualified medical specialists, the introduction of modern treatment protocols, the introduction of high standards of diagnosis (Kem, 2022).

An effective consequence of the implementation of the proposed changes in practice was the assessment of compliance of the content of Ukrainian pregraduate and postgraduate medical education with international indicators in the field of physician training. To determine the professional level of undergraduates and interns, a system of annual licensing and integrated examinations “KROK” was introduced. In order to form the test tasks base, it was proposed to use, first of all, the American experience and use the USMLE (the United States Medical Licensing Examination) and IFOM (International Foundations of Medicine) test tasks. These tasks were developed by the United States National Board of Medical Examiners (NBME) and adapted to the current requirements of the medical industry, so they meet all the necessary criteria (Roberts, 2020).

The introduction of the KROK test system took place in 2017. The first results were an objective indicator of the vulnerability of the then-existing system of medical personnel training, the quality of educational programs approved by higher educational institutions in accordance with the program documents of the Ministry of Health of Ukraine. Unsatisfactory results of the first examinations demonstrated the need for acute reform of the management decision-making system, new program documents were developed, on which higher education in medicine would be based. According to the results of the evaluation of the graduates of higher educationinstitutions, specific proposals were formed to change the basic provisions of the curricula for training students and interns. In fact, there was a gradual change in the working value paradigm: from a focus on “learning” a considerable amount of information with limited application, the transformation was aimed at approving broad academic disciplines that had a practical orientation. The next direction of practical reform of medical education training was the increase in the cost of education, bringing it closer to European standards. Approximation of the approximate averagecost of training of one medical specialist to the European standards allowed to improve the material base of universities and to accumulate certain funds for conducting their own medical research. We should also note that the foundations were formed of the relevant legislative framework aimed at the formation of motivational activity of young specialists after graduation from the master's degree and internship of higher educational institutions (Kelly, 2021). We are talking about employment guarantees in a particularly vulnerable area of medical protection of Ukraine - in rural areas. In particular, certain aspects of the demand for certain medical specialtiesin the labor market were investigated. The adopted Laws of Ukraine guaranteed certain social obligations to young specialists, who would continue to work in rural areas. For example, they spoke about providing housing for free use - the peculiarities of this process were regulated by a separate agreement concluded between the local authorities and a graduate of a higher medical school. It should be noted that together with additional funding these changes allowed to attract a certain number of young specialists to the implementation of the program.

In the future, we believe, the development of higher education in the medical sector will move tothe next stage. We are talking about a broader adaptation of the requirements of educational programs to the realities of the market of services of the medical industry (Lekic et al., 2019). For example, the practice of introducing family physicians has positively shown itself. Despite all thecriticism, the principle underlying the work of this medical “institution” (money follows the client) has led to positive results. Experienced family physicians due to their skills and knowledgewere able to form a significant base of clients of medical services on a voluntary basis. The implementation of a policy in the medical field based on competitive democratic selection (when patients themselves determine which specialist to trust) will be the cornerstone for further transformations. Also, not only consumers of medical services, but also employers are interested in specialists of the highest category. The gradual introduction of insurance and fee-for-service medicine will be a vector for the future development of this industry. Unfortunately, the Russian aggression against Ukraine resulted in considerable material losses, so in the future, the sphere ofmedicine will develop with a combination of paid and free services - in view of the devastation caused, the financing of social expenses will be reduced several times. Under such conditions, private clinics and other medical institutions (the number of which increased significantly during the COVID-19 pandemic) will be interested in employing well-trained specialists (Roberts, 2020).

Participation of stakeholders (employers) in the formation of the educational process is the reality of the European and American educational systems. Gradual transition to such system of trainingand formation of educational programs in Ukrainian reality was denied. At the same time, as the practice has shown, employers' advice deserves to be taken into account during training, since private medical companies, academic institutions of research direction interact more actively withglobal companies or other scientific institutions. Accordingly, their experience in training deserves to be taken into account.

Thus, government measures to improve higher medical education in Ukraine have had positive effects. It is true that the slow pace of their implementation, the partially biased criticism of their methods, the insufficient funding, and the outdated material and technical base create difficultiesfor subsequent transformations in the field of medicine. We believe that a more active cooperationof higher educational institutions and potential employers will speed up this process and find thenecessary financial, methodological, and human resources for its subsequent continuation.

Organization of research work as an element of modernization

Notable importance for the modernization of practical activities of students of higher medical institutions is research work (hereinafter - HDR), which is a key stage in the formation of quality education. In Ukraine, the implementation of this activity by students is provided by legislative documents (“National doctrine of education development”, the Law of Ukraine “On scientific and scientific-technical activity”). We consider that the R&D of students of Ukrainian higher educational institutions is a significant means of increasing the quality of training and education of professionals, who will be able to creatively use the achievements of medical science in practice. Such involvement of students to scientific cognition contributes to the fact that they will be able to use the acquired creative potential to solve urgent (as well as typical) problems of medical education, to practically implement the recommendations of teachers. Research activity also plays the role of a kind of continuation and deepening of the general educational process (Ungerer, 2019). It should be divided into research included in the educational process and activities carried out outside of class time. For example, extracurricular research includes student activities in science, learning labs, and personal (or collective) faculty-led research (Oseredchuk et al., 2022). However, students' participation in various scientific events: conferences (including international ones), research contests, Olympiads, etc., plays a prominent role in this part of the work. Such events can be attended by students both in person and remotely. In this way, the universal nature of scholarly conferences will help both develop students' research, communication, and practical skills (Pinheiro & Santos, 2022). Before a discussion or conference, students choose topics for papers. At the same time, learning excursions, where students have the opportunity to gain practical knowledge, have a separate place in this system. To develop students'skills, in addition to standard lecture classes, a significant role is played by practical seminars, final conferences, additional professional lectures where new teaching methods should be applied: project method, brainstorming, storytelling, scientific debates, etc. Mas-Verdu et al. (Mas-Verduet al., 2020). The use of innovative methodology based on research activities will contribute to the modernization of the practical aspects of medical education. Note that the project method involves both individual and group projects. Atypical tasks of these projects will contribute to theformation of critical skills in students. Note that the seminar (as a typical form of teaching) should contain elements of conversation and dispute. The conducting of practical training sessions influences the implementation of a variety of practical tasks, experimental experiments based onthe content of the subjects. Such classes are less regulated, they focus on the formation of independence in students (Cherng & Davis, 2019). In general, research activity should consist of students' exploratory work, which is primarily expressed in individual, independent research. It isaimed at explaining processes and phenomena, establishing their relationships, identifying logical connections, theoretical and exploratory explanation of facts in accordance with scientific methods of knowledge. The main related components of students' research work are highlighted in Table 1.

Table 1.
Interrelated components of research work

Interrelated components of research work
1. Teaching students the basic aspects of research activities
2. Formation of skills of methodology and organization of scientific work
3. Research work of students serves as an element of the educational part of science in general
4. Scientific research - the consequence of self-session development of a particular problem of the student, containing the results of their own scientific search, conclusions, hypotheses, and predictions, etc.

Created based on the author's analysis

Using the latest teaching methods to modernize medical education

Currently, the implementation of the concept of modernization of medical education is possible only in case of the formation of a modern educational space taking into account the innovative changes of society, education of a modern type of vision and culture (Laufer et al., 2021). One of the innovative tasks mentioned above is the implementation of a modern concept of learning European higher education space. We are talking primarily about student-centered learning, the basis of which is a competence-based approach to the formation and execution of educational programs, comprehensive integration of national qualifications boundaries, modern higher education system, current generation standards, academic programs, etc. (Cherng & Davis, 2019).The implementation of the Bologna Process system in training is a significant incentive for the application of innovation in education (as well as in medical education), information and communication technologies that contribute to improving the efficiency of the educational process and the organization of distance learning (Oseredchuk et al., 2022).

Taking into account the analysis of European countries' experience, one of the ways to modernize educational content and learning technologies is the development and gradual introduction of educational innovative methods and technologies (Kelly, 2021). Nevertheless, we believe that one of the main directions of educational medical policy should be the development of both innovative and scientific work in education in general, improving the quality of education based on innovative methods (Kem, 2022). Based on this there is a problem with the effectiveness of innovative learning processes, the results of which consist in students' deep awareness of the content of the studied, the formation of critical thinking skills. Taking into account modern trendsin pedagogy development, the following innovative pedagogical methods are important for application in higher medical education: case-study method, training learning technologies, application of special quest-tasks, elements of distance education, and humanistic learning.

Table 2.
Pedagogical methods of education and the organization of learning and their implications

Pedagogical methods of education and organization of training	Consequences of use
Personally oriented learning	Will promote independent thinking, the ability to make personal choices
Developmental education	Influences the formation of students' skills for self-improvement, active creative thinking,and learning
Distance learning	It is based on the principle of independent learning of the student. At the same time,modern technologies of online educationcontribute to the possibility of constant dialogue between the teacher and the student based on the latest means of communication.
Learning as an element of research	skills, research students' of Formation new of stimulation work, experimental knowledge.
Humanistic learning	Influences the education of conscientious citizens. Contributes to the development of thestudent based on humanization and democratization of the education system.
Information and computer technologies	Promotes information transfer, which in turn deepens students' knowledge and skills and influences the development of their ability to manage social and technical problems
Case-study method	This method involves solving certain situations that activate students' critical thinking skills. It promotes the development of analytical and communicative abilities.
Quest Assignment Method	The above method promotes the practical solution of certain problems, which allowsyou to practice the necessary skills as part of the training of future doctors. The main goal of the quest is to find an appropriate solution or achieve a certain result faster than the competitors. For students of higher medical institutions, an important task will be to solvea certain clinical situation, in particular the prevention of disease recurrence, stopping bleeding, etc. Thus, using this method, students have the opportunity to practically use the acquired theoretical knowledge.
Brainstorming method	Promotes rapid response to certain medical situations and influences the development of teamwork skills.
Training technologies	They involve solving complex algorithms for solving typical application problems.

Formed based on the author's analysis

In order to fulfill these technologies, higher medical institutions must also search for and develop the content of innovative educational programs and modern educational technologies, productivemethods of managing the educational process, etc.

Conclusions

Consequently, the study of ways to reform higher medical education in Ukraine remains an urgent problem of scientific research. The way of modernization of this industry was hampered by the lack of funding, but also by the lack of development ideas. In fact, only in 2015-2017 real fundamental decisions were made, which changed the paradigm of training of highly qualified specialists. At the state-regulatory level, new developmental benchmarks were adopted, resulting, for example, in a final test system "KROK," based on American samples of task formation. Also adopted important in the Ukrainian realities incentives, primarily for young professionals who agree to continue working in rural areas (where there is the greatest shortage of personnel in Ukraine). The educational environment has also been improved by the introduction of a closer combination of training and research work. However, in order to modernize both theoretical andpractical aspects, important attention should be paid to innovative methods of education and organization of training. In particular, the use of the case-study method, training learning technologies, special quest tasks, humanistic learning will contribute to the formation of critical, creative, practical skills of higher education students. At the same time, the latest teaching methods actualized in recent years should be actively introduced in the teaching practice. Note that employers should be more actively involved in the educational process. Word of the future stakeholders in the formation of educational programs is taken into account in many universitiesin Europe and the United States. For Ukraine, due to the obvious lack of funding due to martial law, the commercialization of education and focus on employers can become a defining trend of development.

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Typology of competence characteristics of pupils with intellectual disabilities

Типологія компетентнісних характеристик учнів з порушеннями інтелекту

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Abstract

The purpose is to develop a typology of competence characteristics of pupils with intellectual disabilities as a measure of a child's integration into educational activity. The following methods were applied: retrospective analysis and generalization; empirical measurement of relevant parameters of the research subject by means of valid and proprietary methods; k-means clustering, mathematical methods for data processing. The experiment participants: the total number (n=114) of the children from the first to the fifth grades: the pupils with intellectual disabilities (Group 1: n=57; 50.0%) and the pupils with normal development (Group 2: n=57; 50.0%). Key differences were found in the following competences of the research participants: intellectual-cognitive, emotional-motivational and social. It was established that deficiency of cognitive and adaptive skills, violation of social norms and limited communication prevail in the children with intellectual disabilities. Three types of competence characteristics in the pupils with intellectual disabilities in education were determined: Operational-Reproductive (ORT),

Анотація

Метою є створення типології компетентнісних характеристик учнів з порушенням інтелекту, як міри інтегрованості дитини в навчальну діяльність. Застосовано методи: ретроспективне аналізування і узагальнення; емпіричне вимірювання релевантних параметрів предмету дослідження за допомогою валідних і авторських методик; кластеризація методом k-середніх, методи математичної обробки даних. Учасники експерименту: загальна кількість (n=114) дітей з першого по п'ятий класи: учні з порушеннями інтелекту (група 1: n=57; 50.0%) та учні з нормотиповим розвитком (група 2: n=57; 50.0%). Виявлено ключові відмінності у таких компетентностях досліджуваних: інтелектуально-когнітивний, емоційно-мотиваційний і соціальний. З'ясовано, що дефіцит когнітивних та адаптивних навичок, недотримання суспільно прийнятних соціальних норм, обмежене спілкування є превалюючими в учнів з порушеннями інтелекту. Визначено три типи компетентнісних характеристик учнів з порушеннями інтелекту в навчанні:

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Limited-Practical (LPT), Limited-Fixed (LFT). The prospect is to create a conceptual model and correction-development program for the formation of key competences of pupils with intellectual disabilities.

Key words: education, psychology, intellectual and creative abilities, educational motivation, social knowledge and skills.

Операційно-Репродуктивний (ОРТ), Обмежено-Практичний (ОПТ), Обмежено-Фіксований (ОФТ). Перспективою є розробка концептуальної моделі та корекційно-розвивальної програми формування ключових компетентностей учнів з порушеннями інтелектуального розвитку.

Ключові слова: освіта, психологія, інтелектуальні та творчі здібності, навчальна мотивація, соціальні знання та вміння.

Introduction

Implementation of a competency-based approach is an issue of global discussions closely related to modernization of Ukrainian education aimed at adjusting it to European and global standards.

The outlined modernization implies changes in a regulatory framework, scientific and educational-methodological regulations encouraging to determine guidelines for effective formation of an individual's key competences. Formation of key competences is a condition for a successfull individual characterized by harmonious life activity and the ability to participate actively in solving social problems.

The noticeable changes occurring in the field of education of individuals with special needs outline a range of problems. These are organizational-content and methodological issues, the solution to which is aimed at ensuring the functioning of an effective system for education of such children under conditions of a competency-based approach. Such articulation of the outlined problems and the formation of key competences of children with intellectual disabilities require special attention, since these disabilities determine difficulties in the quality, intensity and content of social interaction of such children with a social environment. In its turn, it causes slow formation of key competences in such children and, as a result, failures in education and integration into an educational environment.

Hypothesis. The research on typological competence characteristics of pupils with intellectual disorders will allow making important scientific conclusions which should be considered by professionals working with children with special needs and operationalizing the results into educational teaching-methodological materials for professional training of future professionals.

Purpose is to develop a typology of competence characteristics of pupils with intellectual disabilities as a measure of a child's integration into educational activity.

Literature review

Theoretical aspects of the research on a competency-based approach are thoroughly investigated and presented in the following directions: formation and development of a competency-based approach in education (Kremen et al., 2020; Lugovyi, 2020); examination of competences as a systemic manifestation of knowledge, skills, abilities and personality traits on the basis of activity-based and person-oriented approaches (Kostenko et al., 2022; Lokshyna, 2021; Voronov, 2021); practical realization of a competency-based approach in education was outlined in the studies by I. Halian et al. (2020), M. Mulder et al. (2006), I. Popovych et al. (2021a); the problem of the formation of key competences was investigated in the works by L. Prokhorenko et al. (2021). The authors agree that primarily changes should occur in the system of evaluation of the level of pupils' achievements when applying a competency-based model of education.

Conceptual foundations of the formation of life, basic and subject competences in children with special educational needs are given in the studies by M. Mulder et al. (2006). The scientists agree in the opinion that education of children with special educational needs on the basis of a competency-based approach implies an integral system of psychological-pedagogical support that should be aimed at preventing and overcoming life difficulties, challenges in education and socialization, correction of destructive tendencies in a child's development, harmonization of relationships with an environment.

In order to adjust regulations in the area of educational legislation of Ukraine, the concept “competency-based approach” was implemented into regulatory legal acts, in particular (Law No 1838-IX, 2021; Law No 2471-IX, 2022; Law No 764-IX, 13, 2020; Law No 2145-VIII, 2017), national standards for primary and basic secondary education. Changes in stereotypes related to understanding of the issues of teaching children with special educational needs are based on new approaches. These approaches do not deal with personality disorders, but with personality orientation, educational competences, creation of appropriate conditions for equal opportunities for education of children and young people. It should be mentioned that variability of education for such individuals, according to their abilities and special needs, allows them to study at all educational institutions, irrespective of forms of ownership and receive psychological-pedagogical, social-rehabilitation, correction-development support timely and actively participate in social life.

In teaching children with special educational needs, a competency-based approach is related to a person-oriented approach. L. Prokhorenko et al., (2020) thinks that a competency-based approach requires transformation in the content of education, transformation of the model “for everyone” into subjective achievements of a pupil which can be measured. The scientist also emphasizes that an activity aspect can be realized only in activity, in the process of performing a particular set of actions by a pupil (Prokhorenko et al., 2020). The scientists highlight that formation of key and subject-related competences in children with special needs occurs in the process of education. The above mentioned formation is realized by means of using a child’s abilities in the course of mastering a particular subject on the basis of the principles of a purposeful interrelation of education and development of such pupils. It was established that interrelations in the formation of different key competences by means of different educational subjects imply the development of motivation for achievements, operationalization, reflectiveness and self-esteem in children which should be able to determine the aim of their activity, focus their volitional efforts to achieve a positive result, use the experience gained to solve educational problems, perform practical actions on reproductive and creative levels, realize methods of their activity and improve it when it is necessary (Prokhorenko et al., 2021).

In a pedagogical dimension, obtaining key competences is necessary for the formation of the abilities to gain knowledge independently in the course of life, realize them in practical activity, that is an important task of the educational system for teaching children with special educational needs (Sokolova, 2018). It can be summarized that key competences formed at a sufficient level in interrelation with comprehensive skills form a pupil’s competence characteristic enabling children to accept and react properly to individual and social challenges. Competence characteristics reflect the acquired complex of attitudes, values, knowledge and skills necessary for usual life activities and social life of an individual.

Materials and methods

While developing an empirical strategy of the research, we took into consideration the approbated empirical studies characterizing the following directions: components of an intellectual process of educational activity (Halian et al., 2021; Hulias, 2020); regularities of sensory-motor (Plokhikh et al., 2021) and anticipatory character of an individual’s activity (Popovych et al., 2021c); regularities of the development of educational process (Hulias & Karpenko, 2022; Popovych et al., 2021b; 2021d; Zaverukha et al., 2022); specificity of the creation of intellectual models and typologies (Nosov et al., 2020a; 2020b; Zinchenko et al., 2019; 2020). The outlined directions and the above studies were implemented into the empirical strategy in order to develop a typology of competence characteristics of pupils with intellectual disabilities.

Participants. The research participants of the experiment: the total number (n=114) of the children from the first to the fifth grades: pupils with intellectual disabilities (n=57; 50.0%), comprising Group 1 and pupils with normal development (n=57; 50.0%), comprising Group 2.

Organization of research. The strategy of the research was developed and implemented in December, 2021 – January, 2022. The research was agreed with administrations and Ethical Committees of the schools whose pupils participated in the experiment. The participants were informed that they could stop their participation in the experiment without explaining if something did not suit them. Voluntary participation and access to information are the key principles for obtaining reliable data.

Procedures and instruments. In order to find characteristics of pupils with intellectual disabilities, complex evaluation of the key competences was performed: intellectual-cognitive, emotional-motivational and social competences and the levels of their development were determined by means of the proprietary methodology "Complex evaluation of competences" (Prokhorenko et al., 2020).

The following important element in realization of the research was modelling special educational situations, developed by the group of co-authors supervises by L. Prokhorenko et al. (2020). In the course of realization of the modeled special educational situations, purposeful observation with entering data to the protocols of observations prepared in advance was applied. The modeled situations involved withholding the performance of reflective tasks that required a pupil to realize a new problem, a certain motivation to obtain a result, review of the experience in terms of the ratio of the components of the knowledge gained and skills acquired, their generalization and systematization, organization of the methods for performing actions, development of the basic criteria for regulation of activities when solving an educational problem, the ability to cooperate. The solution to these problems covered those criteria which allowed determining functional specificity of the key and subject-related competences and the formation of the corresponding skills. The research implied three stages.

The first stage is creation of the "situation of success", accomplishment of the suggested tasks allowed establishing the development of creative-intellectual skills, motivation for achievements and abilities of self-control and self-evaluation. The children were given the tasks with a familiar method for accomplishing them, i. e. the pupils did not have to experience any difficulties. In the course of their activities, the children's abilities to plan the accomplishment of tasks independently, determine methods for solving problems, control each stage of solving those problems, aspiration to achieve success while accomplishing a task and ask an adult for assistance were analyzed.

The second stage is creation of the situation of "intellectual storm". The problems solved at this stage allowed realizing a new problem, formulating a new aim for the solution, the ability to actualize, generalize and systematize the knowledge gained and the skills acquired. The children were given the tasks similar to the previous ones only in external characteristics, but accomplishment of such tasks was oriented towards a new method for actions. It caused an emotional experience of a common failure ("nobody is able to") in the children, that lead to positive emotions, since there was no worry for one's own failure against the background of other's success.

The third stage implied the creation of the situation of "disruption fixation". The task of this stage was to encourage the children to explain the things they needed to solve a problem. The children had to test the "deficiency of their experience". The children were asked to analyze the situation of practical difficulties: where and why there was a difficulty in solving the problem. After that, the educational task and the aim of further activity were formulated, a new method for solving the problem was determined. It was necessary to decide on a possibility to accomplish the task independently or the necessity of common assistance. The children's review of their own actions encouraged them to analyze new details of the task, determine the construction of a new algorithm, apply the experience gained to solve the problem and find a possibility to transfer the knowledge gained and the skills acquired to new conditions of accomplishing a task, change their actions under these conditions etc.

Statistical analysis. In order to determine the types, a simplified variant of *k*-means clustering was used. Application of the approbated proprietary methods and reliable criteria of the research on competence characteristics of pupils with intellectual disabilities allowed measuring integration of the children into educational activities.

Results and discussion

It was established in the course of the research that children with intellectual disabilities poorly orient themselves in different social and educational situations, they cannot use the information stored in their memory properly, they are often passive and manifest a low rate of interest. The level of motivation is closely related to insufficient development of cognitive interest to educational process. Additionally, motivation is complicated with weak volitional efforts aimed at overcoming difficulties in the course of intellectual activity. A low level of the development of social competence causes not only behavioral problems, but also leads to serious obstacles in academic, social and emotional development of children.

On the basis of analysis of the observation protocols, the formation of the following components was considered to be a common diagnostic feature of the development of competence characteristics in the children participating in the experiment: intellectual-creative abilities, i.e. cognitive processes, search skills, internal motivation, adaptive capabilities, the ability to cooperate and achieve mutual understanding. In the course of the research the formation of subject-related competences and the abilities to use the knowledge gained in the process of learning other subjects and in life activities were analyzed.

Typological features of competence characteristics of a pupil reflect the level of the development of key competences of the research participants with intellectual disabilities. It was an important conceptual decision to perform diagnostics of comprehensive skills and establish their place in the area of relations between knowledge and action in real practice. A key competence was considered to be an ability to learn, flexibility in relationships with peers and adults, adaptation in a social space. A subject-related competence reflects specificity of a particular subject area of educational activity. Comprehensive skills allowed performing educational activity in the context of requirements to the system of education at a certain stage of education. The outlined competences and comprehensive skills are interrelated, they develop simultaneously and comprise a pupil's competence characteristics.

It was determined in the course of the experiment that by the level of the development of competence characteristics (intellectual-creative abilities, internal motivation, social adaptation, the ability to cooperate and achieve mutual understanding) the children with intellectual disabilities have reliable differences unlike their peers with normal development (t=2.1-3.8; p≤.05-.01). Insufficient development of educational motivation, disruption of purposeful brain activity, a low level of motivational control, cognitive decline, inability to regulate one's own feelings and behavior, diffidence, a lack of abilities of self-control and cooperation comprise specific features of the key competences which have a negative impact on these children's educational activities, that cause serious difficulties in the course of gaining theoretical knowledge and acquiring practical skills.

On the basis of the comparison of the obtained indexes by intellectual-creative abilities; interests and internal motivation; adaptive abilities; the ability to cooperate and achieve mutual understanding; mobility in different educational and social conditions, three types of competence characteristics of the pupils were determined: Operational-Reproductive (ORT), Limited-Practical (LPT), Limited-Fixed (LFT) and essential differences of these types were outlined. In Tabl. 1 quantitative and percentage ratios by the outlined types are given.

Table 1.
Quantitative and percentage ratios by the outlined types

Type	Group 1 (n=57), %	Group 2 n=57), %
Operational-Reproductive (ORT)	n=5; 8.77	n=36; 63.16
Limited-Practical (LPT)	n=32; 56.14	n=19; 33.33
Limited-Fixed (LFT)	n=20; 35.09	n=2; 3.51

Source: Personal elaboration, January, 2022.
Note: Group 1 – pupils with intellectual disabilities; Group 2 – pupils with normal development.

It was found that ORT competence characteristics include (n=5; 8.77%) the pupils with intellectual disabilities (Group 1) and (n=36; 63.16%) the pupils with normal development (Group 2). We can state that the children with ORT competence characteristics have a sufficient level of cognitive abilities with domination of unstable educational motivation and cognitive interest in educational subjects. These pupils are motivated to obtain a correct result of their work, they can apply methods of interaction while performing activities in familiar situations, they can use the assistance received while analyzing and making corrections to their work and they are interested in positive evaluation. In a social context they are capable of predicting people's actions on the basis of analyzing real situations of communication (in families, at school, with friends), realizing a new event on the basis of understanding feelings and intentions of communication participants.

It was established that LPT competence characteristics include (n=32; 36.14%) the pupils with intellectual disabilities (Group 1) and (n=19; 33.33%) the pupils with normal development (Group 2). It was determined that the abilities to act in educational situations are developed insufficiently, educational knowledge and skills often have processual character that affects the level of perception, completeness and adequacy of reflection of the requirements for activity.

It was found that LFT competence characteristics include (n=20; 35.09%) the pupils with intellectual disabilities (Group 1) and (n=2; 3.51%) the pupils with normal development (Group 2). We can state that the children referred to this type are characterized by insufficient development of educational actions that can be traced in manipulations and randomness, domination of game motifs and motifs of avoiding failure (punishment), a low level of functioning of cognitive processes, a low level of social adaptation and negative perception of themselves.

In a pedagogical aspect, ORT is characterized by adequate reproduction of a familiar practical reality in the form of knowledge and finding possibilities, correlation of knowledge under conditions of a familiar activity. Specification of theoretical knowledge in solving a problem within the framework of the basic concepts and the methods learned, the desire to achieve success, the ability to cooperate is a characteristic feature. ORT is characterized by the awareness of a problem situation, understanding of the necessity to choose optimal variants of organization of cognitive actions, however, there is a necessity of continuous comparison of the content of one's own cognitive actions with a familiar sample, that causes their "solution" and inability to use them under conditions of a new activity. Therefore, competence characteristics acquire a limited character. The basis for LFT is insufficient development of cognitive activity, in which, in the course of realization of available knowledge, interrelations between objects under new conditions of activity are not realized, i. e. under changes of the conditions of a familiar type of activity, construction of a new model is not accompanied by a change in the methods and results. In the process of accomplishing educational tasks, there is fixation of knowledge on the totality of rules (methods), stipulating the content and succession of familiar actions. There is a desire to complete the work faster, inability to take advantage of assistance, insufficient development of interaction in the group.

In a psychological aspect, the common manifestation of competence characteristics of ORT is: a) motivational readiness for educational process, motivation for achievements; b) insufficient intellectual-creative thinking (insufficient development of the operations of generalization and abstraction, at the same time most children have well-formed operations of analysis and synthesis and they can use them while accomplishing simple tasks, they are able to transferal and reflexive analysis of the knowledge gained in familiar situations); c) the system of personal values is formed in the light of the positions of values of micro- and macro-society (family, school); d) value-based positions both towards oneself and towards others, manifestation of empathy in communication, the ability to determine near and far aims in education; e) balancing processes of excitation and inhibition, that enables a pupil to regulate manifestation of social emotions of compassion and sympathy; active communication.

The major manifestations of competence of the pupils with LPT are: a) domination of external motivation (motifs of praises, excellent marks, avoiding failure or punishment, receiving a certain award) and motivation related to the process of education; educational motifs are unstable and depend on emotional coloration, the complexity of activity (they prefer simple, familiar tasks); b) shortages of perception and storage of information, partial perception of requirements, fragmentary analysis of a task; underdevelopment of reflexive thinking that does not allow purposeful internal-intellectual analysis of a task, these shortages are often combined with unstable attention and disruption of the process of switching; c) the ability to find appropriate mode of communication with different interlocutors in familiar situations and the formation of a certain repertoire of role behavior, but inability to recognize the structure of interpersonal situations in dynamics; d) availability of positive emotions and negative experience which are situational and minimal, that ensures emotional psychological comfort and contributes to optimal functioning of a child in society.

LFT involves: a) underdevelopment (limitation) of educational motivation (children are more attracted by emotional motifs (to receive a candy, watch a cartoon), underdevelopment of the system of purposes, needs and motifs which encourage a child to gain knowledge; immature motivational inclinations, insufficiently developed curiosity, short-term interest in educational activity, insufficient formation of educational needs; b) a lack of practical skills, caused by a lack of realization of theoretical knowledge and possibilities to use them, that, as a rule, leads to a protective reaction and reduces expressive sensibility; в) mixed attitude towards oneself (positive, negative, conflictive); c) spontaneous, uncontrolled character of emotions, a lack of understanding of true reasons of their manifestations; emotional centrality, orientation towards oneself; limitation of social contacts, their superficial and impersonal nature.

We can state that insufficient formation of thinking, speech, imagination, attention, search and adaptive skills, communicative skills in the pupils with disruption of intellectual-cognitive competence. These children show inability to organize themselves in different educational and social conditions. In other words, disorders of pupils' competence characteristics manifest themselves in underdevelopment of educational motivation, in the ability to use interactive methods in education, functioning in micro- and macro-society, that does not contradict to the results obtained by other researchers (Prokhorenko et al., 2020).

Additionally, we established a correlation between intellectual-cognitive, emotional-motivational and social components of competences in the pupils of the groups under study (Group 1 and Group 2) using the method of Pearson's R correlation analysis with $p \leq .01$. We determined the value of correlations from r=.52 to r=.83 – in the pupils with normal development (Group 2) and from r=.11 to r=.23 – in the children with intellectual disabilities (Group 1).

Interpreting the results obtained, we can state that there is a low correlation between all the components of the key competences in the pupils with intellectual disabilities: between intellectual-creative abilities and educational motivation – r=.21, between educational motivation and social adaptation – r=.17. The obtained data evidence that external motifs dominate in educational situations of these pupils (avoiding failures, receiving praises, excellent marks and approval). In the process of accomplishing educational tasks, they manifest inability to observe requirements of a task, analyze a problem situation, perform activity following a given algorithm, make plans and realize them independently, apply interactive methods in the process of accomplishing a task, use knowledge and information literacy. A lack of educational motivation has a negative impact on adaptive skills, therefore the majority of pupils are unable to act in micro- and macro-society according to the given requirements/rules. A low level of adaptive skills is combined with inability to interact with others, cooperate and manage conflicts. Moreover, most pupils with intellectual disabilities have no ability of intellectual analysis of a task from the beginning to the end, compare the results obtained with the scheme of solving the problem and the aim, that evidences a lack of well-formed cognitive processes.

Unlike the pupils with intellectual disabilities, the pupils with normal development have a high correlation between the components of the key competences: between intellectual-creative abilities and educational motivation – r=.76, between educational motivation and social adaptation – r=.61, between intellectual-creative abilities and social adaptation – r=.88. It means that in educational activity these children are guided by the motifs of achievements, which are related to the content of education more than to its process in most pupils. These children are characterized by awareness of the necessity to plan a task in advance, follow the plan while accomplishing it, the ability to substantiate and correct the mistakes made. In other words, their intellectual-creative abilities, motivation and social adaptation are formed at a sufficient level. We presented quite detailed discussive substantiation of the results obtained since there are no similar studies which could be close to the suggested typology.

Conclusions

1. The precondition for insufficient formation of competence characteristics of pupils with intellectual disabilities is underdevelopment of the main categories of the key competences, i.e. underdevelopment of motivational intentions for education; inability to subordinate one's own activity to the aim; a low level of the ability to set goals; a lack of educational motivation, domination of near motifs aimed at performing some operations and actions; inability to find appropriateness/inappropriateness of actions, evaluate and make corrections to the stages of activity; inability to solve problems, estimate risks and make decisions; inability to manage emotions constructively, use emotional intelligence and cooperate in a team.
2. A typology of competence characteristics of pupils with intellectual disabilities was

developed and three types were suggested: Operational-Reproductive (ORT), Limited-Practical (LPT) and Limited-Fixed (LFT). Essential differences of these types and their content features were outlined. Pedagogical and psychological aspects of the types under study were found.

3. Using the method of Pearson's R, correlations between the components in the groups under study (Group 1 and Group 2) were determined, with $p \leq .01$: from $r=.52$ to $r=.83$ – in the pupils with normal development (Group 2) and from $r=.11$ to $r=.23$ – in the children with intellectual disabilities (Group 1).
4. We suggested developing a conceptual model of the formation of the key competences of pupils with intellectual disabilities. Creation of a correction-development program for the formation of the key competences will be a practical foundation of the concept. The program will be based on psychological-pedagogical concepts of developing and person-oriented education and will imply the formation of readiness to solve complex practical problems, the development of critical thinking, the formation of organizational skills, the formation of social adaptation, the formation of the ability of effective interaction, the development of abilities to evaluate a problem and make decisions.

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Research of students' ideas about the actual and expected image of university corporate culture

Дослідження уявлень студентів про реальний і очікуваний образи корпоративної культури університету

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Abstract

The purpose of the article is an empirical research and theoretical substantiation of students' ideas about the actual and expected image of university corporate culture. Materials and research methods: valid psychodiagnostic tools made it possible to determine the content-related parameters of university corporate culture relevantly and compare the studied images; a correlation matrix was construct; reliability coefficients for the obtained data were applied. Results. Differences were identified in four types of actual and expected images of corporate culture: Closed (CT), Random (RT), Open (OT), and Synchronous (ST). The author established the prevalence of the closed type (CT) of the actual image of university corporate culture (t= -2.31; p<.05). An open type (OT) was recorded (t=2.41; p<.05) as an expected image of corporate culture. The interrelation between the parameters of students' social expectations and the parameters of the types of the desired image corporate culture was fixed. Conclusions.

Анотація

Метою статті є емпіричне дослідження і теоретичне обґрунтування уявлень студентів про реальний і очікуваний образи корпоративної культури університету. Матеріали і методи дослідження: застосовано валідний психодіагностичний інструментарій, який уможливив релевантно виміряти змістові параметри корпоративної культури університету і порівняти досліджувані образи; побудовано кореляційну матрицю; застосовано коефіцієнти перевірки достовірності отриманих даних. Результати. Встановлено відмінності за чотирма типами реального і очікуваного образів корпоративної культури: Закритий (CT), Випадковий (RT), Відкритий (OT), Синхронний (ST). Констатовано превалювання закритого типу (CT) реального образу корпоративної культури університету (t=-2.31; p<.05). Зафіксовано відкритий тип (OT) (t=2.41; p<.05), як очікуваний образ корпоративної культури. З'ясовано взаємозв'язки параметрів соціальних очікувань

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Students' ideas about the actual and expected images of university corporate culture are related to the parameters of social expectations and ascertain the self-regulatory readiness of respondents for future professional activity.

Key words: organizational culture, higher education institution, institutional affiliation, educational space, professional identification.

студентів з параметрами типів бажаного образу корпоративної культури. Висновки. Уявлення студентів про реальний і очікуваний образи корпоративної культури університету зв'язані з параметрами соціальних очікувань і визначають саморегуляційну готовність респондентів до майбутньої професійної діяльності.

Ключові слова: організаційна культура, заклад вищої освіти, інституційна приналежність, освітній простір, професійна ідентифікація.

Introduction

In today's realities, a university is an integration platform that produces the synergy of educational and scientific activities. A university is also endowed with powerful educational and consolidating functions. A university plays a crucial role in the formation of competencies through training and practice and effectively undertakes the mission of training through research and social interaction. A university is the basis of a new technological structure, promotes the development of academic potential, outlines the contours, sets the pace, and determines the focus of innovative activity both within the country and on a global scale.

At the same time, a university is a part of the world culture, an indicator of people's conduct and public sentiment which can influence all participants in public life extensively. A university plays a crucial role in preserving spiritual heritage and developing and multiplying spiritual and cultural values.

It is recognized that despite such an important role and significance in public life, a university is the bearer of a unique and authentic activity arrangement, namely, it has an original corporate culture. The phenomenon of the corporate culture of a higher education institution requires more attention from the scientific community. Modern science should focus on the conceptual parameters of corporate culture, the determinants of the formation and development of organizational culture, the identification of education actors with university organizational culture, compare the actual and expected images of university corporate culture and clarify their differences. The above is far from a complete list of urgent tasks amidst the problem under study. The current research deals with one of the mentioned tasks.

Hypothesis. 1. It is assumed that the study of students' ideas about the actual and expected image of university corporate culture will have scientific value, and its findings can be relevant to the organizers of educational and scientific processes and heads of higher education institutions. 2. Respondents' ideas about the expected image of university corporate culture have significant correlations with the content parameters of social expectations that positively affect their self-regulatory readiness for future professional activity.

The research purpose is an empirical study and theoretical substantiation of students' ideas about the actual and expected image of university corporate culture.

Literature Review

Corporate culture is a unique educational and scientific space that cultivates in subjects a sense of belonging to institutional activities. It applies not only to education and science but also to production, trade, and services. The researcher R. Nesmeianova (2018) found that advancing corporate culture mobilizes solidarity with the organizational mission and strategy. For most employees, organizations that successfully promote corporate culture become a social sphere, a source of material well-being, and a place where their professional capabilities and competencies are actualized. In other words, corporate culture makes an organization multifunctional by solving some problems of an employee. As a result, employees no longer regard it only as a "place to earn money" (Nesmeianova, 2018). H. Tovkanets (2011) interprets the corporate culture of a higher education institution as a set of social norms and rules of conduct established within university space between the participants of communication

– subjects and objects of educational and scientific activities. In addition, the researcher compliments the above list with the culture of interpersonal relations, namely, "the actualization of "the spirit" of the higher education institution: all subjects – from the rector and managers to academic staff and students – are well-aware of the institutional mission, strategy, and tasks and make every effort to implement them" (Tovkanets, 2011, 173).

The differences between students with high and average status regarding satisfaction with the organizational culture of a higher education institution, which were identified by V. Kalenchuk (2019), seem relevant to this study. The author argues that students with average status are more likely to enjoy activities (educational and scientific); instead, they are less focused on warm emotional relationships with groupmates or other students. Such students have low expectations about approval from their colleagues. Respondents with high status tend to be active, have pronounced critical thinking, strive to take a leadership role, keep the situation under control, are not afraid of taking responsibility and additional duties, and have a warm emotional relationship with the environment. Despite the status differences, students described the organizational culture of the higher education institution under consideration as closed, and an open type, in which democratic relations prevail, is desirable (Kalenchuk, 2019).

Researchers V. Moroz et al. (2014) conducted a thorough theoretical analysis of the manifestations of the corporate culture of a higher education institution and generalized the following: 1) corporate culture is based on collective values, and the matter and form of its manifestation are shared by a significant part of the university community; 2) academic staff is the major carrier and source of development and formation of university corporate culture: it adopts norms and rules of conduct and forms and improves them in practice; 3) university corporate culture institutionalizes established norms and rules of conduct within the institute of culture and institutional formation; 4) the corporate culture of each particular higher education institution should be considered from the perspective of the subculture of a specific social group, since several models of subcultures can take place at once; in other words, faculties have their norms, values, and rules of conduct within one university; 5) corporate culture is the object of the university head's influence on the quality and efficiency of the organizational structure. In certain circumstances, university corporate culture has organizational-legal and marketing mechanisms for managing a higher education institution (Moroz et al., 2014). We are increasingly noticing university brand, logos, and other corporate attributes. They are designed and developed for capitalizing an intangible asset to increase its value.

As we touch upon the issue of the university's corporate culture model, it is advisable to mention the study by V. Kubko (2014). Thus, the author covers the step sequence of designing corporate culture. The first step is to assess the existing culture and values. The next one is to specify the mission and values of a higher education institution. It is critical when alignment goes from senior executives to performers and vice versa: "top-down and down-top" (Kubko, 2014). Students should be directly involved in formulating the university's mission and strategic objectives. As a result, they actualize their belonging and contribution to the creation of university corporate culture. It is expedient that the strategic tasks focus on improving the competitiveness of the university and its students, the quality of professional training, and positive image creation (Kubko, 2014).

Nowadays, there are advanced requirements for the interaction of universities with organizations that hire their graduates. It drives universities to transform into educational corporations. An educational corporation is an innovative entity that aims to solve a range of problems – from obtaining a profession to mastering the conduct rules and moral principles of employees, reputation at the national and international levels, and integration into a new cultural community (Liu et al., 2019). Such challenges, in turn, encourage researchers to seek progressive technologies of organization and creation of corporate culture, preserving traditions and introducing innovations.

The expected image of the corporate culture of a higher education institution is an integrated unit that depends on social expectations and trends (Popovych, 2007; 2014) and the expectations of subjects and their regulatory capacity (Popovych, 2019). University corporate culture is associated with professional identification (Blynova et al., 2020c; Blynova & Kruglov, 2019; Popovych et al., 2020a; Zaverukha et al., 2022) and labor migration activity of university students and graduates who "decided to look for their place outside the country" (Blynova et al., 2020a).

In the study context, the fundamental contribution by L. Constantine (1993) is of thematic interest. The scientist specifies the essence of the image (model) of the organization's corporate culture. The model is a set of ideas of subjects about the organizational life style and envisages the availability of actual and desired (expected) images. L. Constantine (1993) states that depending on the values and the essence of ideas, the types of organizational culture have the following classification: Closed (CT), Random (RT), Open (OT), Synchronous (ST). CT is characterized by hierarchy, traditional authority, strict legal regulation, negative feedback, and conformism of subordinates. RT is dispersed; creativity and initiative of actors prevail; nonconformism dominates, and employees prioritize their interests over corporate ones. OT is a combination of open and random types; an agreement prevails; it does not have strict legal regulations. Joint activities, consolidated dialogue, and partnerships dominate. ST is characterized by a symbiosis of the goals and values of actors. Occasional arrangements are active; there is no strict regulation. Actors mainly express implicit and latent expectations (Constantine, 1993). L. Constantine (1993) types assisted in studying students' ideas about the actual and expected images of university corporate culture.

Materials and methods

Methodology. The research on students' ideas about the actual and expected images of university corporate culture relies on original methodological theses, which are advanced and substantiated in the contributions of L. Constantine (1993), H. Tovkanets (2011), V. Moroz et al. (2014), Popovych et al., (2021b; 2021c) et al. Four types of corporate culture by L. Constantine (1993) are used as a guide. The expected image of students is regarded as a set of ideas about university life style and the social expectations of students – as a regulatory capacity and the ability to influence their professional becoming within corporate culture (Popovych, 2017). During the implementation of the research ascertaining strategy, the developments of scientists who dealt with corporate culture (Blynova et al., 2020b; Coman & Bonciu, 2016; Tierney, 1988), issues of building automated and non-automated management systems (Nosov et al., 2020a; 2020b; Zinchenko et al., 2019; 2022); organization of educational and scientific processes (Halian et al., 2020a; 2020b; 2021; Popovych et al., 2020b; 2021d); the activity of specialists under specific conditions (Hudimova, 2021; Hudimova et al., 2021), in the construction of the expected action mode (Hulias & Hoian, 2022; Hulias, 2020; Plokhikh, 2021; Plokhikh et al., 2021) were taken into account. The experience of using empirical strategies, which is specified in the mentioned works, allowed building a relevant algorithm to achieve the research goal.

Participants: Undergraduate students in the third and fourth years of study of the educational program "Public Management and Administration" of the Institute of Postgraduate Education and Pre-University Training (n=38) and students of the educational program "Management of Organizations and Administration" of the Faculty of Economics of Vasyl Stefanyk Precarpathian National University (Ivano-Frankivsk, Ukraine) (n=44) were involved in the research. Thus, the total sample comprised n=82 respondents. The gender distribution was as follows: males (n=33; 40.24%) and females (n=49; 59.76). Descriptive frequency characteristics were M=20.11; SD=2.01 (age range: 19-24 years). The sample was random; it meets all the requirements for empirical research.

Organization of Research. The empirical review was organized from November to December 2021 at one higher education institution – Vasyl Stefanyk Precarpathian National University (Ivano-Frankivsk, Ukraine). This is one of the conditions for our research, as corporate culture is analyzed within the specific university.

To implement ascertaining research strategy, the questionnaire "Scales of Organizational Paradigms" ("SOP") (Constantine, 1993) is used. The technique was translated, tested and adapted by S. Lipatov (2005). The psychodiagnostic tool has twenty-five blocks of statements. Each statement has four options that are related to organizational paradigms of corporate culture: closed, random, open and synchronous. In each block, a respondent chooses the statement that most accurately renders his/her ideas of the actual course of events at the university. Then this procedure is repeated to choose an option of the expected corporate culture. We have taken into account all seven scales of the questionnaire, which cover the conceptual parameters of university corporate culture: Leadership and Management (LM), Communication System (CS), Change Management (CM), Orientation Style (OS), System Coordination (SC), Workspace (WS), and Problem Solving and Decision Making (PSDM). Some statements relate to more than one scale. The reliability of the empirical data was verified using the homogeneity index α-Cronbach, which amounted to α_{SOP1} = .823 in the former variant and α_{SOP1} = .845 in the latter.

Respondents' social expectations as self-regulatory readiness to act were identified using the questionnaire "Level of social expectations of personality" (LSEP) (Popovych, 2017). Three main scales were applied. The technique facilitates assessing the cognitive, emotional and behavioral components of the expected action. The α-Cronbach coefficient was α_{LSEP} =.923

Statistical Analysis. The statistics were prepared using the certified program "SPSS" v. 23.0. In some cases, MS Excel was applied. The researchers established standard descriptive characteristics for experiment reproducibility. Spearman's correlation coefficients (r_s) were used to construct the correlation matrix. The differences between the respondents' actual and expected images of corporate culture were established by the Student's t-test. The α-Cronbach indicators are considered reliable at a level not lower than .8 (average). The differences between the studied parameters are considered reliable at a level not lower than p≤.05.

Results and discussion

The organized empirical study aims to analyze students' ideas about university corporate culture. The ideas relate to the culture of the higher education institution in which the students have already studied for at least two full academic years. Thus, during the ascertainment review, they were third- and fourth-year students. The choice of student groups was random. Students' awareness of university life made it possible to obtain balanced, substantive, and constructive answers to the statements of the questionnaires and formulate diagnostic hypotheses. The above contributed to producing a coherent idea about the actual and expected image of university corporate culture through the eyes of students. According to the SOP questionnaire (Constantine, 1993), the actual and expected images of university corporate culture is determined. In Tabl. 1 renders a comparison of the types of relevant images using the Student's t-test.

Table 1.
Respondents' comparison of the types of actual and expected images of corporate culture (n=82)

Corporate culture type	M_1	M_2	t-test	Significance level
Closed Type (CT)	±10.05	±3.54	-2.31	p<.05
Random Type (RT)	±5.94	±7.01	–	–
Open Type (OT)	±6.12	±10.84	2.41	p<.05
Synchronous Type (ST)	±3.34	±4.12	–	–

Source: Personal elaboration, November – December, 2021.
Note: M_1 – arithmetic mean of ideas about the actual image; M_2 – arithmetic mean of ideas about the expected image.

We state that the results obtained under the descriptive frequency characteristic (M_1 and M_2) meet the sample experimental norm (Lipatov, 2005). Applied the same technique, there were data that do not have significant differences, which were recorded in another study (Blynova et al., 2020b). A comparison of respondents' ideas about the expected and actual images showed that the university is predominantly characterized by a closed type (CT) of corporate culture (M=10.05). The types are further arranged in the following sequence: OT (M=6.12), RT (M=5.94) and ST (M=3.34). Respondents convey corporate culture as a structured, bureaucratic management model with consistent regulation of internal processes and strict subordination. As for students' ideas about the expected image of corporate culture, there are two statistically significant differences: OT (t=2.41; p<.05) and CT (t=-2.31; p<.05). It is expected that modern student youth strive for openness and mobility, thus the idea of open corporate culture dominates. In their opinion, such a type most fully corresponds to the democratic principles and facilitates the development of personal potential and professional becoming of a young specialist. At the same time, it is recognized that the higher education institution under consideration is a first-class state institution where statutory regulation should be advanced that will contribute to the accurate coherence of educational and scientific processes. Students realize the abovementioned but also appeal to the fact that the creative component of professional development declines amid discipline approach and regulation.

In Table. 2 renders the study results for corporate culture types following the basic SOP scales (Constantine, 1993) through the main frequency characteristics (M and SD). The results obtained were also compared using the Student's t-test.

Table 2.
Comparison of the main frequency characteristics of the respondents' ideas following the main SOP scales (Constantine, 1993)

Scale	M_1	SD_1	M_2	SD_2	t-test (M_1& M_2)	Significance level
Open Type (OT)						
LM	1.11	±.74	1.12	±.75	–	–
CS	. 96.	±.29	1.51	±.41	3.11.	p<.01
CM	1.78	±.32	2.12	±.39	2.11	p<.05
OS	1.24	±.23	1.28	±.24	–	–
SC	.79	±.20	.86	±.22	–	–
WS	1.18	±.26	1.48	±.36	2.72	p<.05
PSDM	.94	±.22	1.13	±.25	2.23	p<.05
Random Type (RT)						
LM	1.30	±.25	1.31	±.26	–	–
CS	1.47	±.32	1.48	±.33	–	–
CM	1.12	±.28	1.15	±.29	–	–
OS	1.5	±.31	1.7	±.33	–	–
SC	1.21	±.28	1.55	±.37	2.19	p<.05
WS	.91	±.18	1.21	±.24	2.22	p<.05
PSDM	.99	±.21	1.04	±.23	–	–
Closed Type (CT)						
LM	2.12	±.28	2.09	±.27	–	–
CS	1.83	±.18	1.52	±.15	-2.21	p<.05
CM	1.11	±.17	.92	±.15	-2.12	p<.05
OS	1.81	±.42	1.82	±.42	–	–
SC	1.62	±.26	1.61	±.25	–	–
WS	1.52	±.28	1.21	±.22	-2.68	p<.05
PSDM	2.36	±.32	1.81	±.21	-2.81	p<.05
Synchronous Type (ST)						
LM	1.44	±.36	1.45	±.36	–	–
CS	.76	±.21	.75	±.19	–	–
CM	1.18	±.41	1.22	±.43	–	–
OS	.48	±.16	.57	±.19	–	–
SC	1.41	±.28	1.44	±.29	–	–
WS	1.41	±.17	1.46	±.17	–	–
PSDM	.72	±.19	.75	±.21	–	–

Source: Personal elaboration, November – December, 2021.
Note: M_1 – arithmetic mean of ideas about the actual image; SD_1 – standard deviation of ideas about the actual image; M_2 – arithmetic mean of ideas about the expected image; SD_2 – standard deviation of ideas about the expected image.

A comparison of the main SOP scales (Constantine, 1993) elucidated specific conceptual features of the student idea about the functioning of the higher education institution. We state the mirror changes in the open and closed types. Consequently, there is an increase in the OP indicators for the following scales: CS (t=3.11; p<.01), CM (t=2.11; p<.05), WS (t=2.72; p<.05) and PSDM (t=2.23; p<.05) and decline for the same scales in CT: CS (t=-2.21; p<.05), CM (t=-2.12; p<.05), WS (t=-2.68; p<.05) and PSDM (t=-2.81; p<.05). Significant differences were recorded in two Random Type scales: SC (t=2.19; p<.05) and WS (t=2.22; p<.05). There are no significant differences in Synchronous Type.

Significant differences that are noted in open and closed types are because the dominant communication system is hierarchically-oriented. Its large part has regulatory content, and the flow runs mainly from top to down. Students hold that their opinion matters to the university administration, but, in truth, they notice that change management is slow enough. This is evidenced by the findings for the CM scale (t=2.11; p<.05). In open-type terms, respondents are ready to change the workspace drastically by building it on partnerships and modifying available procedures, rules, and instructions. They believe it can significantly affect the solution of educational and scientific problems and the speed of decision-making.

In order to establish correlations between the expected image of corporate culture and the parameters of students' social expectations, a correlation matrix was constructed (Tabl. 3).

Table 3.
Correlation matrix of the expected image of corporate culture with LSEP scales (Popovych, 2017)

Corporate culture type	LAEE	LEA	LEP
Closed Type (CT)	-.087*	-.283**	-.136*
Random Type (RT)	.071	.131*	.023
Open Type (OT)	.081	.224**	.147*
Synchronous Type (ST)	.022	-.022	.049

Source: Personal elaboration, November – December, 2021.
Note: LAEE – Level of Awareness of the Expected Events; LEA – Level of the Expected Attitude; LEP – Level of the Expected Performance; * – p < .05; ** – p < .01.

A correlation pleiade is presented for visualization (Fig. 1).

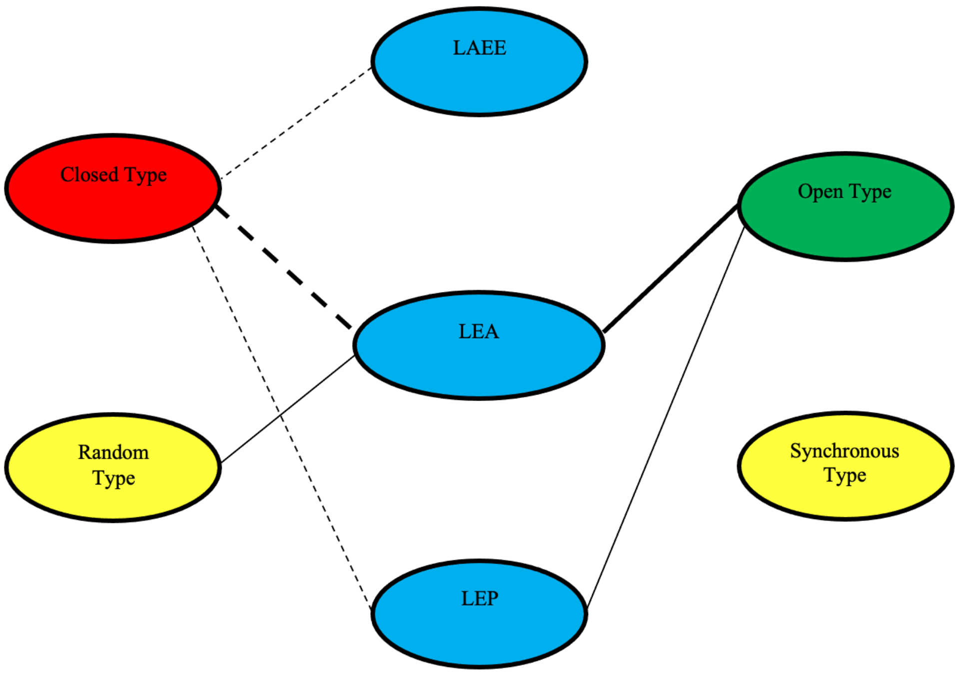

Figure 1. Correlation pleiade of the expected image of corporate culture and parameters of respondents' social expectations
Source: Personal elaboration, November – December, 2021.
Note: ▬ ▬ ▬ ▬ negative correlations at p≤.01; ------------ negative correlations at p≤.05; ———— positive correlations at p≤.05; ▬▬▬ positive correlations at p≤.01; LAEE – Level of Awareness of the Expected Events; LEA – Level of the Expected Attitude; LEP – Level of the Expected Performance.

The correlation matrix (see Tabl. 3) and the correlation pleiade (see Fig. 1) made it possible to find out that the content parameter of the LEA of social expectations is the most critical in producing students' ideas of university corporate culture. LEA has two most loaded relationships with the following culture types: CT (r_s=-.283; p<.01) and OT (r_s=.224; p<.05). It was also established that the LEA parameter is the most dependent since it has the most relationships – three. It is noted that the formed expected attitude of respondents as a reflection of emotional and value assessment of corporate culture ideas is the main component in the professional becoming and development of future specialists. The relevant scientific facts are confirmed by the study of Popovych et al., (2021a). As the Level of the Expected Attitude affects an individual's regulatory capacity and ability to predict the likely course of events, the association with the expected image of corporate culture is a reproduction of the constructed model of corporate culture in the minds of actors. The obtained results find endorsement in the research on the professional identity of future specialists by Blynova et al., (2020b). The interrelation of professional identity with the corporate culture of a higher education institution has a positive impact on the formation of specialists. In this context of argumentation, the lack of significant relationships of Synchronous Type with social expectation scales is evident. This is because students do not associate ST with their perspective. Unspoken agreements and implicit expectations, which are at the heart of the type concerned, contradict the goal of students' professional development.

Researchers B. Fralinger and V. Olson (2007) concluded that the effectiveness of functional decision-making in universities depends on corporate culture. Continuous assessment and change management are essential for effective coordination of activities. The original comparison of students' ideas about the actual and expected images of university corporate culture justifies the conclusions of the mentioned researchers. The above-proposed algorithm is an example of solving an urgent scientific problem within the corporate culture framework. In particular, J. Hennigan (2005), in his thesis "Corporate culture in an institution of higher education", emphasizes the importance of corporate culture type and the training of future specialists. We believe that our desire to compare actual and expected images and find leverage confirms the validity of finding a connection (Hennigan, 2005) and the desire to render one that researcher N. Bilyk (2020) calls the regulatory function of corporate culture. It is clear that this research has some limitations, namely, empirical data relate only to students. It is advisable, in the long term, to conduct a comprehensive study which samples all subjects of university activity.

Dn. Mierzwa and Dm. Mierzwa (2020) pursued a similar goal in their research, using other tools and experimental strategy. The desire to study the current and desired corporate culture confirms the relevance of our pursuits. Researchers J. Smart and E. John (1996) found that culture type has a much stronger independent influence on institutional performance than culture power. This is another argument that the creation of university corporate culture directly influences the quality of training of future specialists.

Conclusions

1. It is theoretically justified that corporate culture is a unique educational and scientific space that cultivates in subjects a sense of belonging to institutional activities.
2. Differences in four types of actual and expected images of corporate culture were identified: Closed (CT), Random (RT), Open (OT), Synchronous (ST). The prevalence of the closed type (CT) of the actual image of university corporate culture is established (t= -2.31; p<.05). It was found that the open type (OT) (t=2.41; p<.05) is an expected image of the corporate culture of the university under consideration.
3. The correlation matrix clarified the interrelation between the parameters of students' social expectations and the parameters of types of the desired image of corporate culture. It was fixed that the content parameter of the LEA of social expectations is the most important and most dependent in the formation of students' ideas about university corporate culture. It was explained that respondents' expected attitude is a projection of the emotional and value assessment of corporate culture ideas and the main component of professional becoming and development of future specialists.
4. The goal was achieved, and the hypothesis was proved. It is noted that studying students' ideas about actual and expected images of university corporate culture has scientific value. Therefore, it is advisable to operationalize the results in the educational and scientific processes. It was found that respondents' ideas significantly correlate with the content parameters of social expectations that positively affects their self-regulatory readiness for future professional activity.

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Introducing the latest teaching and educational development practices in mathematics: the experience of EU countries

Запровадження новітніх практик викладання та розвиток освітнього процесу у галузі математики: досвід країн ЄС

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Abstract

The purpose of this work was to investigate the qualitative implementation and the possibility of use in the educational context of Ukraine. For this work, the author invited five groups (a total of 169 students of different genders). The second was a conversation with the teachers about the atmosphere in the classroom, the difficulty of the learning process, and the results. The study showed the weakness and small effectiveness of the old teaching methods (control group) and elementary explanatory online meetings.

Keywords: mathematics, pedagogy, digitalization, flipped classroom, education.

Анотація

Мета цієї роботи полягала у дослідженні якості впровадження новітніх практик викладання математики та можливості їх використання в Україні. Для цієї роботи було запрошено п'ять групи студентів та студенток 3 курсу (всього 169 студентів) педагогічних спеціальностей. Упродовж трьох місяців, вони вивчали математику по новим методикам. Задля отримання результатів, використовується метод тестування (перевірка поточних та кінцевих знань студентів), статистичного аналізу та бесіда (з викладачами). Результаті дослідження представлені у формі відсоткового співвідношення між оцінками до та після експерименту. Дослідження показало слабкість старих методів навчання (контрольна група) і онлайн-зустрічей. Продемонструвало велику перевагу STEAMосвіти, та впровадження «електронних портфоліо».

Ключові слова: математика, педагогіка, цифровізація, перевернутий клас, освіта.

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Introduction

Mathematics is one of the oldest sciences in our world. Since ancient times, it has become a universal language for the whole world, a method for the development of human logical thinking, and a way for scientific and technical development. Studying mathematics at school and in high schools gives pupils and students not only the acquisition of specialized knowledge but also the development of intellect and consistent thinking. Like any subject (humanities, natural or technical), the teaching of mathematics is being redefined, changed, and transformed through sociocultural conditions.

Thus, with the rapid development of globalization and active scientific and technological progress, we are now witnessing the digitalization of the entire world, which has also affected the sphere of education. So, in 2018, at the level of the French Ministry, questions about electronic textbooks, electronic portfolios, the introduction of presentations and video lectures, the prospects of introducing distance learning, the use of special computer programs, and many other issues are raised (Gueudet et al., 2021). If discussions of the ideas of digitalization of education have been longstanding and mostly theoretical and only sometimes practical, then with the arrival of the total pandemic covid-19 and forced lockdowns, distance education is reaching an urgent practical level.

Most countries of the world and Europe have been forced to introduce "distance learning" (Weinhandl et al., 2021) tearing students away from the collective with peers, from the teacher, and with an apparent shift in the emphasis of learning to independent work. For example, France proposed the formation of students' "autonomous" learning ability (Gueudet et al., 2021). The transition to distance learning requires an active reorientation and change in teaching methods on the part of teachers. Therefore, digitalization requires schools, universities, and other educational institutions: logistical support, new teaching methodology, and active communication between student and teacher.

Research Problem

Like most countries in the world, Ukraine is trying to maintain the level of quality education, but old teaching methods are losing their relevance and it is necessary to change approaches. The model for the introduction of the latest practices in education are the countries of the European Union, so to analyze their experience and place it in Ukrainian conditions in the future gives a new impetus to the development of modern science, focused on quality standards.

Research Aim and Research Questions

Our study aims to analyze the latest methods of teaching mathematics (on the example of the European Union countries) in Ukrainian schools, establishing their effectiveness and further development. The stated theme and purpose of the study led to the following tasks: to analyze the latest methods of teaching mathematics in the European Union, to form criteria for sampling subjects, to distribute groupsinto “control” and “experimental”, to conduct three control and one final test, to interview teachers and through statistical analysis, comparative and hermeneutic practices to draw conclusions.

Materials and methods

General Background

For this study, we selected five 8th graders from different schools. The students were not mixed among themselves. By leaving students in a comfortable and familiar environment, we do not add to the stress of entering a new environment by avoiding the need for adaptive time. In the case of independent or group work, students already know each other and will be able to ask for help from each other more quickly, as well as be comfortable with being assigned to groups (for example, as with the STEAM system).

Of the five groups, one of them was taught using standard methods of teaching mathematics (the control class), and the others with the latest technology were experimental. Thus, one group, GP-A, was taught using the “checked group” concept. Group GP-B, in distance education, actively used online meetings with the teacher to discuss questions about the material. Group GP-B studied with the introduction of individual “electronic portfolios”. Group GP-G studied “STEAM education”.

The number of students in the group (on average) was 25-30 people. The total number of people was 169. Gender number: 55% - girls and 45% - guys. Material and technical base: all students were equipped with technical means (computers) and the Internet. Most of the students come from the middle class and have good living conditions and family support. Therefore, the social atmosphere should not have had a large and negative impact.

Instrument and Procedures

The empirical methods that we used in the research we can refer to: testing and conversation. The experiment was conducted for three months and included two stages. The first was testing to determine the assessment and quality of the students' knowledge of mathematics. During the three months, we analyzed three current tests and one final test that required students to apply all the knowledge they had acquired. The second phase was a conversation with the teachers. Thirty minutes were allotted to each person. All interviews were transcribed and analyzed. Conducting the second phase provided a more realistic understanding of the implementation of the latest mathematics teaching practices. First, the teachers knew their classrooms. Second, the teachers were able to compare their teaching experiences with the old and new methods.

Data Analysis

The results were analyzed using the "statistical" method of data processing. It is necessary to demonstrate and compare the quality of the mathematics knowledge obtained with the implementation of the latest teaching practices. The audio files from the teacher interviews were transcribed and analyzed using comparative and hermeneutical methods. Questions focused on classroom atmosphere, difficulties in the introduction, student motivation, and visible results.

Literary review

The latest technologies for teaching mathematics have a wealth of theoretical and practical research (e.g., that has taken place through questionnaires) (Weinhandl et al., 2021). Large universities in Europe are conducting a variety of studies to improve the learning process, create a comfortable environment, and identify the best teaching method. In collecting data, we found that the learning process and the teaching of mathematics, in particular, during the covid-19 pandemic was addressed by (Ní Fhloinn & Fitzmaurice, 2021). Pepin et al. (2017) have joined in the analysis of the remote presentation of mathematics. The research in the implementation of STEAM education in the Spanish experience was done by (Diego-Mantecon et al., 2021), (Diego-Mantecon, Prodromou, Lavicza, Blanco, Ortiz-Laso, 2019). The ideas of integrating programming to mathematics have been addressed by (Bråting& Kilhamn, 2021). Epistemologies of learning and issues of inclusion have been addressed by: (Hudson, 2018; Hudson, 2019). Practices of the "flipped classroom" have been addressed by: (Feudel & Fehlinger, 2019), Weinhandl et al. (2018).

Also, in their paper Weinhandl et al. (2018) considered the topic of "e-portfolio". The problem of teaching mathematics in Austria was addressed by Kadunz & Zudini (2021). Additional information on the educational process in Sweden we took from the official government source: Swedish National Agency of Education (Swedish National Agency of Education, 2018). The latest technologies in education in France and the concepts of student autonomy have been dealt with by (Gueudet et al., 2021). The study of the learning process, using the comparative method, applying it in Europe and Japan, was done by: Asami-Johansson et al. (2019).

Results

The latest technology in mathematics

Looking at the experience of the European Union countries in changing education and in the field of mathematics, the introduction of the latest practices, the rethinking of the received experience, we see that many countries are focused on the digitalization of being. The pandemic of Covid-19 forced the introduction of emergency measures in the educational process, which gave impetus to the development of theoretical and practical pedagogy. So, studies on the effectiveness of teaching mathematics online, the availability of material and technical facilities in schools, or the conduct and effectiveness of distance learning appeared.

We begin our consideration of new practices in mathematics teaching by identifying them in distance learning. The University of Ireland, led by researchers Ní Fhloinn & Fitzmaurice (2021), conducted online surveys of mathematics teaching in the early months of the pandemic. They received active feedback from teaching subjects who had directly experienced the changes. Evaluations and recommendations covered a variety of areas within distance learning. Here are a few of them: First, technologies that connect all subjects of learning should be uncomplicated (this recommendation came from their practical use). It should be remembered that “students must adapt to this new way of doing things”. Comfortable use of learning platforms is a psychological comfort for students and learners. Second, the researchers came to a consensus on the need for “dialogue” between all actors in the learning process because students need psychological and emotional support. After conducting research, it turned out that students lacked live communication. One method of supporting the student is the introduction of an “online chat” or “discussion forum”. A study by Ní Fhloinn & Fitzmaurice (2021) noted the convenience of communication when teachers can post at any time, students can engage in streaming on YouTube, where “students can comment and ask questions via email or chat”. Second, the researchers came to a consensus on the need for “dialogue” between all actors in the learning process because students need psychological and emotional support. After conducting research, it turned out that students lacked live communication. One method of supporting the student is the introduction of an “online chat” or “discussion forum”. A study by Fhloinnhttps & Fitzmaurice (2021) noted the convenience of communication when teachers can post at any time, students can engage in streaming on YouTube, where “students can comment and ask questions via email or chat”.

Weinhandl et al. (2018) also spoke of the central role of the “social dimension” in learning mathematics, examining the experiences of Austrian schools that, with the onset of the pandemic, were open only temporarily, to receive homeschooling materials. Exceptions were small classes for students whose parents were classified as essential workers (e.g., health care workers, grocery stores, or public transportation workers) and who could not physically support children in distance learning.

Weinhandl et al. (2018) draws attention to the disadvantages of online classes. They concern both technical problems and the moral state of students. It is believed that in a bad in tension atmosphere there is detachment from the learning process, a lack of motivation in acquiring this knowledge. Because motivation and emotion are critical to the success of online mathematics instruction, special attention should be given to the community and social support when planning and conducting online instruction (Weinhandl et al., 2018).

Therefore, one practice is the introduction of audio-visual “online meetings” to discuss the material.

E-portfolio

Another effective innovation for learning mathematics that combines pedagogy and technology is the creation of an “e-portfolio” for each student in each individual subject.

An e-portfolio is an electronic document that demonstrates a student's work and progress in a particular subject. According to Weinhandl et al. (2018), working with an “e-portfolio” helps the student make connections between mathematics and the real world, develop and demonstrate learning outcomes in mathematics, and show individual mathematics topics of interest to the student. Teachers should also benefit from the use of electronic portfolios. One of the benefits of “e-portfolios in teaching mathematics for teachers is feedback from students” (Weinhandl et al., 2018). With knowledge from students' “E” portfolios (as it is also called), a teacher can not only help with a particular problem in mathematics but also change teaching methods, coordinate a student's views in the right direction, recommend literature and assignments for the student's interests.

Weinhandl et al. (2018) analyzed the effects of e-portfolios. The authors analyzed the relationship and effects of portfolios on students' mathematical achievement. The authors were able to establish in their study that when students learn mathematics through the use of electronic portfolios, they can achieve better learning outcomes in “higher-order thinking tasks”. In addition, it is illustrated that by changing the assessment processes in e-portfolios (from pointing out weaknesses to pointing out students' strengths), metacognitive skills such as reflection can also be developed.

Research to analyze e-portfolios shows positive results on the mathematics research side. “When taught with hands-on, student-centered approaches to mathematics instruction, such as the use of electronic portfolios, can be fruitful. According to Weber, demonstrating in his study that students who received experimental instruction were able to develop a deep understanding of trigonometric functions” (Weinhandl, 2021).

The practice of the “flipped” classroom

“Flipped” mathematics teaching finds its place in European countries (particularly Germany and Austria) as an alternative to the classical model of teaching, in which students first mastered new material in the classroom in a lesson.

The traditional scheme of teaching is very well known to us: the teacher comes to the class, tells the new material, simultaneously puts formulas, theorems, etc. on the board, commenting on the new material at the same time. It is believed that the student needs intensive intellectual work to master the new material (Weinhandl et al., 2018). The student does several things at the moment of presenting new material: listening, taking notes, trying to understand. “Thus, to understand the content, many students will need intensive post-lesson processing based on their notes. However, students often do not carefully work through lectures after class. On the other hand, they often do not write down the lecturer's oral explanations necessary to understand the formal content of the lecture” (Feudel & Fehlinger, 2021).

We have found and analyzed two kinds of “flipped method”. The first method is a certain inverted approach to teaching mathematics. It was developed by Weinhandl, Lavicza, Süss-Stepancik. The second is the concept of the “flipped classroom” considered by Feudel, Fehlinger (Feudel & Fehlinger, 2021). It should be noted that at the heart of the two approaches is the flipping of the responsibilities of the subjects of learning. At a certain point, the student assumes the “function” of the teacher, and the teacher takes a back seat. He or she becomes a guide in the world of mathematics. Weinhandl et al. (2018) believe that group learning spaces can be turned into dynamic, interactive learning environments. Direct instruction or individual feedback (concerning the material) is given individually in individual learning spaces rather than as a whole. The second option of “flipping through” is a fully flipped classroom. The meaning of this practice is to familiarize in advance with the new material, and the teacher's role is to explain incomprehensible points, add comments, etc. That is, the teacher's job is only to help him understand it. By the way, we can notice that the practice of flipped learning has a correlation with the idea of self-organization (autonomy), actively implemented in France.

Practice combining mathematics and programming

Another practice in teaching mathematics is to combine/include/partially include it with programming. Denmark and Sweden have had this experience and over the last 5-6 years have started to include programming skills in the “basics”. The relevance of this method is also based on scientific and technological development. “In particular, programming is often emphasized as a pedagogical tool in developing students' computational thinking” (Bråting & Kilhamn, 2021). Although the question of the obviousness of incorporating programming into mathematics still remains, Finland and Sweden have integrated with each other.

The pluralism of opinion on the inclusion of programming in mathematics has led to new subjects that “fully integrate” the two branches. Thus, in England and Denmark, programming has become part of the new school subjects Computing and Understanding Technology (Bråting & Kilhamn, 2021).

STEAM education

The introduction of STEAM education (S - science, T - technology, E - engineering, A – art, and M - mathematics), which was originally created and developed in the USA, deserves special attention. There have long been opinions in society that STEAM education competes with classical education and is capable of supplanting it in the future.

STEAM is an education program that incorporates the interdisciplinarity of different areas of knowledge. The old education showed that the modern child is not able to fully connect the knowledge of different disciplines, and this is an indicator of logical thinking, the ability to analyze knowledge and find answers to various questions and problems. STEAM offers a solution to these problems. At the heart of the new education is the idea of a “universal” person. And the learning process is built on “solving certain problems”.

Diego-Mantecon et al. (2021) in their study tried to analyze and evaluate STEAM education together with project-based learning on the learning side of mathematics. To begin with, the researchers noted that mathematics teachers avoided interdisciplinary projects in which it was difficult to do school mathematics, while teachers outside the field (outside mathematics) tended to overlook mathematics in interdisciplinary projects STEAM education allows students to solve specific problems and create specific projects that excite them. Thus, students will be required to use a variety of knowledge to implement their projects. As the researchers point out, in such an environment, mathematics (if challenging) can be facilitated by the teacher himself and adjusted to the student's current level of knowledge. Diego-Mantecon et al. (2019): “Projects that emphasized engineering and technology components helped students with low average success in mathematics develop a practical sense of the discipline's applicability and positive beliefs about learning it".

Practice student automation

The French government is launching a national curriculum aimed at developing the idea of "self-management" and "autonomy" for students, as well as the introduction of the latest technology, such as the introduction of a "digital plan for schools" (Gueudet et al., 2021). There are difficulties with the introduction of technology because of the rich spectrum of understanding of this field. Gueudet et al. (2021) identify two categories in their study. Digital technologies can be subject-oriented (e.g., dynamic geometry software) or generic (e.g., online collaborative writing tools) Gueudet et al. (2021). The authors see a direct correlation between technology and offline mathematics learning.

Gueudet et al. (2021) consider and distinguish two levels of mathematical autonomy. The first is the mobilization of previously acquired knowledge, an indicator of which will be the rapidity of their use. The second is the discovery of new knowledge. The source for obtaining such knowledge will be the independent solution of certain problems, tasks, etc. The authors conclude and distinguish "autonomy" into three categories: transversal autonomy, autonomous mobilization of familiar mathematical knowledge, and autonomous development of new mathematical knowledge (Gueudet et al., 2021). Students can use different sites and digital resources, which will provide new knowledge and mobilize already acquired knowledge. Certain environments or software (e.g., dynamic geometry systems) can allow students to formulate and test hypotheses and facilitate the "autonomous development of new mathematical knowledge" (Gueudet et al., 2021).

Together with France, Austria has joined France in introducing technology into the study of mathematics. The years 2021/2022 were proclaimed the years of digitalization. It should be noted right away that the success of this experience still depends on the level of development of the country. Because Austria noted the fact that all students who will enter school will have electronic media for learning, as well as that there will be quality logistical support for all schools. Kadunz & Zudini (2021) tried to investigate and find the problems that mathematics teachers might have with the introduction of digitalization. "Teachers in our study have high expectations for repeating and deepening new content outside the classroom through new technology" Kadunz & Zudini (2021). In addition to "digitalization," we see how the Austrian government is also emphasizing students' independent learning of the material. Digital technology makes it possible to retrieve and repeat material, "pause" videos, and disassemble unclear points. The idea of "accessibility" of learning from the use of technology (as exemplified in many European countries) is befalling all new mathematics teaching practices.

In our study, we will use and analyze all proposed techniques except programming (as an element integrated into the process of learning mathematics). Even though Ukrainian schools are now actively studying computer science in the lower grades, it leaves much to be desired in practical implementation. The new concept of education is not yet expected to introduce new subjects like "Computer Science" and "Understanding Technology". For lack of such a base, we did not include it in our study.

Results

For accurate results of the study at the beginning of the experiment, we analyzed the current state of knowledge in mathematics (Table 1).

Table 1.
The current state of knowledge in mathematics.

Group name	GP (control)	GP-A (flipped class)	GP-B (online support)	GP-C (e-portfolio)	GP-D (STEAM)
Number of students	28	30	30	27	29
Average score	8.59	9.10	8	9	8.70

After three months in the experimental groups and control tests (Table 2), we came to the following results:

Table 2.
Results three months in the experimental classes and control tests.

Class	GP	GP-A	GP-B	GP-C	GP-D
Control 1	8.59	9.15	8	9.10	9
Control 2	8.59	9.20	8	9.20	9.10
Control 3	8.70	9.30	8.05	9.30	9.20
Final score	8.75	9.35	8.10	9.45	9.25
quality %	1.86%	2.74%	1.25%	5%	6.3%

The results of the control class (GP) did not change significantly. Their results improved by 1.86%. Compared to it, conducting additional "online meetings" (GP-B) during the pandemic also did not give significant results - 1.25%. The teacher noticed children's disinterest, or because of the shame of "not knowing something". Sometimes the teacher's responses were not enough. Next in the results is the introduction of the flipped classroom - 2.74%, which can be conducted in two formats "online" and "offline". Grades GP-B and GP-G had the most successful result. Due to the introduction of electronic portfolios and interdisciplinarity of STEAM education, teachers noted that when communicating with students, it was noticed that they were interested and active in the lesson. Analyzing the statistical results, we can notice that this was reflected in the level of understanding of the material as well. The average scores of the experimental classes were higher than the average scores of the control class.

Discussion

The results of the study demonstrate Ukraine's readiness to implement the latest practices in mathematics teaching, considering digitalization and the development of student autonomy. Such practices well support the concept of the "New Ukrainian School," which aims to form modern people, with an interdisciplinary approach and critical thinking about the world. Such a path in education will make the knowledge of Ukrainian students on a par with that of European students.

Analysis of the data shows that practices based on a creative and project-based component yield faster results than other proposed practices. We can assume that in STEAM education the teacher can adjust the curriculum and adjust it to the projects of his students. And according to the practice of "online meetings," students "go along" with the plan, just as they would in a flipped classroom. In addition to the speed of mastery, quality is key. High quality in STEAM education and e-portfolio can depend on student motivation. The greater the interest and motivation - the better the student's mastery of new knowledge and skills. By developing their own project, the student is not only more interested but also takes the knowledge they need and masters it with a special effort.

We must assume our work that perhaps high school and university students will have higher scores in the "classical" model of learning, online meetings, and flipped classroom because of their ability to self-organize, self-control, and prior knowledge. Still, creative tasks always attract more attention than classical and sequential learning models.

Conclusions

Examining the topic of the introduction of new practices and development of the educational process in mathematics, based on the experience of the European Union (France, Austria, Germany, Sweden, Denmark, Finland, Spain) and analyzing their activities on the effectiveness in Ukraine, we can make the following conclusions:

First, the development and implementation of the latest practices in education depend on the scientific and technological development of the world and its digitalization. All countries in Europe are directing their educational policies so as to educate students in the direction of digitalization (as an inevitable stage in the development of the planet), with analytical and critical thinking, autonomy, and autonomy to learn. Trying to pay attention to each student (guiding him), to improve the quality of knowledge, given the comfort of the learning environment and personal interests during learning.

Third, the classical training model has outlived its usefulness in today's Ukrainian realities.

Fourth, online meetings and the concept of a flipped classroom do not provide a meaningful effect and quality result.

Fifth, STEAM education together with project-based activities (primarily liked and developed by students themselves) improves the quality of mathematical learning. This effect is made possible by not trivializing a particular topic but working through it in a specific project in relationship to other disciplines. Thus, students develop analytical thinking and a quality understanding of mathematics in practice. If we look at the implementation of “e-portfolios,” we also see the main component is the student's interest, the demonstration of their own results and skills.

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Methodological principles in the field of philology of modern European methods of teaching a foreign language

Principios metodológicos en el ámbito de la filología de los métodos europeos modernos de enseñanza de una lengua extranjera

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Abstract

The relevance of the research lies in the fact that at the current stage of the development of human civilization, in the conditions of life in a digital society and the introduction of information and communication technologies, learning a foreign language is not only an advantage of a separate circle of specialists in a certain direction, but also a daily need of every person in everyday life. A correctly chosen method of teaching a foreign language, and, as a result, its effective learning by students. In the article, the authors considered the topical issues of foreign language teaching methods that are currently tested and widely used in the European educational space for teaching a foreign language. In the article investigated the main trends observed in the outlined field, and also singled out the general principles of foreign language teaching methods. The purpose of the article is to analyze the main modern European methods of teaching a foreign language. The task of the research was to highlight the general trends that exist in the European educational space at

Resumen

La relevancia de la investigación radica en el hecho de que en la etapa actual del desarrollo de la civilización humana, en las condiciones de la vida en una sociedad digital y la introducción de las tecnologías de la información y la comunicación, el aprendizaje de una lengua extranjera no es sólo una ventaja de un círculo separado de especialistas en una determinada dirección, sino también una necesidad diaria de cada persona en la vida cotidiana. Un método correctamente elegido para la enseñanza de una lengua extranjera, y, como resultado, su aprendizaje efectivo por parte de los estudiantes. En el artículo, los autores consideraron los temas de actualidad de los métodos de enseñanza de lenguas extranjeras que actualmente se prueban y se utilizan ampliamente en el espacio educativo europeo para la enseñanza de una lengua extranjera. En el artículo se investigaron las principales tendencias observadas en el campo señalado, y también se señalaron los principios generales de los métodos de enseñanza de lenguas extranjeras. El objetivo del artículo es analizar los

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the current stage, as well as to highlight their specific features. When conducting the research, the authors used general scientific methods of cognition.

Keywords: foreign language, teaching, method, students, education.

principales métodos europeos modernos de enseñanza de una lengua extranjera. La tarea de la investigación consistió en destacar las tendencias generales que existen en el espacio educativo europeo en la etapa actual, así como resaltar sus características específicas. Al llevar a cabo la investigación, los autores utilizaron métodos científicos generales de cognición.

Palabras clave: lengua extranjera, enseñanza, método, estudiantes, educación.

Introduction

The modern world is experiencing a new era of human civilization, which is characterized by globalization and digitalization processes. Society is facing the question of training specialists in accordance with the new realities, using the latest educational tools and information and communication technologies. In particular, we are talking about replacing traditional methods of teaching a foreign language with new ones, aimed at its thorough study. The educational process involves not only learning a language, but also culture, which would give rise to a high level of motivation to learn it, as a means that stimulates dialogue and close interaction of cultures in the world. It is for the reason that learning a foreign language introduces students to the cultural traditions and spiritual values of other cultures, that the formation of their competencies of interaction in society and the ability to self-development takes place, that choosing the right method of teaching a foreign language becomes an urgent need. In today's world, education standards are aimed at preparing a creatively developed person with a full range of necessary competencies to quickly adapt to the modern socio-economic environment. Therefore, the education system itself is constantly undergoing changes, and experts are developing new methods of teaching a foreign language or improving existing ones. Effective training requires an individual approach to students, depending on their abilities, communication skills, and needs.

Among the methods of teaching a foreign language, widely used in the modern European space, it is necessary to distinguish three main methods, namely: communicative system-activity method; problem method; project method. The advantage of using these methods is the consideration of cultural and other social aspects in learning a foreign language, the ability of students to apply a creative approach in the learning process, as well as identifying a high level of self-organization and motivation to learn a foreign language.

The purpose of the article is to analyze the main modern European methods of teaching a foreign language. According to the goal, the task of the study is to determine the general trends that exist in the European educational space at the present stage, as well as highlighting their specific features, advantages and disadvantages of certain methods and techniques of teaching a foreign language using innovative information and communication technologies, determining the appropriateness of their application. at a certain stage of teaching a foreign language.

Theoretical Framework or Literature Review

The research of various aspects of the modern European methodology of teaching a foreign language is devoted to the scientific works of many domestic and foreign scientists. Thus, (Chernysh et al., 2020). draws attention to the fact that for the successful and effective learning of a foreign language by students it is necessary not only to use the leading European methods of study but also the appropriate training of teachers and foreign language teachers. The author has analyzed the techniques that are currently used in the European educational space in the organization of the educational process in the preparation of teachers in the field of philology and highlights among them the multisensory approach to learning in non-formal education (Chernysh et al., 2020). It is this method, according to the author, that meets the requirements of the multicultural world, in which interactive information and communication technologies have become widespread (Chernysh et al., 2020). Babash, & Noma (2019) in his scientific work explores the formation of professional competencies in students while studying a foreign language and notes that one of the important factors for the implementation of this task is the use of modern European techniques The author notes among their main list the profession-oriented teaching of a foreign language, which implies that the students receive not only special knowledge, but also the necessary skills and abilities, which they can use for the future in their professional activities and be more competitive in the labor market in comparison with other professionals (Babash, & Noma, 2019). The importance of using modern methods of teaching a foreign language as one of the conditions for the formation of future professionals with appropriate professional competencies, notes in his work and (Fox et al., 2019). Also, the author notes that the knowledge of a foreign language at a high level enhances the communicative skills of future professionals and on their level of intercultural awareness, which can bring bark not only to them but also to society as a whole. An important aspect of the maximum person-centered methodology of teaching a foreign language notes in his research study (Doughty, 2018). The author notes that in both basic and in-depth study of a foreign language, it is important to take into account such factors as the age of listeners, the level of their prior language learning, and general education to ensure the effectiveness of the final result and to ensure the effectiveness of the teaching methodology itself. Uztosun (2021) in his scientific research draws attention to the fact that regardless of the form of the chosen method of foreign language learning, it is important to develop the students' skills to self-organization and their own motivation in the learning process, especially when it comes to a person-oriented approach to them.

Methodology

During the study, to implement the goal and planned in accordance with it, were used both general methods (analysis and synthesis, comparison, induction, and deduction) and special methods of linguistics (descriptive, typological, structural).

One of the ways to form communicative competence is the implementation of a system-activity approach, which is aimed at independent, active acquisition of knowledge. Techniques of a system-activity approach should be present in almost every lesson of a foreign language, for example, independent (in pairs, groups) work to transform information on new material: the teacher gives a choice form of textbook material processing (table, cluster, algorithm). Step-by-step instructions for working with the material of the study guide are offered, for example: determine what you will study; determine the purpose of studying this material; decide on the way of work (how you will study: make a table, cluster, algorithm); rework the study guide material in your chosen way so that to make it understandable to other listeners; do practical work, making reasoning according to the method you have chosen; find associations for you for better memorization of new material; protect your choice (method) of studying and processing the material of the study guide; evaluate your work in terms of answering the question: how easily and quickly your method makes it possible to understand, remember and apply the learned rule in practice. This form allows students to discuss the progress of work among themselves, to offer and argue their opinion in a group (before audience), to process the material for the implementation of the plan.

Teaching a foreign language, which involves the creation of problem situations in the classroom and a discussion of possible approaches to solving them, during which students learn to apply previously acquired knowledge and acquired skills and abilities and master the experience (methods) of creative activity, is called problematic. In practical work on teaching a foreign language, it is possible to determine five levels of difficulty:

– the initial first level is characterized by the fact that the problem situation arises as if spontaneously, due to the characteristics of the educational material, it is solved by the teacher in the course of explaining the educational material;
– the second level of students' assimilation of the logic of a problem solution is already determined by the fact that the teacher consciously creates a problem situation, draws the attention of the trainees to it, and solves it himself in the course of the presentation;
– the third level of student involvement is characterized by the fact that the teacher creates a problem situation and involves students in a joint search for its solution;
– the fourth level of setting a system of cognitive tasks and programmed learning involves an independent solution by the student of the formulated problem, making assumptions and proving them;
– the final fifth level provides that the listeners formulate the problem, look for ways to solve it, proof of correctness.

The implementation in practice of the methods of problem-based teaching of a foreign language is possible under certain conditions: it must be combined with learning how to independently acquire knowledge, the ability to work with a book, dictionary, other educational materials, the ability to reason logically, compare and contrast phenomena, draw conclusions and generalize, the ability to discuss, defend and substantiate their conclusions. Also important when using the problematic method in teaching a foreign language is the formation of stable motives for learning, which can be achieved through the use of an emotional factor, a variety of techniques that increase interest in the material studied, the maximum use in the process of teaching the principle games.

The main function of applying the project method in teaching a foreign language is communicative, since it contributes to the development of communicative competence of students. The unit of the educational model of the project method is the problem situation, and the technology for solving a specific problem lies at its basis. During the implementation of the project method, the condition for effective independent classroom and extracurricular activities of students is intergroup and intergroup interaction. The activity of the teacher should be based on such components as constructive design, organizational, communicative, and he himself should become a coordinator, consultant, and equal participant in the learning process. The project method allows you to simultaneously develop the intellect of students, their personal and professional qualities, as well as teach a foreign language as a phenomenon of the social world. The implementation of the project method in teaching a foreign language contributes to the creation of conditions for the active oral practice of each student, forming skills and abilities in the types of speech activity, which makes it possible to bring the conditions for the formation of communicative competence closer to the conditions of the natural language environment; stimulates independent work on the acquisition of knowledge and its practical application; forms creative competence as an indicator of communicative knowledge of foreign language; involves obtaining a professionally significant final product of activity, preparation, design and presentation of which requires the use of a foreign language and expansion of vocabulary; allows you to model the subject and social content of the future professional activities of students by means of a foreign language; increases the motivation of learning and promotes the inclusion of trainees in dialogue of cultures.

Results

The most effective modern methods of teaching a foreign language can be defined as the following: communicative system-activity method; problem method; project method. The advantage of the communicative-activity method is that the linguistic and communicative problem the listener forms independently and solves it himself, simultaneously with the fulfillment of this task, he makes the necessary conclusions and generalizations. However, the disadvantage of this method is that it is time-consuming, it is impossible to use it often as a permanent method of teaching a foreign language in the context of its limited and rigid plan of the educational process. When using this method, it is necessary to guide the students' thought process, to emphasize the important points when performing tasks, but not to solve the problem instead of them, otherwise, the problem method simply loses its meaning.

As for the project method, it involves active independent work of students, their own search, and the collection of the most important and interesting information within the chosen topic. The project method serves as a kind of supplement to the educational process of learning a foreign language in general. This method, in particular, assumes that the project is an independent work of students aimed at revealing their creative potential and simultaneously solving the problem of in-depth study of the chosen topic. The project method, as well as the communicative method, helps students to reveal their personal qualities and creative potential in learning a foreign language, so this method makes the learning process personally significant and an important aspect of person-centered learning.

Thanks to the project method of learning a foreign language, students express the ideas that come to them in a form that is convenient for them. Projects have many forms, constantly updated with new ones, including, in particular, the following: presentations, games, maps, routes, magazines, newspapers, etc. Regarding the subject composition, it should be noted that the project can be both individual and group. From the peculiarities of the mentioned method of teaching a foreign language, it is also necessary to mention that under such conditions students find the necessary information on their own, and, thus, due to the active usage of this method students' interest in learning a foreign language and their level of independent language learning increases noticeably.

In the process of project preparation, in addition to language knowledge and communicative competences, students acquire basic induction and deduction skills and learn to draw personally meaningful conclusions. Accordingly, before starting to work on the project, it is necessary to consider the fact that:

1. the topic of the projects may relate to the home country or the country whose language the students are studying; they compare and contrast phenomena, facts, and actions. They look for several approaches to solving any problems;
2. it is the formulation of the problem that directs listeners to use facts from other areas of knowledge and various sources of information;
3. the project used in the study of a foreign language can have different forms of design; the topic should be as interesting and understandable to listeners as possible, as well as appropriate to their language abilities.

Work on the project itself in the process of learning a foreign language includes the following stages:

1. choice of topic. Trainees determine the problem that interested and find ways to solve it, discuss the content and focus of the project, formulate a plan for its implementation;
2. work on the project. This stage includes search work, collection of information for revealing the topic of the project, as well as formation of students' independent work skills;
3. project presentation. This stage includes project defense and presentation of the results of the work done;
4. project supervision. Evaluation of the results of the developed project, summarizing the overall result.

In addition, there are such common methods of teaching a foreign language in the European educational space as the intensive method of learning, which involves cyclic work of the teacher or teacher and listeners, repeated repetition of language material, and the use of technical means of learning; communicative method of performing tasks, the advantage of which, in comparison with the traditional methods of teaching a foreign language is that listeners have the opportunity to focus on real communication in a foreign language before learning its grammar, phonetics, and vocabulary; interactive, the main in the formation of foreign language competence, because it helps to establish contact between listeners, as well as using formulas of speech etiquette to solve communicative tasks in a foreign language.

Discussion

Language and communication play an important role in today's, «since the 1970s, language has been further recognized as a social phenomenon that inherently entails expressing, interpreting, and negotiating meaning» (Hilgendorf, 2020). In addition, there is a tendency in the European educational space that «throughout Europe, there is a growing trend for students to start learning foreign languages at elementary school» (Baumert et al., 2020).

Learning a foreign language in a digital society and globalized world is no longer a privilege for individual professionals, but a daily essential need for everyone, regardless of their level of education, occupation, or even age. Thus, «results report multiple cognitive benefits of language study and bi-multilingualism, particularly later in life, including enhancement of cognitive flexibility, higher cognitive reserve in advanced age, and delay in the onset of dementia» (Fox et al., 2019). In addition, «foreign language attainment depends on both cognitive and affective factors, highlighting the deeper impacts of the former» (Shen, 2021).

However, it is obvious that the ability to learn a foreign language of each individual person is different, so when teaching a foreign language and predicting the success of its learning, no less important is the methodology of predicting the success of its learning. It is the methodology of personality-oriented teaching of a foreign language with maximum consideration of the abilities of each of the students is the key to its effective and efficient learning. «In other words, for any given person, when motivation is high, personality facets are aligned, and the learning context is excellent, differences in aptitude determine ultimate attainment» (Doughty, 2018). It should also be noted that the methodology of person-centered learning of a foreign language has a high level of effectiveness when combined with self-regulated language motivation, as evidenced by the research. «These findings suggest that self-regulated speaking motivation may be one of the predictors of improved speaking competence» (Uztosun, 2021), therefore, one of the effective methods of teaching a foreign language can also be defined as helping listeners to develop their own motivation for learning a foreign language and desire to independently improve their language knowledge, skills, and abilities. In determining the motivation of a particular listener to learn a foreign language, it is also necessary to consider the motive of learning a foreign language. Thus, «there may be many different reasons for learning a foreign language, but for most language learners developing good speaking skills is essential» (Daskalovska, 2018).

Given the complexity of the requirements for the methodology of teaching a foreign language, the most successful it seems to be a form of integrated teaching of content and language, it is «…a dual-focused approach that promotes the learning of curricular content in tandem with an additional language, usually English» (Banegas, & Beamud, 2022). Even though this method does not pay enough attention to the study of grammar and phonetics of a particular foreign language, it allows students to be integrated into the language environment as much as possible, so it is quite popular for use in European countries. The method of teaching a foreign language, which provides training based on the content, is highly effective. For example, this methodology «…can be considered for use as an effective instructional methodology and an essential aid in generating multiple opportunities to use English if meaningful topics and frequent practice were included» (Vanichvasin, 2019).

It is obvious that the training of specialists of the highest level in teaching a foreign language implies not only the use of leading tested modern European teaching methods but also the appropriate amount of professional competence in teachers and instructors. It is especially important to take this factor into account in the context of transnational processes in the social and cultural life of the world community. «Transformational trends of the modern social and political-economic space determine the modernization of the educational sphere, in particular, the system and methods of teaching highly skilled foreign language teachers» (Chernysh et al., 2020). In addition, it should be noted that «educational implications include the importance of research-based, focused teacher professional training both in content knowledge of basic language constructs and in pedagogical knowledge of EFL literacy acquisition» (Vaisman & Kahn-Horwitz, 2019).

Equally important for the implementation and widespread use of the method of teaching a foreign language, which provides training based on the tasks. Thus, «…teamwork is more realistic if the learning process includes application exercises and assessments set in real-life contexts» (Berkson et al., 2020). It is teamwork in learning a foreign language that provides the foundation for professionals to be more competent in their professional tasks in the future, as they learn important teamwork skills during their training. This method focuses on the trainees' needs contained in communicative tasks and the ability to use all available language resources to accomplish them.

It should also be noted that one of the leading modern European methods of teaching a foreign language is vocational training. «Phased training for professionally and oriented foreign language communication contributes to the formation of speech and though activity, the development of a sense language and is part of the professional competence of future professionals» (Babash, & Noma, 2019). It is thanks to the above method of teaching a foreign language, it is possible to train specialists of a certain profile with a high volume of professional competencies. Such a goal can also be achieved by using another method of teaching a foreign language - the method based on the competence of students. «This approach demands an active role of the learner, a facilitating role of the teacher, materials directed to output, and tasks and assessment methods oriented to identify what the learner is able to do with the language being learned» (Boillos, 2018).

The traditional, classical methods of teaching a foreign language can be defined as audiolingual, which assumes that «listening was the first skill to be developed and grammar was taught implicitly through pattern drills prior to brief explicit explanations» (Rilling, 2018) and grammatical-translational, which «…involves very little spoken communication and listening comprehension» (Benati, 2018). However, in the era of the development of information and communication technologies and the increasingly stringent requirements for professionals who speak a foreign language, these techniques are losing their relevance.

Indeed, despite the value of the above methods of teaching a foreign language, it should be noted that the main ones are the communicative system-activity method; problem method; project method. As for the first method, we can notice that «after analyzing the positive and negative traits, we can conclude that the most effective, successful, and harmonious is the communicative method of teaching foreign culture» (Alibekova & Urinboyeva, 2020). It is obvious that the study of a foreign language involves communication both between the teacher or instructor and the students, as well as directly between them. Given this circumstance, the use of this method also seems appropriate and effective, as well as the problem method, which «…focuses on creating a psychological environment that is related to achieve designing the learning processes» (Fayzullaev & Eshnazarova, 2019). It is obvious that the methodology of teaching a foreign language undergoes changes in accordance with the transformation of economic, political, and social content, respectively, it is necessary to depart from the classical, traditional forms, the formation of a more creative environment of the educational process in order to train competent specialists in different areas of training. Similar in content creative and creative component includes a such method of teaching a foreign language as project-based because it «…the method calls on teachers to respond sensitively to students' needs in the moment, reflect on the processes and products of project learning, and hold space for students to co-construct the school curriculum» (Hsu, 2021). It is for the reasons mentioned above that it is important when teaching a foreign language, to take into account not only the teaching and organization of the educational process in the language of the other country but also the cultural component of the country whose language is studied by students, because «…postsecondary institutions have recognized the need to prepare interculturally competent undergraduates» (Barski & Wilkerson-Barker, 2019).

Conclusions

The knowledge of a foreign language at the present stage significantly increases the chances of career growth of future specialists in professional activities, which opens up new opportunities for them to increase their level of self-realization and independent development of personality. The problem of knowledge of a foreign language is recognized not only as an educational direction but also of great social importance because it forms the ability and readiness of students to communicate in a foreign language based on certain practical knowledge and skills acquired by them. Increase in the effectiveness of the educational process of teaching a foreign language is greatly facilitated by active methods aimed at the development of traditional language skills, as well as improving information and communication language education. Along with the traditional forms of foreign language teaching organization, the application of active methods and progressive technologies, aimed at achieving optimal results in professionally-oriented communication in relation to the future profession of students, is necessary. The fundamental principles of foreign language teaching in the modern European educational space are multicomponent in their structure. The choice of this methodology depends on a number of factors that may affect the final result of foreign language learning of students. In order to make such a correct choice, it is necessary to take into account the age of the foreign language learners, their previous experience in learning a foreign language, and their general educational experience. However, no matter what methodology will be chosen, in accordance with the realities of the present, the existence of a digital society, world globalization, the active use of information and communication technologies in all spheres of society, as well as in conditions of social and cultural diversity, a person-centered approach to each student learning a foreign language, as well as the disclosure of their language competences and abilities is necessary.

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Managing working capital for profitability; Experience in the Saudi SME sector

إدارة رأس المال العامل لتحقيق الربحية ؛ خبرة في قطاع الشركات الصغيرة والمتوسطة السعودية

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Abstract

This study is an attempt to examine the relationship between Assertive investment, inventory conversion period, cash conversion period, firm performance, and market value. Moreover, this study also examined the mediating role of firm performance. The data for this research was collected from the employees working in the SME sector of KSA. A self-administrative survey was conducted to collect the data. After three reminders, 68.4% of questionnaires were returned, and 66.7% were found to be duly completed and used in this research. The data was gleaned from these questionnaires and was later analyzed using SPSS 25 and Smart PLS 3. The study's results revealed that except for the inventory conversion period, all other chosen parameters affect the market value of the Saudi SME sector. At the same time, the rest of the direct effects are confirmed. On the other hand, the mediating role of firm performance is confirmed between CCP, ICP, and MV. The findings of this study are helpful for the policymakers of the SME sector in KSA.

Keywords: Assertive investment, inventory conversion period, cash conversion period, market value, SME.

الملخص:

تهدف هذه الدراسة لمحاولة فحص العلاقة بين الاستثمار الحازم وفترة تحويل المخزون وفترة التحويل النقدي وأداء الشركة والقيمة السوقية. بالإضافة الى ذلك، درست هذه الدراسة أيضًا الدور الوسيط لإداء الشركات. تم جمع بيانات هذا البحث من الموظفين العاملين في قطاع الشركات المتوسطة والصغيرة في المملكة العربية السعودية. تم إجراء مسح إداري ذاتي لجمع البيانات. بعد ثلاثة رسائل تذكير، تم إرجاع 68.4٪ من الاستبيانات، وتم العثور على 66.7٪ مكتملة ومستخدمة كما ينبغي في هذا البحث. تم الحصول على هذه البيانات من الاستبيانات وتم تحليلها لاحقًا باستخدام SPSS 25 و Smart PLS 3. أظهرت نتائج الدراسة أنه باستثناء فترة تحويل المخزون، تؤثر على جميع العوامل الأخرى المختارة في القيمة السوقية لقطاع السعودي للشركات المتوسطة والصغيرة. في نفس الوقت، تم التأكد على بقية التأثيرات المباشرة. ومن ناحية أخرى، تم تأكيد الدور الوسيط لإداء الشركة بين CCP و ICPو MV. نتائج هذه الدراسة مفيدة لصناع السياسات في قطاع المشاريع المتوسطة والصغيرة في المملكة العربية السعودية.

الكلمات الرئيسية: استثمار حازم، فترة تحويل المخزون، فترة التحويل النقدي، القيمة السوقية، الشركات المتوسطة والصغيرة.

Introduction

In the current competitive environment, sustainability is dependent upon the success of the functionality of financial management. It has become very challenging for the finance division managers to deal with financial market issues. It is because organizational success depends upon effectivity and efficiency of the financial markets. The success also depends on the operational and financial affairs of the organization. Therefore, organizations are

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paying much attention to their performance. Organizations are enhancing knots with grants of equity so goals related to financial performance can be achieved (Yasir, Majid, & Yousaf, 2014).

The typical nonequity or equity grants link the organizational performance by enhancing values and identifying targets and thresholds. The organizations involved in business try to apply different kinds of tactics so they can enhance their sales, values, and profitability. Organizations have also invested in different environmental projects to enhance their performance (Obeidat, Al Bakri, & Elbanna, 2020).

The stock price shows investors' perception regarding its ability to grow adds earn profit in the future. Many conditions can influence the prices of stock. Because of these conditions, the stock price can go up and down, and the company's financial position can also be influenced by time. An organization can be considered a healthy organization with outstanding financial performance. As a result, the value of the company is impacted. Higher company value attracts more investors, which, in the long run, will result in better financial performance (SUKESTI, GHOZALI, Fuad, ALMASYHARI, & NURCAHYONO, 2021).

The firm's value is the concept of economics which reflects the organization's value. It shows the value of a business at a specific date. In theory, firm value is the amount a person needs to pay so the business entity can be purchased. The organization's financial performance is its ability to allocate and manage resources. It is possible to determine the Market value with the help of the present value of the future earnings (Jihadi et al., 2021).

In the context of social sciences, assertiveness is considered a social skill that contributes to the regular adaptation of a person's social interaction, maintaining the social relationships, And the emotional well-being of the person involved in social interaction. The basic message in the interaction is a kind of self-expression without humiliation, dominance, or any other threat to the person involved in it (ROMAȘCANU & STĂNESCU, 2020).

Therefore, this study examines the relationship between Firm performance, assertive assessment, cash conversion period, and inventory conversion period on the market. This study also explored the mediating effect of firm performance.

Literature Review

Firm performance

Performance measurement is the process of examining the organizational actions to Improve effectiveness and efficiency. The success of an organization is based upon explaining the company's performance over a certain period. Scholars have paid a lot of effort to examining the concept of performance in different conditions. By successfully measuring the organizational performance, one can easily compare the organizational performance with other organizations as well. Scholars have reported that organizational performance is the construct of multiple hierarchies and indicates the organization's operational and financial performance (Vejseli & Rossmann, 2017).

The organizations that are successful always play a crucial role in the development of countries as well. Some economists consider themselves the same as the engine determining their political, social, and economic development. For survival in a competitive business environment, every organization's main objective must be to regularly improve its performance. Scholars have pointed out that performance is the set of nonfinancial and financial indicators that provide the information required to achieve results and objectives. Researchers also opined that performance is a very big word because it has several notions, including competitiveness, effectiveness, productivity, return, and growth (Phan, De Luca, & Iaia, 2020).

For investors, corporate values are a critical concept. It is because this concept is an essential indicator of the way the market perceives the company. The organization's market value is assessed through the stock market price. The stock market price shows the organizational potential for the future (Sulong, Saleem, & Ahmed, 2018). It may also include the investor's assessment of the capital owned by the organization. Organizational value is shown in the stock price of the organization. The prosperity of the shareholder will rise if the price of the share increase. The market price also reflects the organization's value (Ngatemin, Maksum, Erlina, & Sirojuzilam, 2018).

The organization's performance is a multidimensional and complex phenomenon in the literature on the business. Firm performance is comprised of the organizational results as well as the organizational output, which are measured in terms of intended objectives, goals, and outputs. Three different areas are involved in organizational performance: market performance, shareholder return, and financial performance (Koji, Adhikary, & Tram, 2020).

For the organization's managers, organizational performance is the primary concern because it allows them to examine the critical factors for organizational success. In the concept of firm performance, researchers have used the terms effectiveness and efficiency interchangeably. The potential of the organization is represented through effectiveness. As mentioned by the scholars, the needs for organizational performance and effectiveness are the same. Therefore, they are interchangeable (Taouab & Issor, 2019).

Performance often signifies the set of measures of the organization as stakeholders are interested in it. Around three decades ago, performance was purely measured in terms of measures of accountancy. Nevertheless, its popularity increased among stakeholders over time, which birthed the need for other measures to gauge organizational performance. Some researchers provided models including customers' perspectives to measure the performance (Rehman, Asghar, & Ahmad, 2015).

Performance within the firm is also measured in terms of the employee's job performance and organizational standards. Performance is the outcome of the employee's ability that is the product of support and effort. Therefore, if any of these factors is missing, it will negatively affect the performance. Moreover, the interest and talent of the person also affect the person's ability. Design work, incentives, and motivation also tend to affect the effort. The training of HRD is also included in the organizational support (Okechukwu, 2017).

Inventory conversion period (ICP)

ICP is the average time an organization keeps its inventory (Shin & Soenen, 1998). Scholars have calculated ICP as:

“Inventory conversion period = Average inventory *365/Cost of goods sold”. The authors also describe it as the time required to get materials for manufacturing and selling a product. Whereas the inventory conversion time is the basic time period between which an organization should invest when a material is ready for sale (Kangogo & Irungu, 2020).

The amount of days inventory holding or inventory period is the total time lag among selling the finished product, manufacturing the product, and purchasing the material required to finish the good. The inventory holding period is also described in the form of conversion of raw material by the addition of work in progress and a period of conversion of finished goods. The organization's efficiency and effectiveness play a vital role in influencing the inventory conversion period (Sathyamoorthi, Mbekomize, Mapharing, & Selinkie, 2018). As a result, the selling as well as manufacturing process of the products is also affected. The activity regarding conducting a product sale depends upon customers' satisfaction in terms of their needs and wants. If a large amount of inventory is held by the organization, it will increase its cost. Therefore, organizations must introduce systems like the Just in time system. Organizations must reduce the inventories at the optimum level so the opportunity cost can also be reduced regarding the stock holding and excessive inventory. Whereas, the cost of products getting out of stock may be reduced because of stock in inventory (Ganiyu, Henry, & Adekunle, 2019).

Firm performance and Market value of a firm

The organization's accounting system has several measurements to examine organizational performance. These gauges include the return on equity, return on assets and net income. The performance of the firm is the assessment of the success of the organization which the stakeholders and investors will view for the funding. The price of stocks will also rise if the organization's performance is high. As a result, there will be a positive response of the investors as well. As the stock market represents the firm's value, the increase in the price of the stock reflects a rise in the firm's value. So, the organization's value is an important factor in examining the firm's value by increasing stock price (Hamdan, 2018). An increase in the organization's revenue can be gathered through the enhancement in the market share and by accessing new markets. Scholars proposed that organizational reputation in the form of positive organizational performance plays a critical role in increasing market share (Deswanto & Siregar, 2018).

Assertive assessment and Firm performance

A performance task is an organizational activity that the organization performs. It is essential that employees to have good behavior so they can improve their performance. Therefore, personal growth is one of the person's growth which is assessed by the performance at the workplace. As a result, students are helped to be assertive and participate actively in the organizational activities. In order to excel in performance, assertive behavior must be enhanced among the employees (Moneva & Bolos, 2020).

The term assertiveness is an important factor of extraversion. "Assertiveness" is closely related to the communication of ideas in an effective way in the form of assertive individuals that tend to talk forcefully without having any hesitation. Scholars have described assertiveness as the capacity of the person to communicate personal encounters by sharing directly and with clear ideas**.** Scholars suggested that members of the organization and team must effectively share their ideas to persuade others. These characteristics are essential to gain any position so the organization's performance can be improved. Through the direct information, it is evident that team performance can be improved through the provision of feedback performance and solving the problems (Van Weele, van Rijnsoever, & Nauta, 2017).

Cash conversion period and Firm performance

One crucial factor for a manufacturing firm is the cash conversion cycle. The financial managers get help from the cash conversion cycle to specification the stock holding period. Additionally, the cash conversion cycle is one of the crucial tools to examine how the organization's working capital is managed. For the organization's survival, finance managers must develop a balance between current liabilities and current assets for the working management. On the other hand, financial managers can also help the organization manage the cash conversion cycle to minimize the risk of bankruptcy and future shortage. Resultantly, return on assets (ROA) and return on equity (ROE) will be affected and subsequently performance of the organization will be impacted (Doğan & Kevser, 2020).

Researchers have explored the relationship between organizational profitability and the cash conversion cycle. The cash cycle is an essential factor used to examine the risk-return while managing liquidity. The organization's results showed that cash conversion is vital to return on assets. Moreover, it has an important linkage with the performance of the organization as well. Researchers also explored how the cash cycle affects organizational profitability (Farooq, Maqbool, Waris, & Mahmood, 2016).

Yazdanfar & Öhman, (2014) investigated how the organizational cash conversion cycle impact its profitability. In their study, panel data was applied by the scholars as they collected data from 13,797 SMEs operating in four Swedish industries. Scholars reported that the organization's profitability could be enhanced through increased cash flow (Yazdanfar & Öhman, 2014).

Zakari and Saidu (2016) analysed the relationship between organizational profitability and the cash conversion cycle. Zakari and Saidu (2016) analysed Nigerian Stock Exchange listed IT firms' data from the year 2010 to 2014. They reported a significant relationship between organizational profitability and the cash conversion cycle (Zakari & Saidu, 2016).

Inventory conversion period and Firm performance

Researchers investigated the impact of inventory management on financial performance among Nigerian organizations. These scholars used ex-post factor research design along with multiple regression and Pearson correlation regression techniques to analyze data for 5 years from 2010 to 2014 (Ahmed, Modibbo, Modu, & Muhammad, 2016). These scholars found that the inventory conversion period significantly impacts organizational performance.

On the other hand, in previous studies, scholars also investigated the impact of inventory management on the organizational performance of manufacturing organizations (Kangogo & Irungu, 2020). Kangogo & Irungu (2020) used a quantitative research design, descriptive study, and data from 13 companies. Ondimu, Rotich, & Kipkirui (2018) reported a positive relationship among these variables (Ondimu, Rotich, & Kipkirui, 2018).

A hypothesis provides a refined supposition based on methodical evidence, which is further proven or disproven through the scientific method and data analysis. The hypotheses are a way to present a focus on the findings, data, and conclusion of a study. Based on the literature review this study hypothesize the following:

H1: Firm performance and the Market value of a firm are significantly related.
H2: Assertive assessment and Firm performance are significantly related to each other.

H3: Cash conversion period and Firm performance are significantly related.
H4: Inventory conversion period and Firm performance are significantly related.
H5: Assertive assessment and market value are significantly related to each other.
H6: cash conversion period and Firm performance are significantly related.
H7: Inventory conversion period and Firm performance are significantly related.

Mediating Hypotheses

H8: Firm performance is a significant mediator between Assertive assessment and the Market value of a firm.
H9: Firm performance is a significant mediator between Cash conversion and the Market value of a firm.
H10: Firm performance is a significant mediator between the Inventory conversion period and the Market value of a firm.

Methodology

A cross-sectional design was adopted for this study. Moreover, this study adopted a quantitative approach. Therefore, questionnaires were developed having two portions demographics and questions regarding variables of the study. 7 Likert scale was used, ranging from 1= strongly disagree and 7= strongly agree to develop the questionnaire. The data was collected by using simple random sampling from employees of the SME sector in KSA. The data was collected using a self-administered survey. Initially, 476 questionnaires were distributed among the respondent. A total of 317 were usable, having a response rate of 66.56%. The received questionnaires were punched in SPSS for initial analysis like multicollinearity screening, detection of outliers, missing value analysis, and descriptive analysis. For further analysis, PLS 3.3.2 was used by the researcher.

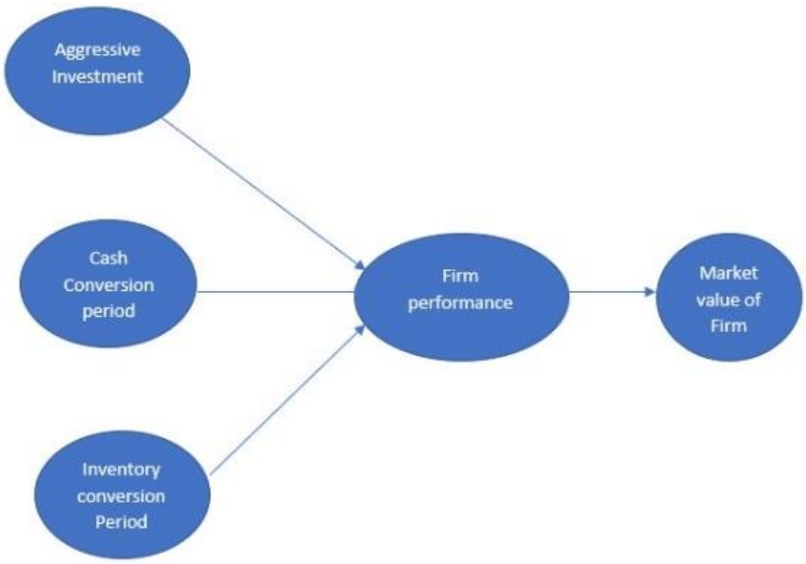

Figure 1. Research Framework

Results

The data gathered from the respondents was entered in SPSS for preliminary analysis. Initial tests like multicollinearity, detection of outliers, normality tests, and descriptive statistics were conducted. Later, the present study conducted the demographic analysis as well using SPSS. According to the findings, more than 72% of the respondents were female. Most of the respondents were married, which constitutes around 86%. More than 37% of the respondents had more than 40 years of age, whereas 32% were aged between 20-30 years. In the end, most respondents, around 50.2% were Master's degree holders.

Table 1.
Demographics

Demographic variables	Category	Percentage
Gender	Female	72%
	Male	28%
Marital Status	Married	86%
	Single	14%
Age	Below 20	0%
	20-30	32.50%
	31-40	30.23%
	Above 40	37.01%
Highest Education	Diploma	2.2%
	Masters	50.2%
	Bachelors	47.6%

Based on the recommendations of Henseler, Ringle, and Sinkovics (2009), two steps approach was followed in the present study to run the PLS-SEM. The first step is assessing the measurement model, which leads to examining the structural model. Following is the figure of the measurement model used in the present study.

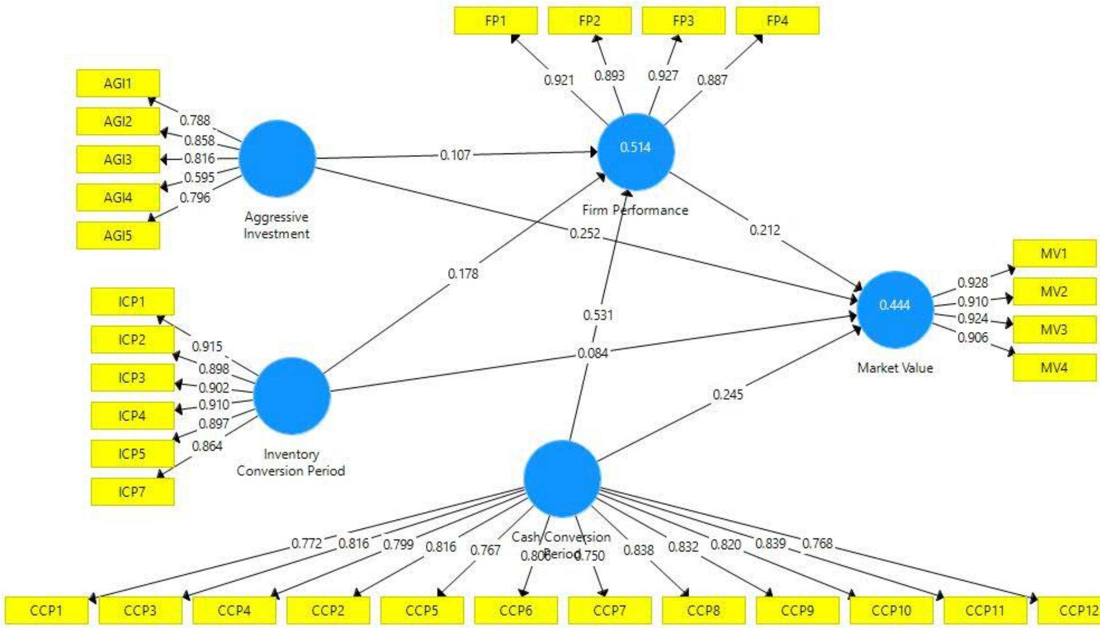

Figure 2. Measurement Model

Note: CC= cash conversion, ICP= Inventory conversion Period, MV= market value, FP= firm performance, AGI= aggressive investment

The primary purpose of evaluating the measurement model is to assess the reliability and validity of the data. The first phase is to assess the reliability of the inter-item, which is done through the evaluation of factor loadings. In this aspect, Sarstedt, et al. (2016) mentioned the threshold value to be a minimum of 0.50. Table 2 below shows the reliability of the items of all variables used in the present study fulfilled the criteria.

Table 2.
Factor Loading

	AGI	CCP	FP	ICP	OP
AGI1	0.788				
AGI2	0.858				
AGI3	0.816				
AGI4	0.595				
AGI5	0.796				
CCP1		0.772			
CCP10		0.820			
CCP11		0.839			
CCP12		0.768			
CCP2		0.816			
CCP3		0.816			
CCP4		0.799			
CCP5		0.767			
CCP6		0.806			
CCP7		0.750			
CCP8		0.838			
CCP9		0.832			
FP1			0.921		
FP2			0.893		
FP3			0.927		
FP4			0.887		
ICP1				0.915	
ICP2				0.898	
ICP3				0.902	
ICP4				0.910	
ICP5				0.897	
ICP7				0.864	
MV1					0.928
MV2					0.910
MV3					0.924
MV4					0.906

Note: CC= cash conversion, ICP= Inventory conversion Period, MV= market value, FP= firm performance, AGI= aggressive investment

The next step, after a successful evaluation of the reliability of the items, examination of convergent validity is conducted in the present study. For this purpose, the present study evaluated AVE by ensuring that all AVE values are above the threshold level of 0.50 (Chin, 1998). This research also assessed the Cronbach Alpha and composite reliability values, for which the minimum acceptable value must be more than 0.70 (Gefen, Straub, & Boudreau, 2000). Results mentioned in table 3 reflect that the minimum threshold level is fulfilled in the present study.

Table 3.
Data Reliability

	Cronbach's Alpha	rho_A	Composite Reliability (CR)	Average Variance Extracted (AVE)
AGI	0.836	0.868	0.882	0.602
CCP	0.950	0.951	0.956	0.644
FP	0.928	0.929	0.949	0.823
ICP	0.952	0.952	0.961	0.806
OP	0.937	0.938	0.955	0.841

Note: CC= cash conversion, ICP= Inventory conversion Period, MV= market value, FP= firm performance, AGI= aggressive investment

Discriminant validity of the data is confirmed when the loading of the items is higher on its construct than of other constructs. Therefore, in the present study, discriminant validity is assessed through the differential of the square of values of AVE of every construct through all other constructs, which has to be more than a correlation among two factors (Fornell & Larcker, 1981). Table 4 shows correlation values among each construct with itself is more than all remaining constructs showing discriminant validity of all constructs is fulfilled.

Table 4.
Discriminant Validity (Fornell & Larcker)

	AGI	CCP	FP	ICP	OP
AGI	0.776				
CCP	0.611	0.802			
FP	0.539	0.687	0.907		
ICP	0.605	0.513	0.515	0.898	
OP	0.566	0.587	0.559	0.471	0.917

Note: CC= cash conversion, ICP= Inventory conversion Period, MV= market value, FP= firm performance, AGI= aggressive investment

In this study the discriminant validity is assessed using Heterotrait-Monotrait ratio. Multitrait-Multimethod is the method which is the base of HTMT (Henseler, Ringle, & Sarstedt, 2015). In this context, Kline (2011) pointed out the minimum threshold value for the discriminant validity if the value is less than 0.85 (following the strict criteria) and 0.90 (following the lenient criteria). Table 5 below shows that the strict criteria of HTMT were fulfilled in the present study.

Table 5.
Discriminant validity (HTMT)

	AGI	CCP	FP	ICP	OP
AGI					
CCP	0.648				
FP	0.580	0.729			
ICP	0.646	0.538	0.546		
OP	0.608	0.621	0.598	0.496	

Note: CC= cash conversion, ICP= Inventory conversion Period, MV= market value, FP= firm performance, AGI= aggressive investment

After assessing the measurement model, the present study evaluated the structural model to confirm the relationship among proposed relationships. In this step, the guidelines of Henseler et al. (2009) were followed to examine the significance of the coefficient. Five thousand subsamples were used in the present study to perform bootstrapping for the structural model Sarstedt, Hair, Ringle, Thiele, and Gudergan (2016). The stats in table 6 below show the findings of the direct hypothesis.

Table 6.
Results: Direct Hypothesis

	Betas	Standard deviation	t-test	p-value	Decision
AGI -> FP	0.107	0.063	1.696	0.045	Support
AGI -> MV	0.252	0.073	3.460	0.000	Support
CCP -> FP	0.531	0.064	8.250	0.000	Support
CCP -> MV	0.245	0.072	3.410	0.000	Support
FP -> MV	0.212	0.067	3.177	0.001	Support
ICP -> FP	0.178	0.057	3.118	0.001	Support
ICP -> MV	0.084	0.059	1.415	0.079	Not Support

Note: CC= cash conversion, ICP= Inventory conversion Period, MV= market value, FP= firm performance, AGI= aggressive investment

The results in table 6 show that most of the proposed hypothesis is supported statistically. According to these results, AGI has a significant positive effect on FP. AGI has a significant positive relationship with MV (β =0.252). The same results are with the relationship between CCP and FP showing a positive (significant) relationship. Moreover, SSP and MV have positive (significant) effects and a positive relationship (β =0.245). Also, FP and MV have a significant positive association with β =0.212. In the end, the relationship between ICP and FP has positive integration (β=0.178). On the other hand, the statistical results do not support the hypothesis that ICP and MV have a positive relationship.

Table 7.
Results: Mediating Hypotheses

	Betas	Standard deviation	t-test	p-value	Decision
CCP -> FP -> MV	0.112	0.039	2.882	0.002	Support
ICP -> FP -> MV	0.038	0.015	2.481	0.007	Support
AGI -> FP -> MV	0.023	0.017	1.333	0.092	Not Supported

Note: CC= cash conversion, ICP= Inventory conversion Period, MV= market value, FP= firm performance, AGI= aggressive investment

Furthermore, the above table depicts the mediating results of the study. The findings support the mediating role of FP between CCP and MV. Moreover, the mediating role of FP and MV is also confirmed. But this role is not statistically supported in the relationship between AGI and MV.

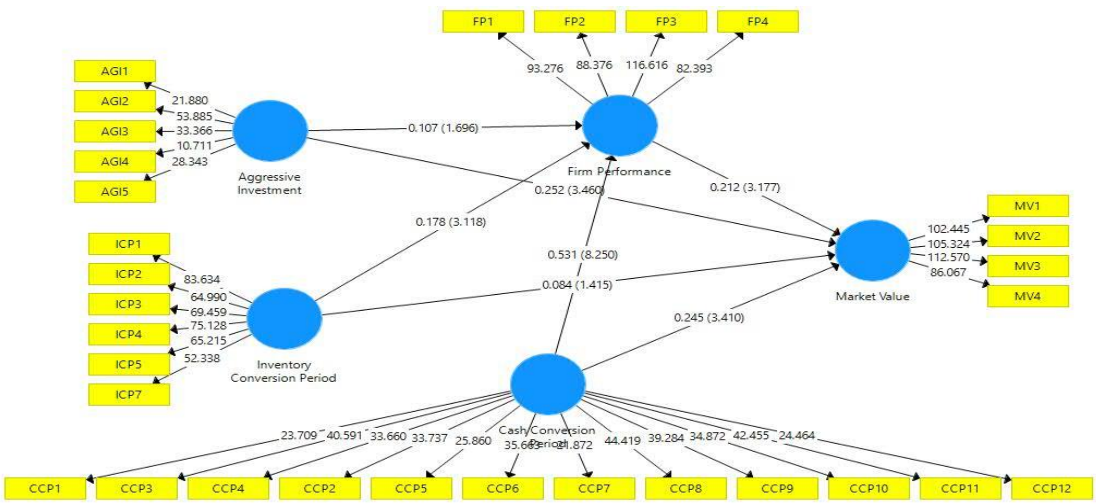

Figure 3. Structural Model

Note: CC= cash conversion, ICP= Inventory conversion Period, MV= market value, FP= firm performance, AGI= aggressive investment.

In this study, R^2, calculated using PLs algorithm, was used to assess the predictive power. During statistical analysis R^2 for FP was 0.514 and for MV was 0.444. According to Purwanto and Sudargini (2021), the value of R square is acceptable if it is more than 0.10. This criterion is fulfilled in the present study.

Table 8.
R square

	Original Sample (O)
FP	0.514
MV	0.444

Note: MV= market value, FP= firm performance

Discussion

The assessment of the firm's market value is a lynchpin of success for any firm, and the SME sector is no exception. Therefore, this study was conducted to assess the relationship between aggressive investment, inventory conversion period, cash conversion period, firm performance, and market value. This study found that aggressive investment has a positive relationship with market value and the organization's performance. These results are in line with (Pearsall & Ellis, 2006). Moreover, the study's findings revealed that CCP positively affects MV and FP. These results align with the findings of (Doğan & Kevser, 2020).

Furthermore, ICP and FP are positively associated as well. These results are in line with the findings of (Kangogo & Irungu, 2020). However, these results show that ICP and MV are not significantly linked. Additionally, the mediating role of FP is confirmed among AGI, CSI, and MV.

Conclusions

It has been observed that though the SME sector in Saudi Arabia is taking a leading role in the kingdom's economic development, there is a lack of research in this area. This research attempts to bridge this gap and provide research closely focused on the SME sector of the kingdom. Moreover, as the mediating role of FP is rarely tested in the existing literature, this study could also be considered an attempt to fill this gap. Last but not least, it is expected that this paper will provide some economic reasoning for future policies and will help the policymakers of the SME sector in KSA.

This study also has a few limitations; for example, the moderator role of the Trust of the customer should be considered in future research. Moreover, this model should also be tested using data from the banking sector.

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Raillietiniasis in cacique parrot (*Deroptyus accipitrinus fuscifrons*) and its importance as a zoonotic disease

Raillietiniasis en loro cacique (Deroptyus accipitrinus fuscifrons) y su importancia como enfermedad zoonótica

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Abstract

Raillietinosis is a disease of zoonotic importance. The objective of the present work was to report the presence of Raillietina sp. in Cacique parrots (Deroptyus accipitrinus fuscifrons) in captivity by coprology and necropsy. Analyzes revealed that the birds studied were found to be parasitized by cestodes compatible with Raillietina sp. This registry is the first report in Argentina and it acquires great importance since there is the possibility of its transmission to their owners and / or professionals, such as veterinarians, biologists and keepers who contact more directly with these birds.

Keywords: Deroptyus accipitrinus, Parrots, Raillietina, Zoonosis.

Resumen

Raillietinosis es una enfermedad de importancia zoonótica. El objetivo del presente trabajo fue reportar la presencia de Raillietina sp. en loros caciques (Deroptyus accipitrinus fuscifrons) en cautiverio por coprología y necropsia. Los análisis revelaron que las aves estudiadas estaban parasitadas por cestodos compatibles con Raillietina sp. Este registro es el primero que se reporta en Argentina y adquiere gran importancia ya que existe la posibilidad de su transmisión a sus dueños y/o profesionales, como veterinarios, biólogos y cuidadores que tienen un contacto más directo con estas aves.

Palabras clave: Deroptyus accipitrinus, loros, Raillietina, Zoonosis.

Introduction

Raillietinosis is a zoonotic disease (OPS, 2003) produced by cestodes, characterized by diarrhea (sometimes bloody) during the acute state and emaciation, cachexia and anemia during the chronic phase. It is caused by some species of the genus Raillietina that parasitize the small intestine (Paul et al. 2012); in parrots it presents a mild parasitism that in most cases does not cause clinical signs (Sciabarrasi et al. 2020).

Of the genus Raillietina, more than 200 species are known; most of them affect birds, in these the most frequent species are: *R. taylori, R. tetragonoides, R. echinobothrida, and R. bonini*. The first two being those eventually reported in parrots and *R. cacatuinae* in cockatoos housed in enclosures with a dirt floor (Doneley, 2010).

They all have indirect life cycles with a pre-patent period of 2 to 3 weeks (García Corredor et al., 2013). The cycle begins with the release of the egg-filled proglottids in the faeces of the definitive hosts (rodents, birds). These are ingested by intermediate hosts (ants, flies, snails, slugs, depending on the Raillietina species).

Then, from the embryonated eggs, the cysticercoid larvae develop, which are infective once the definitive host feeds on the arthropod or the other intermediaries (Ensucho et al, 2015). They are relatively frequent parasites in wild Old-World parrots (yacos, cockatoos), but not in South American parrots (Melo et al., 2013).

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The cacique parrot (*Deroptyus accipitrinus*) is a species of South American bird of the Psittacidae family; it is the only member of the genus Deroptyus (IUCN, 2014). It inhabits the jungles of the Amazon and the Orinoco basin where its population is declining due to increased deforestation (Collar, 1997). There are two subspecies *Deroptyus accipitrinus accipitrinus* the nominal species and *Deroptyus accipitrinus fuscifrons*, with a much smaller range located south of the Amazon and is distinguished by the much darker color of the feathers of the head. Their size is 33 to 35 cm and when they feel threatened or excited, they have the property of raising the collar of feathers on the nape like a fan (Forshaw, 2010).

The objective of the present work was to report the presence of Raillietina sp. in Cacique parrots (*Deroptyus accipitrinus fuscifrons*) in captivity; in order to contribute to improving their sanitary and handling conditions as well as those of their caregivers.

Methodology

This study was carried out at the Zoological Station "La Esmeralda" of the Province of Santa Fe, Argentina (Longitude 31 ° 35'11.6"S, latitude 60 ° 41'32.4"W, at 25 masl), in the months of February and March 2020.

Fecal matter samples were taken from 6 adult individuals of *Deroptyus accipitrinus fuscifrons* (3 males and 3 females) each housed, for this study, individually in enclosures according to the species (Figure 1), plus a dead specimen of traumatic causes preserved of chilled form. The feces were collected non-invasively by means of a polyethylene placed on the floor of each cage, which were removed after 6 hours. At the time of collecting the samples, the outer halo and the lower part that came into contact with the plastic were discarded, so the inner part was taken to avoid damage to the sample. The sampling was repeating 3 times with an interval of one week between each one. They were transported in polyethylene bags and refrigerated, avoiding as much as possible exposure to external factors such as heat and air currents that could cause damage to them, to the Zoology laboratory of the Faculty of Veterinary Sciences (UNL), in a time less than eight hours, where they were processed.

They were processed using the combined Teuscher flotation and sedimentation technique (sedimentation-flotation with SO4Zn) and observed under an optical microscope for identification, counting and measurement according to Martínez Tovar et al., (2015).

Flatworms collected from the dead individual were stained with hematoxylin and rinsed with phenol, according to the methodology adapted from Amato, Böeger and Amato (1991) and Hoffmann (1987). The cestodes were mounted on slides with permanent synthetic resin, identified according to the keys of Anderson, Chabaud and Willmott (2009), Khalil, Jones and Bray (1994) and Vicente, Rodrigues, Gomes and Pinto (1995) and incorporated into the collection of the Chair of Zoology, Diversity and Environment of the FCV-UNL.

Figure 1. Individual of (*Deroptyus accipitrinus fuscifrons*) in a room for taking samples.

Statistical analysis: This research corresponded to a descriptive analytical cross-sectional study with simple random sampling (Wayne, 2006). The results of this research were tabulated in an EXCEL sheet and analyzed by the EPIINFO statistical program (Pérez-Cardona and Suárez-Pérez, 2004). The prevalence of infection was calculated according to Bush, Lafferty, Lotz and Shostak (1997).

Ethical aspects: The enclosures were within the guidelines of the WAZA (2017). The management of the birds and the information had the authorization of the Directorate of the Fauna Center ¨La Esmeralda¨ together with the corresponding endorsement of the Institutional Committee of Ethics, Bioethics and Animal Welfare.

Results and Discussion

Stool analysis revealed the presence, in all samples, of eggs (from 53.9 to 57.7 per 42 µ) of cestodes, isolated or in ovigerous capsules approximately 8 in number (Fig. 2). In the autopsy of individual No. 7, hemorrhages of varying intensity were observed in the intestinal mucosa, catarrhal hemorrhagic enteritis, and the parasites themselves during macroscopic observation. Therefore, the 7 birds studied were found parasitized by cestodes compatible with Raillietina sp. (100% prevalence).

Figure 2. Raillietina sp eggs in ovigerous capsules observed at 40X in *Deroptyus accipitrinus fuscifrons* fecal matter.

Sciabarrasi et al. (2020) with similar diagnostic methodology reported the presence of Raillietina sp. in individual parrots of the captive *Forpus coelestis* and *Forpus conspicillatus* species in Argentina, originating from illegal wildlife trafficking.

In Brazil, Melo et al. (2013) recorded parasitism by Raillietina sp. in parrots of the species *Amazona aestiva* in captivity. Although cestodes are common in non-psittacidal wild birds, they are not common in parrots, and their association with mortality is unusual. In general, parrots parasitized by these flatworms can show anemia, weight loss and diarrhea, but more serious infections can facilitate the appearance of other diseases that can cause the death of the animal (Doneley, 2009).

The gregarious habit of parrots can represent a risk for populations affected by parasitic infections; the high population density of the hosts can be an influencing factor in the mortality of individuals facing a disease (Hochachka and Dhondt, 2000).

The feeding habits of birds can also be related to parasitism. Birds that feed on fruits and grains, such as cacique parrots, have great possibilities of contamination during the search for food (Costa et al., 2010), and in turn, can disperse pathogens during foraging (Barrera-Guzmán and Guillén-Hernández, 2008). Also, it factors like stress, inadequate nutrition and contaminated environments that facilitate the presence of parasites and hosts the normal development of their life cycle.

The treatment and subsequent control of the affected parrots was carried out by deworming with 6 mg of Praziquantel per kg of body weight, in a single dose, mixed with drinking water.

This study made it possible to identify gastrointestinal parasites such as Raillietina in *Deroptyus accipitrinus fuscifrons* in captivity, being the first record in Argentina. The fact that other groups of gastrointestinal parasites have not been reported may be due to the systematic deworming plan carried out for nematodes and coccidia by the Institution.

Conflict of interest: The author has no conflicts of interest to declare in relation to this manuscript.

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Conclusions

Wild psittaciformes are hosts for a wide variety of parasites, including some zoonoses, and can transmit them through fecal matter, blood, secretions and arthropods. The registration in this study of Raillietina spp in the *Deroptyus accipitrinus fuscifrons* analyzed acquires great importance since, according to what has been indicated by authors, there is the possibility of its transmission for their owners and / or professionals, such as veterinarians, biologists and caregivers who contact more directly with these birds.

The coproparasitology in these species constitutes an important tool for the evaluation of the sanitary conditions of the environment. Despite the limitation of research in this field due to the difficulty in accessing the hosts, knowledge about diseases and their implications are of fundamental importance for biodiversity conservation and management programs, highlighting the knowledge of zoonotic diseases in their actions.

As a prophylaxis, it is recommended as a useful measure for the control of infections by this parasite, the control of rodents, insects and the hygienic handling of food by the caretakers or holders of the birds to avoid contamination of the food to parrots.

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Educational trends 2022: essence and innovation potential

Tendencias educativas 2022: esencia y potencial de innovación

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Abstract

The paper aims to analyze the educational trends of the year 2022 and determine whether they are relevant in the future, whether they are a response to the challenges of the present. Also, attention is paid to the method of SWOT-analysis, with the help of which the strengths and vulnerabilities of distance learning are identified. The results analyze the future of distance education, in particular, special attention is paid to the experience of implementing hybrid education as a likely promising direction of further learning. Another aspect is the introduction of STEM education, media education (as a counteraction to intentional propaganda), and Education for Sustainable Development as important elements of the modern learning process in the United States and European countries. In conclusion, it is concluded that these areas of educational activities will be trends in the next decade in the recurrence of the crisis. The scientific novelty of the work consists in the fact that for the first time at the synthetic level modern educational trends were studied, their prospects and risks of use were characterized.

Resumen

El objetivo del artículo es analizar las tendencias educativas del año 2022 y determinar si son relevantes en el futuro, si son una respuesta a los retos del presente. También se presta atención al método de análisis DAFO, con cuya ayuda se identifican los puntos fuertes y los puntos débiles de la enseñanza a distancia. Los resultados analizan el futuro de la educación a distancia, en particular, se presta especial atención a la experiencia de la aplicación de la educación híbrida como una dirección probablemente prometedora de la enseñanza posterior. Otro aspecto es la introducción de la educación STEM, la educación en los medios de comunicación (como contrapartida a la propaganda intencionada) y la educación para el desarrollo sostenible como elementos importantes del proceso de aprendizaje moderno en los Estados Unidos y en los países europeos. En definitiva, se concluye que estas áreas de actividades educativas serán tendencia en la próxima década en la recurrencia de la crisis. La novedad científica del trabajo consiste en que por primera vez a nivel sintético se estudiaron las tendencias educativas modernas, se caracterizaron sus perspectivas y riesgos de uso.

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The abstract in English does not match the abstract in Spanish.

Key words: educational trends, distance education, innovations, media education.

Palabras clave: tendencias educativas, educación a distancia, innovaciones, educación mediática.

Introduction

In the XXI century. the development of society has reached new horizons. Modern requirements for education must meet this process, as well as the current globalization trend and the total digitalization of all spheres of social life. At the same time, new challenges (in particular the COVID-19 pandemic and inciting military conflicts) increase the requirements for the organization of educational work, so for 2022, there is a need to identify and analyze the main trends that will determine the further evolution of the educational sphere. The relevance of this topic is also increased because among researchers no unified point of view or system of views on what the future, essence, and innovative potential of many current trends is, that is, whether they have future prospects for use, are only a short-term answer to urgent problems.

The development of the educational industry in relation to the latest global challenges remains a pressing issue. The available research is usually separate, i.e., it covers narrow, specific issues that are not addressed in a synthetic context. A comparative and detailed examination of emerging trends in the future of the industry remains an important element for subsequent elaboration and formulation of the necessary recommendations and conclusions for implementation.

Therefore, the purpose of the article is to determine the essence and prospects of modern means, technology, and trends that are used in 2022. Consequently, the paper highlights such research questions:

1. advantages and disadvantages of operating an online distance education system
2. the importance of lifelong learning for the self-development of individuals
3. the role of STEM-education and Education for Sustainable Development
4. characteristics of media education as a future educational trend.

The solution of these questions will make it possible to reinterpret some of the statements approved in the professional literature about the prospects of certain techniques or systems of education, as well as to offer our vision of future trends in the development of the educational sector.

Theoretical Framework or Literature Review

Currently, there are many works in which modern educators have tried to characterize the main pedagogical innovations and trends in the development of education. In particular, Conte et al. (2019) investigated the main ways of development of higher education, the authors characterized the possibility of using inclusive digital spaces, where knowledge is available to all regardless of social status. Abuhassna et al (2020) investigated student satisfaction with online learning environments. They note that in order to understand, memorize, apply, and analyze course material, the learning environment should include certain factors. First, students should be given autonomy. Second, opportunities for collaboration are needed to enhance learning. Third, educators should be well-trained, knowledgeable, and supportive of students in their academic endeavors. Finally, students' experience with technology also plays a significant role in regulating the online learning environment system. Dhawan (2020) has characterized the use of distance education and explored its importance and role in today's information society. This researcher notes that in order for a digital learning system to be effective, various socio-cultural aspects of education must be included. De Souza et al (2020) investigated the development of education against the backdrop of modern technological change. At the same time, Ehlers (2019) characterized the qualitative changes in the education system of the future. Aghion et al. (2021) examined contemporary innovations in higher education. At the same time, Andersone (2020) characterized the main innovative methods of teaching and described their possibilities and prospects of use. Pinheiro & Santos (2022) analyzed the pedagogical conditions for the implementation of distance education, identified the features of its use. Kaur & Batra (2018) characterized the problem of the effectiveness of training to improve the performance of professionals in different industries. Instead, Bak et al. (2019) identified the problem of social communication skills and their importance for today's students. Cherng & Davis (2019) investigated the problems of multiculturalism in the education system and formed key recommendations to reform multicultural education. Liao & Thomas (2020) explored contemporary ways to improve intercultural competence. Ungerer (2019) identified perspectives on using Storytelling to improve the learning system. At the same time, Richards (2019) analyzed the problem of cultural diversity in higher education and characterized conceptual pedagogy. Pérez et al. (2018) explored the prospects and possibilities of using play methodology as a major contemporary educational trend.

Consequently, although today there are many scientific works devoted to the main trends and methods of development (improvement) of education. However, the issue of efficiency of using these or those trends in the education system remains understudied. Also, little-studied is the prediction of the likely development of those or other trends that are now prevailing in education.

Methodology

The main empirical materials are the official ratings of modern educational methods, regulations on educational programs, and recommendations for the development of standards of higher education in Ukraine.

The theoretical pedagogical methods of research were used in the work: abstraction, concretization, comparison, and others. In particular, based on the method of comparison it was possible to compare the main trends in the development of education. With the help of concretization, the problem of using distance learning as a key trend in the world educational system is reflected. As a result of using abstraction, it was possible to move from general statements (coverage of the role of modern educational innovations and trends, identification of the main trends in education) to our own judgments on the effectiveness of using certain trends. Based on the predictive method the problem of using trends 2022 in the education of the future was characterized. The empirical methods include observation and experiment.

Separate attention is paid to the SWOT analysis method, which has been actively used in various fields of scientific knowledge since 1969. The main content of the method consists in a detailed analysis of the identified factors, which are essential in decision making, it allows to formulate and characterize the prospects of development of a process, idea, or activity. It should be noted that originally this method was actively used in marketing studios, but nowadays it has shown its effectiveness in the educational system as well. So, since our study analyzes the main trends and tendencies in the development of education the requirement for an objective and balanced analysis is relevant.

Results and Discussion

Is distance education a major trend?

This is a debatable question the authors of the floor ask in order to determine the prospects of using distance education in the times after the COVID-19 pandemic is over. During the pandemic, distance learning was the main way out of the crisis situation in the education system (Arruda et al., 2021). In addition, online education is effective in crisis (military) situations. For this reason, the experience of Saudi Arabia, Palestine, and Ukraine, where military operations took place (or are taking place), is valuable. But will distance education be used in countries that have overcome the COVID-19 pandemic and are not suffering from the war in the future?

Let us note the gradual evolution of the legal framework for distance learning since 1996 when the term was gradually introduced into the legislation of European countries and America. Distance learning was used to increase access to education for the not-so-wealthy segments of the population, as the problem of tuition fees became very urgent (Abuhassna et al., 2020). It was normal for universities to offer distance learning courses as part of their bachelor's or master's degree programs. Initially, the period of expansion of distance learning since 1996 was led by the government. However, beginning with the start of the 21st century and the global development of the Internet, universities began working to expand their distance learning offerings. The real development of the legal framework occurred after 2017 when European countries accredited an institution specializing in distance learning (Arruda et al., 2021). Students who studied on campus and in online programs were declared equal. At the same time, institutions of higher education created digital libraries. The full transition to online learning took place in 2020 when all on-campus learning activities ceased and all classrooms moved to virtual platforms. The trends presented in the data set are also confirmed by a study conducted by de Souza et al. (2020). However, these numbers do not reflect the equity or quality of education, as private educational institutions are mainly focused on increasing the number of students. Distance learning methods have already gained popularity in higher education institutions in many countries because of the legislative framework established decades ago. The pandemic has expanded the reach of distance learning when classroom instruction has moved into the virtual world (de Souza et al., 2020).

To predict the likely development of distance education, we will conduct a SWOT analysis of the effectiveness of educational resources in this type of training. The key criteria are chosen: financial resources: investments, financing, physical factors: space, equipment, location, human resources: teachers, technical staff, involvement of specialists, access to information resources (copyright statement, corporate access, licenses), analysis of different internal processes (organization of webinars, lectures, trainings, master classes, conferences), the possibility of professional development, availability of loyalty programs, etc. To identify the strengths of online learning in comparison with the traditional model, we use the SWOT analysis to determine what exactly its advantages are obvious (in the absence of a clear indicator, we interpret it as a weak feature). Consequently, according to the above criteria, we can determine the strengths (Strengths) of the use of online learning in higher education institutions.

Considering the factor “financial resources”, the use of online learning makes it possible to obtain grants from various organizations. By the factor “physical resources” distance learning does not require and does not depend on a significant renovation of the material and technical equipment of classrooms. For this reason, the BYOD (bring your own device) approach, which provides for the use of portable electronic gadgets by all participants of training (Conte et al., 2019), becomes especially important in educational institutions. Considering the “human resources” criterion, it is possible to significantly expand the audience in case of attracting students from other educational institutions, it is also possible to invite “guest” lecturers or certain specialists in a particular industry (Abuhassna et al., 2020). According to the factor “access to resources”, the strength of the distance learning system in the structure of the educational process organization is the expansion of Creative Commons license opportunities. Analyzing the criterion “internal processes” is a valuable absolutely inseparable course of improvement of mastery (competence) of teachers and students on some procedural issues of blended learning application (Dhawan, 2020).

Let us define Weaknesses using online learning. Given the criterion “financial resources”, the use of this type of learning in higher education institutions is somewhat limited, primarily due to inadequate state funding of modern educational innovations. In the criterion “physical resources” there is a limited use of online learning in the absence of Internet access. Analyzing the “human resources” criterion, the need for systematic motivated self-education of both students and teachers becomes apparent. According to the criterion of “access to resources” the weak side of the use of blended learning can be the limitation of corporate access to resources. Considering the criterion “internal processes” the limitation of the teacher's independence in the educational process may become a weakness (Demiray, 2017).

In addition to the above-mentioned objective internal criteria, which can potentially be identified and controlled, uncontrollable external factors that can affect the development of innovation in different ways should also be taken into account. The mentioned external factors are: - variable trends and tendencies (integration of new educational technologies into the educational process, changes in methodological foundations, the transformation of target audience preferences; - relations between educational actors; - economic aspects: migration, competition; demographic aspects, political, economic, environmental, limitations.

Table 1.
SWOT-analysis matrix of the process of distance education implementation

Strengths	Weaknesses
Ability to obtain grants	Depending on Internet access
Lack of significant renovation of the material and technical base	The requirement in systematic motivated self-education of students and faculty
Expansion of the target audience	Becoming a limitation in the use of other online resources
Expansion of the Creative Commons license;	A methodological limitation of teachers' freedom, limitation of teachers' creativity
Improving the competence of distance learning participants	

Created based on the author's analysis

So, as we managed to establish in distance education, there are more advantages than disadvantages. However, the next stage of its mass implementation should take into account the above risks. We believe that the introduction of new learning resources and the improvement of existing ones will improve the distance education process as a whole.

Hybrid classes as a promising trend in the educational process

Some of the most recent advances in the educational system include hybrid classes, which are a mixture of online learning and conventional teaching. In hybrid classrooms, much of the learning takes place on campus or at school, and students participate in both in-person and online activities. Virtual analytics are used to assess student performance by collecting data on their interactions with instructional content (Dhawan, 2020). Pedagogical tools are developed based on new learning technologies. It is about combining game-based teaching methods with modern technology, from creating avatars or online characters to playing in fictional online worlds (Arruda et al., 2021). Many digital learning platforms are creating their own spaces to use and shape their participants. An extension of this is the creation of virtual reality, a digital gateway to the social online world. Regardless of the content of these advances, the digitalization of learning has spread. This means that the education system has moved to e-learning, and digital platforms are likely to remain part of the learning process. This method advances in ease of access and high levels of student and learner engagement (Ehlers, 2019). It also creates an environment where students can choose personalized educational tools and have more access to information. Moreover, they will use this access on their own, without coercion from teachers.

STEM-education and Education for Sustainable Development - the latest formulas for organizing the educational process

For a long time, Education for Sustainable Development has been a separate branch of educational activity, characterizing the vectors of its development, defining the tasks and methodology of general and accessible learning opportunities. Education for Sustainable Development formed a tangible evolutionary force because it redefined the approximate development of the entire field. Meeting such enormous challenges required the introduction of an updated and redesigned framework for teaching and education. In fact, it was not simply a matter of supplementing an already existing structure, but of thoroughly redesigning an already existing system of educational organization (Li & Lalani, 2022). Through this development, education for sustainable development has become an important and new learning system, the results of which have been repeatedly noted by experts.

We must agree with researchers who argue that the main distinguishing feature of Education for Sustainable Development is its proactive nature, the emphasis on the gradual formation of critical and systemic thinking in students and learners during their studies, and the consideration of local features of social development and transformation (Ehlers, 2019). At the same time, due to this specificity, even today there is no approved model of learning in the framework of Education for Sustainable Development. Accordingly, each region and each country has its own unique educational practices that take into account economic, religious, cultural specificities, etc. Such universality gives Education for Sustainable Development an additional bonus in today's multicultural society, which requires consideration of many aspects of the development of human communities (Pérez et al., 2018).

It is believed that education for sustainable development is most successfully applied in the pedagogical practices of a fairly limited number of countries, primarily from North America and Western Europe. For example, let us present a short list as follows: Finland, Canada, Netherlands, Sweden, Norway, etc. Overall, only one in three countries in the European Union takes full advantage of the new system. Educational activities here are characterized by the availability of national strategies, plans for education for sustainable development, a fairly extensive network of educational institutions, etc. Qualitatively using the advantages received, pupils and students formed their systemic values and necessary transversal skills in later life - manifested features of their personal development and integrated into society without a certain systematic range of knowledge and norms of behavior, outlined by teachers (Richards, 2019). At the same time, the teaching and learning support is at the highest level, used by the national language at all levels of education, comprehensively covering academic disciplines (Aghion et al., 2021).

Note that education for sustainable development is spreading rather slowly in many other regions of the world. For example, in countries of the post-Soviet camp, the rate of its spread is low. Local state budgets do not bear the burden of development of this trend, so the financial burden falls mainly on non-budgetary organizations, charitable foundations, grant support, etc. The post-Soviet space do not use common institutional and interdisciplinary approaches to the implementation of this sphere in educational institutions, often resorting to manipulation. In addition, the norms of this progressive methodology of organizing an entire educational sector are not supported by special training of teachers, heads of educational institutions, which is an urgent problem of educational sector reform in this region. The number of educational and methodological materials and scientific research, which would accelerate the implementation of Education for Sustainable Development in the region, is also insufficient.

One of the elements of this process is the use, implementation of ideas, and realization of the modern trend of STEM-education. In general, the definition of STEM is used to define an actual pedagogical direction that combines several elements in the world today: science, technology education, technical creativity, and mathematics (Andersone, 2020).

A key aspect of the application of this direction in the pedagogical process is the integration of the natural history component and the comprehension of innovative technologies. Note that such initiatives are often taken by universities on their own. The innovative potential of STEM thus develops in the field of education, given the level of interest in its implementation (Conte et al., 2019). However, we note that financial constraints can be an obstacle to such optimistic plans. So, we believe that STEM education technology should be widely implemented and applied in the future. Obviously, this trend will spread further and far beyond 2022, because the promise of this direction has been noted by many researchers.

Media education - a future educational trend?

Most experts consider digitalization, online learning, visualization, Education for Sustainable Development, prioritization, STEM education, and lifelong learning as modern educational trends (Andersone, 2020). However, less attention is given to media education, which is the integration of the latest technology into the educational process based on the application of certain techniques, leading to the realization of media literacy in students and even teachers (Richards, 2019). In an information-driven world, students need to possess critical thinking skills, rigorously evaluate and verify information, know about fake news, and ways to protect themselves from dangerous manipulations. The Russian-Ukrainian war (2014-until now) has demonstrated to the world the danger of information warfare because the propaganda of the Russian Federation has become widespread through global information channels. Consequently, media education, which contributes to the formation of media literacy, is especially relevant now. Accordingly, modern students should acquire skills related to working with media products. We believe that the principles of media education should be applied even in the elementary school system. Integrated media education will allow students to think critically, learn how to find and verify the information.

However, the appeal to media technologies in learning requires new approaches in teaching and perception of information, a restructuring of teaching ethics, and additional parental attention. The new educational goal of developing a modern feature from childhood offers new challenges for teaching staff and educators. We believe that media education in the future should be one of the important educational trends to be used in the education system at all levels.

Conclusions

So, now as of 2022, there are several educational trends: distance education, STEM-education, Education for Sustainable Development, etc., which are actively being implemented in the European bachelor's training system. Distance education and digitalization of learning will be actively used in the educational system. As it was possible to establish although distance education has certain disadvantages, however, the development of the latest educational resources, improvement of existing ones can solve some problems.

A promising trend is the introduction of a system of hybrid classes, which is a combination of online learning and the traditional pedagogical model. In hybrid classes, we recommend implementing a combination of game and project-based teaching methods with modern technology. This means that the digitalization of the learning process will increase, so distance education will remain part of the educational process in the future.

The newest forms of educational process organization will be STEM-education and education for sustainable development. These trends are ahead of the curve, and the program learning outcomes include the formation of students' critical and systemic thinking. In addition, Education for Sustainable Development implies a lot of variabilities, which allows taking into account the peculiarities of national education systems.

We also predict that the future trend will be media education because it meets the requirements of the information society and modern challenges (however, hybrid warfare and the Covid-19 pandemic).

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Strategies for economic development: the Ukrainian case

Estrategias de desarrollo económico: El caso de Ucrania

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Abstract

The article studies the peculiarities of economic strategies of developed countries of the world and carries out a comparative analysis of the strategic goals of Ukraine and Poland. Based on correlation and graphical analysis, it is proved that the basis of economic growth of Poland, which had actually the same starting conditions as Ukraine after the collapse of the USSR, is the economic ideology, which provides for the development, stimulation, and support of the processing industry. In particular, the study showed that it is the deindustrialization of the Ukrainian economy and the reduction of processing industry products in the structure of Ukrainian exports leads to a slowdown in the growth rate of absolute GDP and GDP per capita, in Poland, there are cardinally opposite trends. The formation of economic strategies within the framework of the ideology of stimulation of the processing industry adapts macroeconomic policy to meet such goals by increasing capital expenditures, implementation of state-targeted development programs, debt financing. Besides, an important strategic principle of Ukraine's economic strategies should be the principle of

Resumen

El artículo estudia las peculiaridades de las estrategias económicas de los países desarrollados del mundo y realiza un análisis comparativo de los objetivos estratégicos de Ucrania y Polonia. Sobre la base de la correlación y el análisis gráfico se demuestra que la base del crecimiento económico de Polonia, que en realidad tenía las mismas condiciones de partida que Ucrania después del colapso de la URSS, es la ideología económica, que prevé el desarrollo, el estímulo y el apoyo de la industria de transformación. En particular, el estudio mostró que es la desindustrialización de la economía ucraniana y la reducción de los productos de la industria de transformación en la estructura de las exportaciones de Ucrania conduce a una desaceleración en la tasa de crecimiento del PIB absoluto y el PIB per cápita, en Polonia, hay cardinalmente tendencias opuestas. La formación de estrategias económicas en el marco de la ideología de la estimulación de la industria de transformación adapta la política macroeconómica para cumplir con tales objetivos mediante el aumento de los gastos de capital, la aplicación de programas estatales de desarrollo dirigidos, la financiación de la deuda.

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increasing capital expenditures of the state budget, at the expense of deficit and debt financing of target programs of the economic market.

Key words: economic strategy, economic ideology, strategic principle, processing industry, postwar economy, economic development.

Palabras clave: estrategia económica, ideología económica, principio estratégico, industria de transformación, economía de posguerra, desarrollo económico.

Introduction

At the beginning of 2022, Ukraine entered a new, most large-scale crisis of civilizational, social, and economic nature, which arose as a result of unprovoked aggression on the part of the Russian Federation. The full-scale war against Ukraine became a challenge for the Ukrainian state, which led to the need to review not only the historical past, political miscalculations, economic policy of the pre-war period, but in general the economic and social structure of the country and strategic priorities of economic development.

After the end of the war, regardless of the territorial configuration formed as a result of its results, Ukraine, as an independent state in the new geo-economic and geopolitical reality will have to restore the infrastructure destroyed by war and develop a new form of economy, without a clear and balanced economic strategy at the macro-, micro- and meso-levels will not allow to quickly achieve the desired results. Moreover, given the readiness of the European Union, the United States of America, and other partner countries to participate in the reconstruction of postwar Ukraine, the economic strategy of the Ukrainian state should become a roadmap for the development of international cooperation and integration of Ukraine into economic and security alliances.

According to the Kyiv School of Economics, as of May 25, 2022, the amount of direct damage to Ukraine's economy from military action to infrastructure and residential and non-residential buildings exceeded \$105.5 billion or more than 3.1 trillion UAH (Kyiv School of Economics, 2022), equivalent to 56.4% of GDP as of 2021. In addition, given the destroyed vehicles, roads, factories, retail outlets, and loss of businesses, the total loss of Ukraine's economy from the war is estimated at between \$564-\$600 billion (Kyiv School of Economics, 2022) or 320% of GDP in 2021. This indicates that Ukraine suffered losses during the three months of the war (which is ongoing and, according to military analysts, will continue for at least another three to five months) that are three times higher than the GDP of 2021.

This situation indicates the need to form a strategy of economic development of Ukraine at the macro, meso, and micro levels, which will be based on the results of the war and take into account the relevant, so-called financial assistance packages from partner countries.

Analyzing the course of negotiations of the Government of Ukraine with partner-countries and the European Union, we may conclude that the mechanism of targeted external financing for infrastructure and economic rehabilitation will be discussed, which will contain specific requirements for the necessary reforms, which will form the basis for the economic development strategies of the Ukrainian state.

The analysis of effective strategies of macroeconomic development of countries of the world is important for building strategies of the economic development of Ukraine in conditions of war and post-war period. Taking into account the development of cooperation between Ukraine and Poland in the conditions of war and the announcement of a number of joint initiatives, including joint customs control, in our opinion, the Polish experience of forming economic strategies should be used in Ukraine, including, taking into account approximately the same starting conditions for the development of countries after the collapse of the Soviet Union.

Thus, the purpose of the article is to study the peculiarities of economic strategies of developed countries of the world and analysis of Ukrainian experience in implementing economic strategies and on this basis formulation of key strategic principles of economic strategies of Ukraine in the postwar period.

Theoretical Framework or Literature Review

The study of the theoretical postulates of strategic planning in business became widespread back in the 1980s in the system of scientific schools of management, among which it should be noted the school of American scientist Michael Porter, who studied the features of strategic positioning of the company in the market, competitive analysis, scenario planning, etc. After the publications of Michael Porter on business strategies and economic strategies at the microeconomic level in general, the science in this context has developed significantly.

Today, one of the publications on economic strategies at the microeconomic level that deserves attention is the book “About strategy,” which brings together the top 10 articles published in the world-famous Harvard Business Review (Porter et al., 2011). An analysis of the collected publications in the aforementioned book allows us to highlight the fundamental tenets of economic strategies at the micro level. One of these postulates should be considered one that understands economic strategy not only as a long-term plan for a company's economic development but as a unique combination of values and activities for companies to achieve certain strategic goals. The emphasis on the unique combination of values shows that there cannot be the same economic strategies because each of them should take into account the peculiarities of this or that company, which are unique in nature, and therefore blindly copying the strategies of other companies or organizations is doomed to failure. Another postulate of economic strategy at the micro level is the approach to the consideration of the company as a whole, whose activities are based on the coherence of the functions and activities of the structural units because it is coherence that allows to avoid differences in the planning of strategic objectives and the implementation of measures to achieve them. Successful strategy development and implementation requires strong leaders who are able to make a choice between concepts, approaches to strategy building, and strategic goals. An effective economic strategy must fuse on the imperative of an organization's core ideology, which defines the legitimate essence of a company that transcends product or market life cycles, its technological advances, its leadership, and its individual leaders. A core ideology is based on key strategic principles and the key purpose of a company, which are deeper motives for its existence than making money. Strategic principles are designed to help companies or organizations stay focused on strategy while encouraging flexibility among employees that opens the door to innovation and rapid response to opportunities. The essence of the strategic principle is that every member of the organization, from top management to employees in operational units, can consciously move toward the same strategic goal without being constrained in their movement. The key ideology should only matter to and inspire people within the organization; it does not have to be appealing to outsiders.

An important postulate for building a micro-level economic strategy is the envisioned future, which should contain an ambitious goal for 10-30 years, as well as a vivid description of what the company will be in terms of achieving this goal. That is, the company must formulate a vision of its development in the long term. At the same time, thanks to the strategic principles and key ideology all employees of the company should be aware of the vision and purpose of the company, following it not only in working time but also in everyday life. All this allows innovation in the development of the firm, contributing to the achievement of key business goals (Kibik et al., 2022).

Not less important postulates of a micro-level strategy is the establishment and awareness of personal responsibility for the actions and decisions aimed at implementing the strategy. Control over the implementation of the strategy should be carried out through the analysis of the balanced scorecard, the implementation or non-implementation of which is a reason to determine the level of personal responsibility.

A collection of Harvard Business Review's top ten articles “About Strategy” allows you to understand the basics of strategic planning not only at the microeconomic level but also to integrate the outlined postulates at the meso and macro levels.

Macroeconomic level economic strategies are more complex economic development strategies because they involve a broad compromise between different political and socio-economic groups of the country, are based on consideration of the historical past and existing challenges to the economic system, and the effectiveness of such strategies depends on the ability of the authorities to invent a unique formula. of economic development of their state. Each country in the world has its own strategy of economic development or several strategies depending on the specific period, which gives reason to study this or that experience and implement its best examples in the Ukrainian case of strategic planning for economic growth.

Analyzing the scientific literature on the problems of strategic planning for economic development, from our point of view we should pay attention to the developed countries of Asia, primarily Japan and China, which in a relatively short period of time became the leaders of economic growth in the world economy.

Thus, the study by Liu (2021) on the economic development strategies of Japan deserves attention, which clearly emphasizes the historical development of this country, which significantly influenced the formation of strategic plans. In particular, the author notes that after the defeat in World War II Japan used the strategy of developing international trade based on the export of raw materials (given the fact that Japan is an island country with many mineral deposits) and the production of military goods for the needs of the American army. In the mid-1970s, however, Japan switched to an economic strategy based on scientific and technological progress and high-tech production. This strategy became crucial for Japan's economic development, and even during the crisis in the 1990s and the transition to a quantitative easing strategy, i.e., the use of financial levers to stimulate economic development, high-tech production remained the basis for the development of the Japanese economy. Moreover, the so-called abenomics strategy was aimed (through credit easing and an increase in Japan's public debt) at the development of the real economy. Thus, financing the development of the real sector of the economy based on scientific and technological progress has become the basis of Japan's economic strategy.

A somewhat similar economic strategy after the global financial and economic crisis of 2008-2009 was the economic strategy of the United States based on debt financing of economic growth (Driessen, 2019). The essence of this strategy is that the growth rate of U.S. gross domestic income is higher than the growth rate of public debt, such trends are achieved because public debt is used to finance specific targeted government economic development programs, which are primarily aimed at the development of the real sector. economy and production with a high share of added value. At the same time, one of the most active participants of the U.S. economic strategy is the Federal Reserve System, which uses unconventional monetary policy instruments (Trifonova & Kolev, 2021; Feldkircher et al., 2020) to create cheap financial resources in the form of targeted loans and securities buyback mechanisms to finance economic development.

Along with Japan and the United States, a study of the economic strategies of China, as one of the leaders of the world economy, should be considered. Special attention should be paid to the comprehensive study “China's Economic Growth Path” (Yaomin, 2020), in which the author describes in detail the main steps of China's economic reforms and the peculiarities of the construction of economic strategies. In our opinion, one of the main features of the formation of China's economic strategy is to take the third session of the CPC Central Committee in each five-year period to discuss it. Thus, the results of the session are fixed by the decision of the Central Committee of the CPC, allowing to supervise its implementation in practice. In addition, China used the original approach to the formation of economic strategy, which says that it is not necessary to copy the models and experiences of other countries, it is necessary to explore their own way, based on the reality of China, and build socialism with Chinese characteristics. Chinese characteristics are as follows: active implementation of scientific and technological progress and innovation in the Chinese economy, active state support for the development of the real economy through direct budget financing channels and lending by specialized development banks, and active expansion of China's participation in global trade through the creation of bilateral free trade zones and the signing of interstate treaties (Song, 2018). A somewhat similar experience of economic strategy formation is demonstrated by Poland, where as well as in China, the economic strategy of the country is approved at the governmental level (Gadomski, 2017), the latter of which is built on the principle of analyzing the historical development of the country and taking into account its miscalculations and national peculiarities (Kołodko, 2019). Having abandoned the concept of the Washington Consensus, having reconsidered the radicality and mistakes of shock therapy, Poland emphasized the development of the processing industry and support for innovation, which became the main strategic principles of the country for the next ten years. An important contribution to the development of theoretical concepts of economic strategy formation has been made by works Zolkover et al. (2021), Kibik et al. (2022) and Buriak (2019) where considerable attention is paid to the introduction of innovation in economic development, use of human capital and human potential to stimulate economic development, as well as elements of social and economic consolidation as the basis for the implementation of mesolevel economic strategies.

Analyzing the scientific works of the aforementioned authors, it should also be noted that economic strategy at the micro and macro levels is based not only on economic indicators, but on the institutional basis of its development, implementation, and monitoring the achievement of objectives. Formal and informal institutions create conditions for employees and citizens to perceive and penetrate the vision of the development of the company, society, and the state respectively, which contributes to achieving a high level of consistency of actions, functions, and decisions at all stages of implementation of economic strategies.

Methodology

The following methods were used in the study:

- analysis and synthesis - in the study of scientific literature and the identification of features of economic strategies of developed countries of the world and Ukraine;
- economic-statistical analysis and comparison - in the study of the dynamics of some indicators of economic development of Ukraine;
- economic-mathematical method - in the study of correlation relationships between indicators of economic development and indicators of macroeconomic policy and Poland in order to identify the factors of rapid economic growth of Poland;
- generalization - for the formation of scientific-theoretical and practical recommendations on the construction of economic strategies in Ukraine in the postwar period, taking into account the effective experience of developed countries.

Results and Discussion

The formation of economic strategies at the micro, meso, and macro levels in Ukraine today is indeed an urgent task, because the large-scale destruction of infrastructure, major enterprises that provided a high share of GDP production, the growth of unemployment, and forced emigration, requires a radical revision of approaches not only to strategic planning but also in general to economic policy. In this context, in Ukraine, as in China and Poland, it is important to take into account the historical aspects of economic development since independence.
Thus, the initial stage of national economic development after Ukraine's independence is characterized by an inefficient and weak institutional environment, which did not facilitate the rapid and balanced implementation of economic reforms. The existence of well-established traditions of the command-administrative type of economy, the lack of a clear understanding of market economy mechanisms in the system of power institutions led, on the one hand, to a delay in the adoption of necessary legislative acts and strategic documents (formal institutions) and, on the other hand, to a slow recovery of national economic traditions, such as cooperative movement, farming (informal institutions), etc.

In addition, the rapid rupture of intereconomic ties with the countries of the former Soviet Union and Ukraine's exit from the ruble zone led to a large-scale economic crisis, which was overcome by the guidelines of Western economic advisors and, since 1994, by the International Monetary Fund. Western economic advisors and IMF experts successfully persuaded the Ukrainian authorities to integrate the quasi-liberal “Washington Consensus” concept, which implied a rapid introduction of free market mechanisms, in particular full price liberalization. However, the absence of proper legislative support of national economic development, mechanisms of national producer protection, and support of production with a high share of added value during price liberalization led to the gradual destruction of the scientific, technical, and production potential of the country, which resulted in deindustrialization and actual transformation of Ukraine into a raw materials appendage of developed countries of the world.

In our opinion, in the 1990s, the liberalization of prices in Ukraine, when the economy had not yet been restructured on an independent path of development, was a fatal mistake of the Ukrainian authorities, because imports of goods from Western countries (companies that had the ability to attract cheap loans, large amounts of state support and considerable experience in market competition) obviously had a higher competitiveness than products of Ukrainian enterprises, which have just begun to adapt to the open market.

The misunderstanding and ill-considered planting of liberalism concepts, propaganda of open market economy experience, and free self-regulating market both in the activities of authorities and in the training of economists through an emphasis on the advantages of liberal schools of economic theory led to the creation of a well-established idea that the highest public benefits could be achieved by abandoning state regulation of the economy. However, in copying the foreign experience of economic regulation, domestic reformers did not take into account the aspect that the legal environment of Western countries was several orders of magnitude more efficient than that of the young post-Soviet state.

Yes, it is true that in developed countries there are fewer permits to open a business, fewer types of taxes, and other barriers to market activities, but the responsibility for corruption, violation of antimonopoly laws, financial fraud, and non-payment of taxes is much higher, and the judicial system is much more efficient, and these are all the true conditions for a free market. The inability of the legal system to enforce the economic law led to the formation of monopolies, uncontrolled redistribution of rents, excessive government support of the primary sector of the national economy, which ultimately affected the real objectives of the economic strategy of Ukraine - to increase exports of raw materials (including products of primary processing of agrarian industry) and fulfill the conditions of the International Monetary Fund.

Similar problems of building a market economy in the 1990s are recognized by modern economists in Poland, they are critical not only of attempts to implement the concept of the “Washington Consensus”, but also to the policy of shock therapy, the period of which is repeatedly called the lost period of development of the Polish economy (Kołodko, 2019).

As for economic strategies of macroeconomic level in Ukraine as state program documents, we should pay attention to three recent strategies: Strategy of economic and social development of Ukraine for 2004-2015 “Through European integration” (Verkhovna Rada of Ukraine, 2004); Sustainable development strategy “Ukraine – 2020” (Decree No. 5/2015, 2015); National strategy for the development of civil society in Ukraine for 2016-2020 (Cabinet of Ministers of Ukraine, 2016). It should be noted that none of the above-mentioned strategies were implemented, and the priority goals were not achieved.

Thus, each strategy assumed improvement of the investment climate, the attraction of investments, increase in GDP per capita, development of entrepreneurship, advanced economic development, etc. In practice, a paradoxical situation arose, clearly demonstrating the ineffectiveness of economic strategies: the volume of remittances of Ukrainian guest workers significantly exceeded the volume of foreign direct investment, despite the fact that each of the above-mentioned strategies contained goals to increase investment and improve the investment climate (Fig. 1).

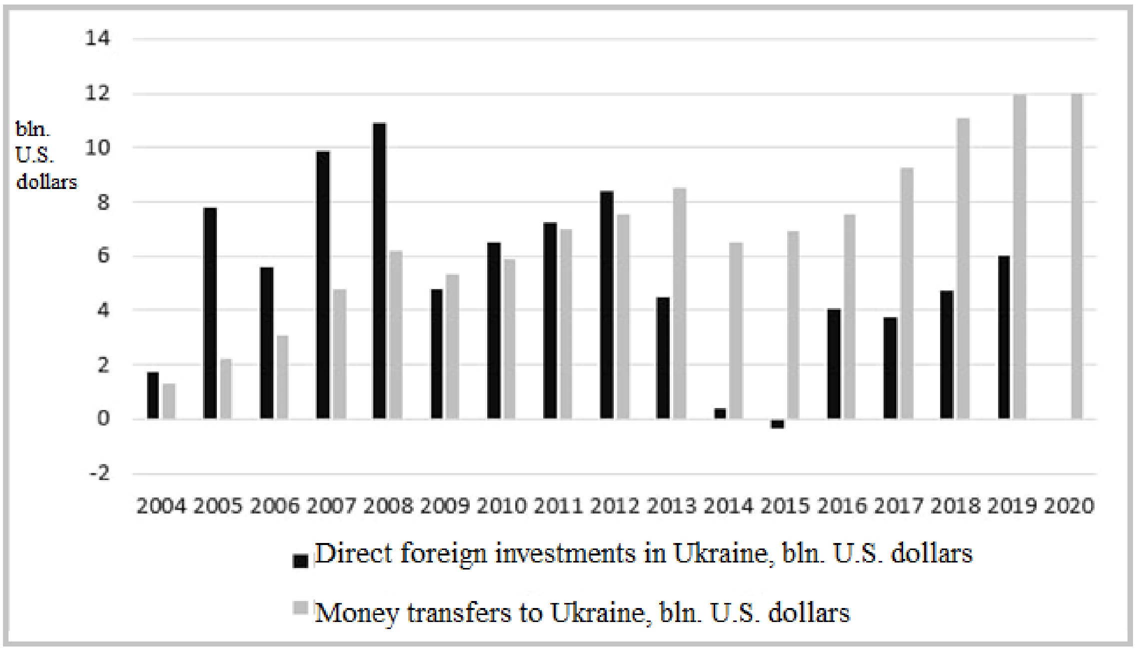

Fig. 1. Dynamics of Foreign Direct Investments and Remittances in Ukraine in 2004-2020
Source: External sector statistics (National Bank of Ukraine, 2022)

In addition, it should be noted that in every development strategy of Ukraine, including economic strategies, there are goals for the growth of the absolute volume of GDP and GDP per capita, but in terms of GDP per capita, Ukraine ranks last in Europe.

In our opinion, such problems in the achievement of strategic goals of economic strategies of Ukraine are connected with absence of economic ideology, key strategic principles, and qualitative targets of economic development.

In this context, it is advisable to compare the targets of economic development presented in the Ukrainian and Polish economic strategies (Table 1).

Analyzing the target macroeconomic indicators given in the economic strategies of Ukraine and Poland, we should note a more qualitative approach of Polish economists to the formation of such indicators, as the Polish strategies contain those indicators which determine the dynamics of such general macroeconomic indicators as the dynamics of GDP and the dynamics of GDP per capita.

Table 1.
List of strategic goals and economic strategies of Ukraine and Poland

Ukraine (Sustainable Development Strategy "Ukraine 2020". Vectors of economic development 2030)	Poland (Strategy for Responsible Development 2017; National Development Strategy 2012)
In the World Bank's "Doing Business" ranking Ukraine will take a place among the first 30 positions;	Adjusted real gross household income per capita at PPP (purchasing power parity) relative to the EU average - an improvement from 68.5% in 2014 to 76.0-80.0% in 2020 and 100% in 2030.
Ukraine's credit rating - the rating on liabilities in the foreign currency according to the scale of the rating agency Standard and poors - will not be lower than the investment category "BBB";	Reduce the risk of poverty from 20% in 2015 to 17% in 2020.
According to the global competitiveness index, which is calculated by the World Economic Forum (WEF), Ukraine will be among the 40 best states of the world	GDP per capita at PPP relative to the EU average of 75-78% in 2020, and 95% in 2030.
GDP (in purchasing power parity) per person, the World Bank calculates, would rise to $16,000	Ginny coefficient - down from 30.6 in 2015 to 30 in 2020 and 27 in 2030;
The maximum ratio of state budget deficit to GDP, according to IMF calculations, will not exceed 3%;	The share of industrial processing in gross value added - an increase from 19.7% in 2015 to 20% in 2020 and 21% in 2030
The maximum ratio of total public debt and publicly guaranteed debt to GDP, according to IMF calculations, will not exceed 60 percent (according to the Maastricht convergence criteria);	The number of apartments per 1,000 inhabitants - increasing from 367 in 2015 to 389 in 2020 and 435 in 2030.
The energy intensity of GDP will be 0.2 tons of oil equivalent per $1,000 of gross domestic product, according to the International Energy Agency;	The state budget deficit maintains a deficit below 3% of GDP.
Achieve a reduction in the unemployment rate to 5%	The national debt will remain below 60% in 2020 and 2030
Achieve a net inflow of foreign direct investment of at least 5% of GDP per year	State tax revenues - will increase from 19.8% in 2015 to more than 20% in 2020 and 2030.
Achieve labor productivity of at least $20,000 per employee. Achieve a labor productivity rate of at least $20,000 per employee and 30% of the EU rate for 2019	Investment rate from 20.1% of GDP in 2015 to 22.0-25%. in 2020 and 25% in 2030
	Household savings rate - increase from 1.7% of GDP in 2014 to 2.2% in 2020 and over 5% in 2030
Achieve a gross fixed capital formation ratio of 25% of GDP	Share of renewable energy in gross final energy consumption - from 11.45 percent in 2014 to 15 percent in 2020
	The share of government spending aimed at development as a percentage of GDP - an increase from 16.4% in 2010 to 17.6% in 2020

Source: Sustainable Development Strategy "Ukraine – 2020", (Decree No. 5/201, 2015); Vectors of economic development 2030, (Cabinet of Ministers of Ukraine, 2020); Gadomski, (2017) Such indicators in Polish strategies are: the share of industrial processing in gross value added and the share of public spending aimed at the development in GDP. Development of a processing industry or industry with a high share of added value is a key strategic principle not only in Poland, but almost all developed countries of the world because the processing industry helps to create jobs (and therefore contributes to reducing unemployment), attract highly qualified personnel (increasing the cost of labor, average income, and GDP per capita indicator), and most importantly - protects the economy from the influence of world commodity cycles. The emphasis on the development of the processing industry in Poland vividly reflects the gap in the development of the Ukrainian and Polish economies (Fig. 2).

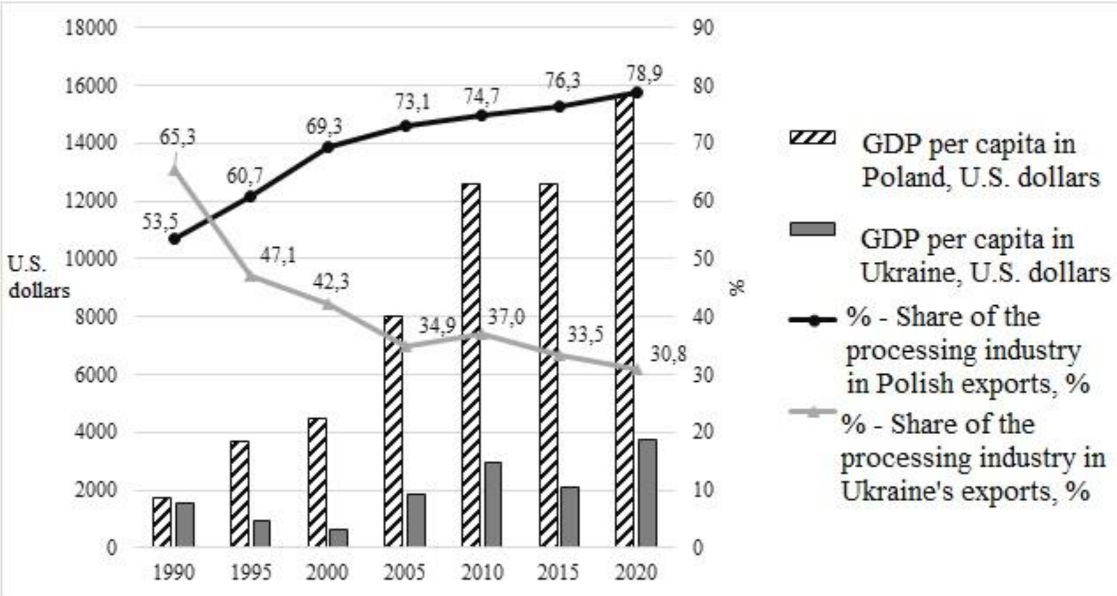

Fig. 2. Dynamics of GDP per capita and the share of processing industry in Polish and Ukrainian exports in 1990-2020
Source: Bank danych Makroeconomicznych, 2022; State Statistics Service of Ukraine, 2022.

The data in Figure 2 show that the decrease in the share of the processing industry in Poland's and Ukraine's exports affects the dynamics of GDP per capita. The decrease in the share of the processing industry in Ukraine's exports not only does not contribute to GDP per capita growth but indicates Ukraine's transformation into a raw materials appendage of the developed world. Moreover, under conditions of war with the Russian Federation, it is the excessive dependence on the export of agricultural raw materials through ports on the Black Sea that Ukraine has suffered significant export losses, especially affecting the volume of foreign exchange earnings amid panic on the foreign exchange market.

Choice of such strategic principles of economic development of Poland as the development of the processing industry and increase of state expenditures for the development of the country mobilizes macroeconomic policy and consolidates actions and decisions of authorities on the implementation of economic strategies. This can be confirmed by the results of the correlation analysis of the main indicators of the development of the Polish economy. Let us reflect our calculations with the help of a correlation matrix (Table 2).

Table 2.
Correlation matrix of macroeconomic indicators of Poland's development in 2004-2020

	GDP, $ billion U.S.	GDP per capita, U.S. dollars	State budget deficit, billion U.S. dollars	Capital expenditures, billion U.S. dollars	Capital expenditures + expenditures of EU funds, $ billion	Current expenditures, billions of U.S. dollars	Public debt, billions of U.S. dollars	Foreign direct investment	Coefficient of economic complexity	Index of economic freedom	Freedom of Investment
GDP, $ billion U.S.	1										
GDP per capita, U.S. dollars	0,9999	1									
State budget deficit, billion U.S. dollars	-0,0137	-0,0159	1								
Capital expenditures, billion U.S. dollars	0,7435	0,7472	0,0625	1							
Capital expenditures + expenditures of EU funds, $ billion	0,6283	0,6253	0,0109	0,7816	1						
Current expenditures, billions of U.S. dollars	0,9259	0,9237	0,0922	0,7987	0,8439	1					
Public debt, billions of U.S. dollars	0,9513	0,9500	0,2357	0,6939	0,5658	0,8962	1				
Foreign direct investment	0,3231	0,3330	-0,1111	0,3660	0,1487	0,2329	0,2651	1			
Coefficient of economic complexity	-0,5371	-0,5358	0,0080	-0,7057	-0,7458	-0,6450	-0,5026	-0,3344	1		
GDP, $ billion. U.S.	0,7370	0,7411	0,1338	0,4824	0,0915	0,4922	0,7568	0,3141	-0,1262	1	
GDP per capita, U.S. dollars	0,8392	0,8436	0,0559	0,5905	0,2810	0,6460	0,8174	0,3367	0,2608	0,9480	1

Source: The Word Bank, 2022; Bank danych Makroeconomicznych, 2022; Index of economic freedom (The Heritage Foundation, 2022); Country & Product Complexity Rankins (Atlas of economic complexity, 2020)

The data in Table 2 testify to a high level of correlation between the indicators of fiscal policy and such macroeconomic indicators as dynamics of GDP and GDP per capita. Thus, the relation of capital expenditures from the state budget of Poland, as well as capital expenditures including expenditures from the EU Funds with the dynamics of GDP (r=0,7435) and the dynamics of GDP per capita (r=0,7472) is comparatively significant, and this indicates the effective direction of public expenditures to achieve the development goals, which corresponds to the targets declared in the economic strategies.

The dynamics of current spending actually has a direct relationship with the dynamics of GDP (r=0.9259), which is quite natural, because the financing of consumer purposes also has a positive effect on the dynamics of GDP, but it should be noted that the effect of consumer spending is greater when the country has a large domestic market and developed industry, whose goods are the main object of purchase of public and private sector organizations and their employees. The main aspect in this context is the level of localization of public spending, characterized by the share of national production in public procurement.

Directing capital expenditures to development, in particular to the development of infrastructure, public procurement of goods from the national manufacturer, financing (subsidies, subsidies) of enterprises producing products with a high share of added value, allows to increase the coefficient of economic complexity, reflecting the level of diversification of the country's exports and its level of technological complexity The lower the value of this indicator, the higher the economic complexity of the country and, therefore, the impact on economic growth (r=-0,5371)

Public debt plays an important role in the economic development of Poland because with the help of debt financing the Polish government implements projects to develop economic infrastructure, which is the basis of economic growth.

Direct foreign investments, if we evaluate their dynamics, have an insignificant influence on GDP growth (r=0.3231), which is associated with frequent changes in the economic and political conjuncture in the European Union, which negatively affects the behavior of investors. However, in order to stimulate the inflow of foreign investments and to create conditions for the realization of domestic investment potential, the Polish government is actively working to increase economic freedom and freedom of investment. The data in Table 2 confirm the fact that the increase in the index of economic freedom (r=0.7370) and the index of investment freedom (r=0.8392) contributes to the growth of GDP and GDP per capita.

In contrast to Poland, most of the indicators of macroeconomic policy in Ukraine have a lower level of correlation with GDP and GDP per capita, which indicates a lower level of effectiveness of the implementation of the economic strategy (Table 3).

Table 3.
Correlation matrix of macroeconomic indicators of Poland's development in 2004-2020

	GDP, $ billion. U.S.	GDP per capita, U.S. dollars	State budget deficit, billion dollars. U.S.	Capital expenses	Ongoing expenses	Public debt, billion U.S. dollars.	Foreign direct investment	Coefficient of economic complexity	Index of economic freedom	Freedom of Investment
GDP, $ billion. U.S.	1									
GDP per capita, U.S. dollars	0,9854	1								
State budget deficit, billion dollars. U.S.	0,5358	0,5482	1							
Capital expenses	0,5742	0,5233	-0,0610	1						
Ongoing expenses	0,9499	0,9741	0,6673	0,3648	1					
Public debt, billion U.S. dollars.	0,3908	0,5247	0,4706	-0,1900	0,6220	1				
Foreign direct investment	0,4287	0,3169	-0,1860	0,6264	0,2113	-0,4300	1			
Coefficient of economic complexity	0,4073	0,5120	0,2940	-0,0908	0,5845	0,8401	-0,1357	1		
Index of economic freedom	-0,2391	-0,2056	-0,3646	0,3333	-0,3008	-0,2890	-0,0386	-0,3783	1	
Freedom of Investment	-0,0129	0,0149	-0,3258	0,4907	-0,0995	-0,1735	0,1677	-0,1882	0,8526	1

Source: The Price of the State (2022); World Development Indicators (The Word Bank, 2022); International economic activity and balance of payments (State Statistics Service of Ukraine, 2022); Index of economic freedom (The Heritage Foundation, 2022); Country & Product Complexity Rankings (Atlas of economic complexity, 2020).

As the data in Table 3 show, in contrast to Poland, capital expenditures of the state budget of Ukraine have a much lower level of correlation with the dynamics of GDP (r=0.5742), which is associated with more frequent economic crises and the war with the Russian Federation. Due to increased spending on anti-crisis policy and war financing, Ukraine does not have enough money to finance capital expenditures. For this reason, the highest relationship between the state budget deficit and the dynamics of GDP, which indicates the use of elements of deficit financing of economic growth (r=0.5358), but this growth is mainly based on the financing of current spending (r=0.9499).

In our opinion, the absence of clear strategic goals for the development of the processing industry and the direction of public expenditures to finance development goals is one of the main reasons for the ineffectiveness of the economic strategies of Ukraine at the macro level. Moreover, the absence of such goals directs public funding (subsidies, applications) to the development of raw material and the agrarian sector of the economy, which is also of raw material nature. In turn, the growing share of raw materials in the structure of Ukrainian exports leads to increased dependence of the Ukrainian economy on raw material cycles, and in accordance with the constant pressure on the currency and financial stability.

The reduction of economic complexity, its de-industrialization, and the reduction of the share of innovative products in the volume of industrial production leads to a decrease in the growth rate of GDP and GDP per capita, as the coefficient of economic complexity has an inverse relationship with the dynamics of GDP. It should be noted that the higher the value of this coefficient, the lower the level of economic complexity (r=0.4073).

Such declared goals of economic strategies in Ukraine as increasing the inflow of direct foreign investments are also not fulfilled, as in Ukraine there remains a rather large system of barriers and risks for foreign investors, which leads to the excess of migration capital over investment capital (Fig. 1). For these reasons, there is practically no correlation between the indicators of economic freedom (r=-0.2391), investment freedom (r=-0.0129) and the dynamics of GDP and GDP per capita.

Based on the conducted comparative analysis of the connection of macroeconomic indicators of Poland and Ukraine with the indicators of their economic development, as well as taking into account the list and content of strategic objectives and the effectiveness of their achievement, we notice the necessity of revision of the economic strategy of Ukraine, especially in conditions of post-war restoration of the state.

Thus, the main aspect of building the economic strategy of Ukraine should be a change of economic ideology on financing and development of the raw materials sector of the economy for the development of the processing industry with a high share of added value and innovation, as well as the direction of state funding for the development and restoration of the destroyed infrastructure.

Given this economic ideology, it is advisable to formulate appropriate strategic goals, conditions of strategy implementation, and mechanisms of financing strategic measures (Fig. 2).

Given the significant destruction of Ukraine's economic infrastructure and the cessation of activities of many enterprises that played an important role in creating GDP, the main goals of Ukraine's new economic strategy should be to restore post-war GDP volumes, restore infrastructure, and increase foreign direct investment. However, it should be noted that without the development of the real sector of the economy and support for national processing enterprises it is impossible to achieve rapid GDP growth because the creation of new and modernization of existing processing enterprises will lead to the creation of new jobs, an increase in high-tech exports, import substitution, and expansion of the domestic market.

Given the post-war state of the economy, Ukraine will have every right to postpone the implementation of the World Trade Organization requirements and introduce certain protectionist measures, chief among which should be the measure to increase the share of domestically produced goods in public procurement to 50% by 2025. Such a measure would be a good incentive for domestic producers, and therefore a goal of the new economic strategy.

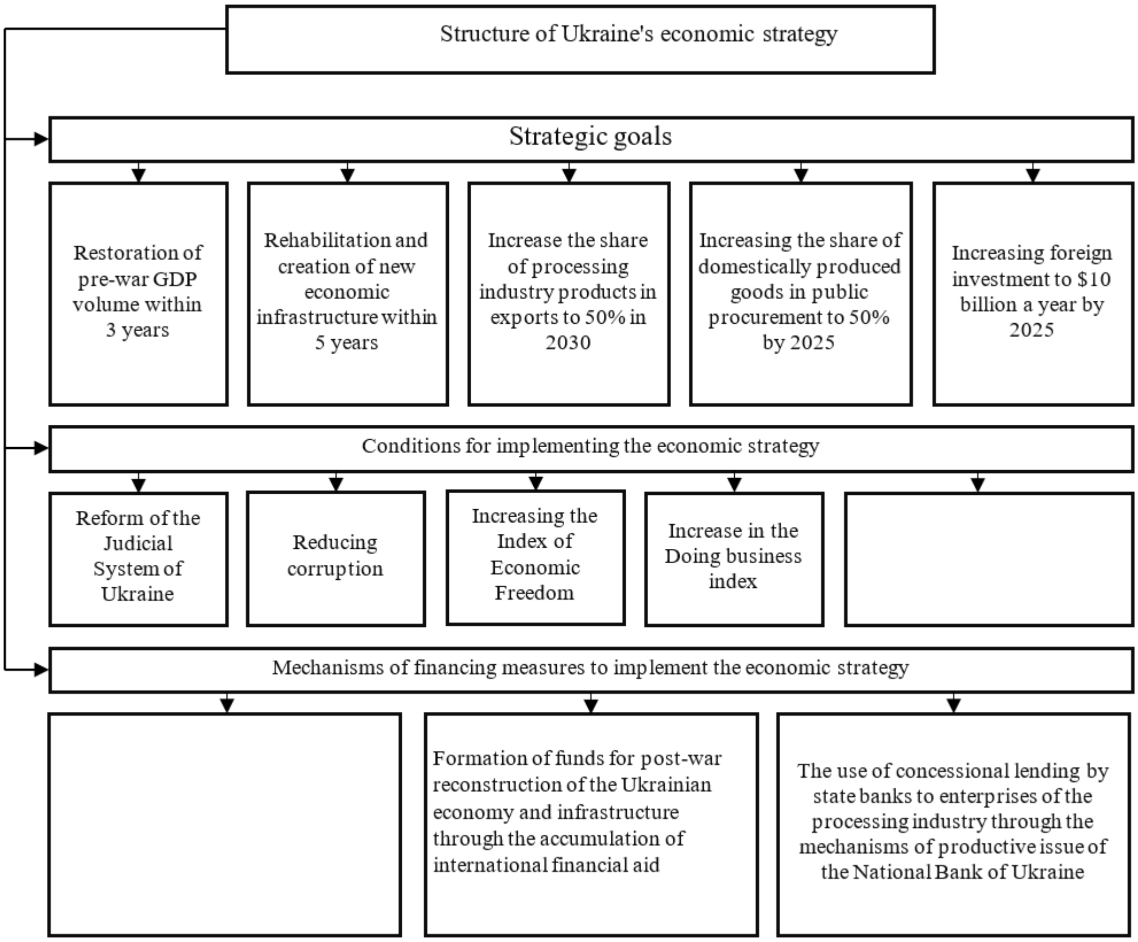

Fig. 2. *The structural and logical scheme of Ukraine's economic strategy*
Source: The author's own development

To really achieve the goals outlined in the strategy, it is important to create the conditions for the implementation of the strategy. In our opinion, one of the most important conditions for the implementation of the economic strategy is a judicial reform and the full launch of the Economic Security Bureau, which will ensure compliance with tax, customs, and antimonopoly legislation, reduce corruption in customs and other fiscal bodies. Such measures, in turn, will increase revenues to the state budget of Ukraine and will create conditions for increasing funding of state-targeted programs for economic development.

Raising the index of economic freedom and the index of Doing business is a necessary condition for increasing foreign investment because the components of these indices reflect the investment and business climate in the state and the protection of investor rights and property rights.

An equally important condition for the implementation of Ukraine's economic strategy is the legislative approval of the strategy itself and the personal and departmental responsibility for its implementation. This will avoid the declarative state program documents and increase the effectiveness of the macroeconomic policy of Ukraine as a whole.

The mentioned conditions for implementing Ukraine's economic strategy at the macro level are also necessary for the mesolevel, which includes oblasts and territorial communities because creating a positive investment and business climate and an effective legal framework will not only attract investors to the territorial communities but also increase the revenues to local budgets.

As for the mechanisms of financing measures to implement Ukraine's economic strategy, the mechanisms of fiscal and monetary policy should be used in the first place. Thus, on the fiscal plane, state budget expenditures for economic development should be based exclusively on the program-targeted method of financing, i.e., it is necessary to develop state-targeted programs for the development of priority economic sectors (for example, processing industry, processing agriculture) and infrastructure ("Big building" and so on). To finance such programs, a Keynesian approach can be used, involving an increase in the state budget deficit. At the same time, one of the options might be to raise public debt exclusively to finance state target programs.

Receiving assistance for the reconstruction of Ukraine's economy and infrastructure from foreign partners is also a significant funding mechanism, but in this context, it is important to ensure maximum transparency of the use of such funds and the patronage of foreign governments, organizations, enterprises over programs for the reconstruction of certain objects is necessary.

The participation of the National Bank of Ukraine in the process of implementing the post-war development strategy should be reduced not only to the direct redemption of government bonds as an instrument of emission financing of the state budget but also to an increase in the volume of productive emission. This emission should provide an increase in the volume of targeted refinancing loans to state banks under loan programs at concessional interest rates, directed to the enterprises of the real economy to finance their modernization, expansion of production capacity, and re-location.

In the context of the indicated objectives, conditions and financial mechanisms of Ukraine's macroeconomic strategy, economic strategies of meso- and micro-level should be developed. Thus, at the meso level, which includes the level of regions and united territorial communities, post-war economic strategies should be based on attracting international financial assistance, financial resources of regional development fund, and self-financing mechanisms.

The main goals of economic strategies at the mesolevel in Ukraine should be the restoration of infrastructure (or its improvement in those territories where there was no combat operations), increasing the living standards of the population, increasing the volume of investments, increasing the number of industrial enterprises, developing tourism, etc.

As for the mechanisms of financing measures to implement the economic strategy at the mesolevel, the most attention should be paid to the mechanisms of self-financing, which can be divided into two groups: 1) targeted programs and local budget benefits; 2) crowdfunding mechanisms.

Thus, we note that local budgets have different possibilities to finance local development projects because the financial capacity of communities is different; therefore, at the mesolevel, a special preferential tax regime for businesses can be implemented, which will provide for exemption from land tax in case of business registration in the united territorial community.

Given that both in 2014 at the beginning of the war with the Russian Federation and in 2022 during the full-scale invasion of Ukraine the volunteer movement was active, there is every reason to believe that organizing crowdfunding for community development projects is a promising idea. Crowdfunding as co-funding of development projects implies the possibility of involving not only residents of united territorial communities, but also residents of the entire country and the diaspora. At the same time, using crowdfunding platforms, such as the Community, it is possible to ensure not only advertising of the project, but also transparency of the use of funds.

As for the economic strategies of the microeconomic level in Ukraine, today they are actually aimed at the preservation of business and its relocation from the sites of hostilities and occupation. However, sooner or later the war will end, and already now firms should form goals to attract financial resources to modernize and expand business through participation in international grant programs, national financing projects, and concessional lending programs.

At the same time, Ukrainian firms should take advantage of the opportunities that will open up after the war is over, namely the projected increase in the flow of tourists to places of combat operations and military glory. Therefore, the development of services, logistics, and tourism is highly likely to be a priority for domestic businesses. In addition, economic strategies of the micro-level will depend on the international economic cooperation of Ukraine and the creation of certain regional politico-military and military-economic regional unions with Ukraine's participation, because in this case foreign trade barriers will be lifted, which will allow enterprises to increase exports of their products abroad, to attract innovation, etc. Consequently, the strategic goals of domestic enterprises will be to increase their competitiveness on the national and European markets, which will require meeting the standardization requirements of the European Union, using a blue ocean strategy in the context of igniting certain niches on the European market. The main advantage in the context of achieving the goals of increasing the competitiveness of enterprises is and will be in the short term a cheap labor force, given the impoverishment of the population as a result of the war.

Conclusions

The study of the economic literature on economic strategies of developed countries and firms, as well as a comparative analysis of strategic planning and policies to achieve the strategic goals of Poland and Ukraine, gives grounds to conclude that the basis of economic growth is a developed sector of processing industry based on the elements of scientific and technological progress. From these positions, the new economic ideology of Ukraine, which should be adopted during the war and implemented after its end, should be based on stimulation and support of industrial production with a high share of added value. After all, it is in the processing industry that a large number of jobs are accumulated, innovations are used, and fixed capital is accumulated. Besides, it is equally important to revise the policy of public expenditures allocated for development purposes, namely, to increase capital expenditures of the state budget for the development of economic infrastructure. At the same time, it should be noted that without creating the institutional conditions associated with reforms of the judicial system, reducing corruption, improving the investment and business climate, and the introduction of personal responsibility for the implementation of economic strategies certain strategic goals will not be achieved.

The post-war economic strategies of macro-, meso- and micro-level should also take into account the sources and mechanisms of financing of the strategy implementation, which in addition to funding from the state budget should use the funds of the National Bank of Ukraine in the form of targeted refinancing loans, and on the ground - crowdfunding mechanisms.

Realistic strategic goals, effective conditions, and financing mechanisms will allow to implement of the economic strategies of the post-war period and achieve economic development and prosperity in Ukraine.

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Organization of work of juvenile prevention units of the National Police of Ukraine

Організація роботи підрозділів ювенальної превенції Національної поліції України

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Abstract

Juvenile delinquency is a social problem faced by each country. Depending on the effectiveness of prevention work, citizens' levels, and social sense of security in each country differ. Juvenile prevention units are just beginning their practical activities in a new legal direction. The article aims to characterize the organization of the work of juvenile prevention units of the National Police of Ukraine. The object of the study is public relations in juvenile prevention. The subject of the research is the organization of work of juvenile prevention units of the National Police of Ukraine. The methodological basis of the study is general scientific and unique methods. Thus, dialectical, descriptive, system-structural, and comparative-legal methods and methods of induction and deduction were used. It is emphasized that the organization of the work of juvenile prevention units of the National Police of Ukraine is due to several factors. First, the system of juvenile prevention in general. Secondly, the legislative sources determine the general principles of juvenile prevention and its specific measures. Third, the structure of juvenile

Анотація

Злочинність серед неповнолітніх – це соціальна проблема, з якою стикається кожна країна, і в залежності від ефективності ведення профілактичної роботи її рівень та соціальне почуття безпеки громадян у кожній країні різняться. Підрозділи ювенальної превенції, тільки починають практичну діяльність у новому правовому руслі. Враховуючи значущість завдання з протидії злочинності неповнолітніх, вжиття ефективних і дієвим заходів підрозділів ювенальної превенції Національної поліції України є важливим та нагальним. Саме тому, метою статті є характеристика організації роботи підрозділів ювенальної превенції Національної поліції України. Об'єктом дослідження є суспільні відносини у сфері діяльності підрозділів ювенальної превенції. Предметом дослідження є організації роботи підрозділів ювенальної превенції Національної поліції України. Методологічною основою дослідження є загальнонаукові та спеціальні методи. Так, було використано діалектичний, описовий, системно-структурний та порівняльно-

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prevention units at the national and local levels. Fourth, the normative definition of the main tasks of juvenile prevention units.

Key words: prevention, juvenile prevention, crime, juvenile delinquency, units of the National Police of Ukraine.

правовий методи, а також методи індукції та дедукції. Наголошено, що організація роботи підрозділів ювенальної превенції Національної поліції України обумовлена кількома факторами. По-перше, системою ювенальної превенції в цілому. По-друге, законодавчими джерелами, які визначають загальні засади реалізації ювенальної превенції та її конкретні заходи. По-третє, структурою підрозділів ювенальної превенції на загальнодержавному та локальному рівні. По-четверте, нормативним визначенням основних завдань підрозділів ювенальної превенції.

Ключові слова: превенція, ювенальна превенція, злочинність, злочинність неповнолітніх, підрозділи Національної поліції України.

Introduction

Juvenile delinquency is a social problem faced by each country. Depending on the effectiveness of prevention work, citizens' levels and social sense of security in each country differ (Ilchenko, Gushcha, 2018). Given the complexity of the demographic situation in Ukraine and the current trend of increasing juvenile delinquency due to the imperfection of the crime prevention system among children, society faces the problem of systemic counteraction to such phenomena as child neglect, begging, drug addiction, and involvement of children in crime, on the other hand, child abuse and trafficking. This led to reform processes in the law enforcement units for children. If earlier the main direction of their activity was the fight against juvenile delinquency, which led to the place of criminal police in children’s affairs in the criminal police, today the Law of Ukraine “On National Police” prioritizes the preventive activities of such units. This led to the structural reorganization of the system of law enforcement units for children and the team's placement in the structure of the block of preventive activities of the National Police. The creation of juvenile prevention units (juvenile police) is due to the current emphasis on social rehabilitation of children of the so-called law enforcement risk, which will help restore their full social status, reduce social tensions in society and improve the health of the nation (Korolyuk, 2021). Juvenile prevention units are just beginning their practical activities in a new legal direction. Thus, the decision to establish a juvenile prevention unit within the National Police of Ukraine was made in August 2015 but remained uncertain for a long time. The order to develop the Juvenile Prevention Department was signed only in July 2017 and later in 2018. The departmental Instruction on the organization of work of these divisions of police came into force. Thus, the newly created unit has just started activities in protecting the rights and interests of children. The new formation of the unit’s activities is of scientific interest and requires an objective and comprehensive analysis and review of the regulatory framework governing the activities of juvenile units (Pisotska, 2020). Given the importance of combating juvenile delinquency, adopting effective and efficient measures by juvenile prevention units of the National Police of Ukraine is essential and urgent. That is why the article aims to characterize the organization of the work of juvenile prevention units of the National Police of Ukraine. The object of the study is public relations in juvenile prevention. The subject of the research is the organization of work of juvenile prevention units of the National Police of Ukraine.

Theoretical framework

The study's theoretical basis is the scientific works of Ukrainian and foreign scientists to determine the nature of juvenile delinquency in general and juvenile prevention. Young S., Greer B., and Church R. note that, in general, the term “juvenile offender” is widely used in the academic literature but requires some caution. This can be a potentially problematic term, and in some contexts, can strike a derogatory tone with deceptive negative assumptions. For several years, the UN has used the phrase “children in conflict with the law” to describe a diverse group of people under 18 who have broken the law or are at risk of doing so (Young, Greer, & Church, 2017).

Abdulgaziev R., Zhukova T., Sukhorukova A., Mamichev V., Arshinov A., & Alsultanov M point out that juvenile delinquency as an antisocial behavior is one of the problems, the solution of which largely depends on the correctness of the overall strategy to overcome it. Forensic scientists and practical law enforcement officers are of great interest in this issue and the public. This is primarily due to the psychological characteristics of the adolescent, which determine the possibility, in the case of a timely response to the criminal behavior of a minor, his re-education (Abdulgaziev, Zhukova, Sukhorukova, Mamichev, Arshinov, & Alsultanov, 2018).

Juvenile delinquency is a more general social phenomenon - crime in general; therefore, it is natural that it has all the meaningful features of the latter. However, juvenile delinquency is characterized by isolation, and study is the key to effective counteraction to such crime (Mozgova, 2014).

Regarding the concept of juvenile prevention, I. Ishchenko is convinced that adolescent prevention is a relatively separate (autonomous direction in the juvenile justice system) social and legal relations, which has its object of legal influence and the system of subjects that exercise this influence within the limits set by law. In addition, it is at the same time, first, an integral part of both social and anti-deviant policy of the state, and therefore is closely linked to such related institutions as social protection of families, children, and youth; secondly, preventive education, education, which together solve a set of general and special tasks for the protection of childhood, ensuring the rights of children and their legitimate interests (Ishchenko, 2017).

According to Parkhanov G., juvenile prevention is aimed at identifying and eliminating the causes and conditions that contribute to the commission of offenses by children, and also has a positive impact on the behavior of individual children in Ukraine, in its region, family, enterprise, institutions or organizations, regardless of ownership, place of residence and at the same time aimed at ensuring their rights and freedoms (Parkhanov, 2018).

Thus, juvenile delinquency is a particularly destructive phenomenon. It contributes to the formation and consolidation of deviant forms of behavior at the stage of forming a new personality. Hence, the state takes extraordinary measures to eliminate negative manifestations of juvenile behavior and resocialize. For example, adolescent prevention is widely used. We are convinced that such an approach is rational, especially in the humanization of penitentiary policy and the implementation of the principle of saving criminal repression.

The article analyzes the legal acts on the juvenile prevention system in Ukraine, outlines the role of the Interdepartmental Coordination Council for Juvenile Justice, defines the structure and powers of juvenile prevention units, and summarizes the practice of the police in juvenile prevention in foreign countries.

Methodology

The methodological basis of the study is general scientific and unique methods. Thus, available scientific methods, such as dialectical, were used to study the concepts of juvenile delinquency and juvenile prevention in the Theoretical framework. The descriptive process served to characterize the legal regulation of the juvenile prevention system in Ukraine and the essence of the Interdepartmental Coordination Council for Juvenile Justice. The induction method was used to develop a general conclusion to the article. Inextricably linked to induction is the deduction method, which was used to determine the main tasks of juvenile prevention units. The system-structural method provided an opportunity to study in detail the elements of the structure of the juvenile prevention units. In addition to general scientific methods, unique methods were also used, particularly the method of comparative jurisprudence - to outline the practice of police activities in juvenile prevention in foreign countries. The article contains links to 20 sources, including articles indexed on the scientometric basis of Web of Science, 8 normative references.

Results and discussion

Regulatory regulation of the juvenile prevention system in Ukraine

During the years of Ukraine's independence, considerable efforts have been made to update the legal system in Ukraine. In its modern format, the juvenile justice system began its development with the Decree of the President of Ukraine of May 24, 2011, № 597/2011, which approved the Concept for the Development of Juvenile Justice in Ukraine (Decree of the President of Ukraine

No. 597/2011, 2011). However, today there is no comprehensive legislative system of juvenile justice aimed at its regulation. There are only indirect legal acts in the country. First, international legal acts: 1) Convention on the Rights of the Child (United Nations, 1989), 2) Minimum standard rules concerning the administration of juvenile justice. "Beijing Regulations "(United Nations, 1985), 3) "Riyadh Guidelines "- United Nations Guidelines for the Prevention of Juvenile Delinquency, adopted and promulgated by a General Assembly resolution of December 14, 1990 (United Nations, 1990); "European rules on juvenile offenders subject to sanctions or measures" of November 5 2008 (Council of Europe, 2008). This document also reflects the rights and responsibilities of parents in the field of juvenile justice in the Recommendation Act of the Committee of Ministers of the Council of Europe addressed to the participating countries (including Ukraine).

Noteworthy are also domestic regulations: 1) The Constitution of Ukraine (Constitution of Ukraine, 1996) is the basis of the system and content of all sources of law in our country. In addition, it is the basis for the further development of law enforcement legislation in Ukraine. Based on its provisions, all other regulations governing the activities of the police of Ukraine are adopted. In carrying out their tasks, police units of juvenile prevention are guided by Art. 3 of the Constitution of Ukraine, according to which a person, his life and health, honor and dignity, inviolability, and security are recognized as the highest social value. Juvenile prevention units perform their duties according to the provisions of Art. 19 of the Constitution of Ukraine are obliged to act only on the basis, within the powers and in the manner prescribed by the Constitution and laws of Ukraine, and no one may be forced to do what is not provided by law. Another legal basis for the work of juvenile police is to ensure equal constitutional rights and freedoms of children. Yes, following Art. 24 of the Constitution of Ukraine, no one may have privileges or restrictions on the grounds of race, color, political, religious and other beliefs, sex, ethnic and social origin, property status, place of residence, language, or other characteristics.

Interagency Coordination Council for Juvenile Justice

Following the Resolution of the Cabinet of Ministers of Ukraine of May 24, 2017, № 357 (Resolution of the Cabinet of Ministers of Ukraine № 357 of May 24, 2017) in Ukraine established the Interdepartmental Coordination Council for Juvenile Justice (in the future - Interdepartmental Coordination Council), which is a temporary advisory body of the Cabinet of Ministers of Ukraine, established to introduce an inter-institutional platform for systematic discussion and resolution of problematic issues of juvenile justice, making agreed decisions that meet the interests of the child. The Interdepartmental Coordination Council included representatives of the Ministry of Justice, the Ministry of Social Policy, the Ministry of Internal Affairs of Ukraine, the Ministry of Education and Science of Ukraine, the National Police, the Presidential Commissioner for Children's Rights, the Verkhovna Rada Commissioner for Human Rights, and the Prosecutor General's Office organizations whose activities are aimed at protecting the rights of children. One of the main tasks of the Interdepartmental Coordinating Council is to promote coordination of executive actions to ensure the development of policies and practices that meet international standards for the interests of juveniles who have committed a crime, become a victim, or witness of crime. A working group established within the framework of the Interdepartmental Coordination Council has prepared a draft Law of Ukraine "On Child-Friendly Justice" (Draft Law on Child-Friendly Justice № 5617, 2021).

The structure of juvenile prevention units

At the level of the staff of the central police body, the Department of Preventive Activities of the National Police of Ukraine has been established to perform the main tasks of crime prevention, including among children, which should be considered a specialized subject of prevention. The structure of the Department of Preventive Activities of the National Police of Ukraine includes the Department of Juvenile Prevention. In addition to this department, juvenile prevention units have juvenile prevention units of the leading departments of the National Police in the Autonomous Republic of Crimea and Sevastopol, oblasts, and Kyiv, as well as juvenile prevention units territorial (separate) units of the National Police. At the regional and local levels, juvenile prevention units operate as structural units of prevention departments (sectors) of the Main Directorate of the National Police. Thus, juvenile prevention units have a clear structural structure, which contributes to the effective implementation of tasks to prevent delinquency among children (Nazar, 2020).

The main tasks of juvenile prevention units

Currently, the state aims not to punish a minor but to ensure his correction and prevent him from committing new offenses. That is why the vector of crime prevention has been shifted towards prevention. In particular, the main tasks of juvenile prevention units are: preventive activities aimed at preventing children from committing criminal and administrative offenses, identifying the causes and conditions that contribute to this, taking measures within their competence to eliminate them; keeping preventive records of children prone to committing crimes and conducting individual prevention measures with them; participation in locating a child in case of his / her disappearance or obtaining data for this purpose within the criminal proceedings opened on the fact of his / her disappearance, taking measures to prevent and counteract domestic violence against and against children, as well as child abuse; taking measures to prevent child neglect, including police care for minors; carrying out activities related to the protection of the child's right to general secondary education; interaction with other units of the National Police of Ukraine, public authorities and local governments on ensuring the rights and legitimate interests of children; implementation within the competence of pre-trial investigation of criminal offenses in the form of inquiry (Order of the Ministry of Internal Affairs of Ukraine № 1044, 2017).

The practice of the police in the field of juvenile prevention in foreign countries

For example, in France, the functions of preventive work with children are performed by specialists of juvenile delinquency prevention teams, specialized units of the French gendarmerie. The brigade consists of personnel (from 5 to 7 gendarmes) who have special communicative and psychological approach skills to minors. Such teams are involved in preventing juvenile delinquency and assisting children who have themselves become victims of crime or find themselves in a difficult situation. Specialists of the brigades practice independently or help other units with minors, work together with a social worker of the departmental gendarmerie of the "Gard" group, and with medical and judicial police service psychologists. Gendarmes of these units work in close contact with the social services of the district, teachers, and administration of educational institutions, parents, intervene in incidents of violence in schools, families; explain the risk factors of communication technologies (GSM, Internet, social networks), alcohol, drug use, theft, extortion; conduct interviews with children who have committed offenses or become their victims, witnesses, provide explanations on the progress of the investigation, give legal advice. Juvenile crime prevention brigades are atypical units of the gendarmerie (repressive methods of work dominate other services), whose primary mission is to be attentive to young people, to help them. It is also a team of professionals who help parents who are sometimes helpless due to the multifactorial problems that affect their children. It can be stated that the given model of organization and tasks of special police units is like the modern Ukrainian version of juvenile prevention units (Veselov, 2018).

The Swiss police work closely with the schools with which cooperation protocols are signed. According to this protocol, the school is obliged to make every effort to carry out preventive work with adolescents who conflict with the law and only then contact the police. In addition, the school is obliged to systematically remind children of the rules of conduct, in legal terms - to conduct legal education of children. Regular meetings with the school administration are held by the L'ilotier district inspector, who wears neither uniforms nor weapons and whose work is mainly focused on gathering information. In addition to these regular meetings with the administration, according to the protocol, the inspector has the right to attend school only in three cases: a) prosecution of the offender; b) legal investigation (investigation of a crime committed on the territory of the school); c) to conduct prevention lessons at the beginning and end of the school year (general prevention) (Muranenko, 2019).

In the case of a minor offense, the U.S. police are in many cases limited to counseling (conducting a preventive interview) and releasing the offender. Law enforcement officers have significant discretion in communicating with minors. They have several alternatives for making decisions such as: removing a child with a warning (rather an oral remark) or without it, but without making an official record for further action; releasing the child, but describing in detail the short-term contact or sending a report (report) to the children's service, informing about the incident; remove the child, but submit a more formal notice to the juvenile service for effective action; to send a minor immediately to the juvenile service; refer the case directly to the court through a district or district attorney (Lawrence & Hess, 2009).

Conclusions

Summarizing the above, it should be emphasized that the organization of the juvenile prevention units of the National Police of Ukraine is due to several factors. First, the system of juvenile prevention in general. Secondly, the legislative sources determine the general principles of juvenile prevention and its specific measures. Third, the structure of juvenile prevention units at the national and local levels. Fourth, the normative definition of the main tasks of juvenile prevention units, in particular, preventive activities aimed at preventing children from committing criminal and administrative offenses, identifying the causes and conditions that contribute to this, taking measures within their competence to eliminate them; keeping preventive records of children prone to committing offences and conducting individual prevention activities with them; participation in establishing the whereabouts of a child in the event of his or her disappearance or obtaining data for this purpose within the framework of criminal proceedings opened on the fact of his or her disappearance; taking measures to prevent and combat domestic violence against and against children, as well as child abuse; taking steps to prevent child neglect, including police care for minors; carrying out activities related to the protection of the child's right to general secondary education; interaction with other units of the National Police of Ukraine, public authorities and local governments on ensuring the rights and legitimate interests of children; carrying out within the competence of pre-trial investigation of criminal offenses in the form of inquiry.

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Variety and action of soil microorganisms in diverse Ukraine climatic zones

Diversidad y actividad de los microorganismos del suelo en diferentes zonas climáticas de Ucrania

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Abstract

The study aims to summarize the important results of the long-term studies of soil microorganisms: structure, interaction, functioning, activity, and diversity in the main types of soils in different natural and climatic zones of Ukraine.

Methods for the study are the generalization and analysis of literary sources and scientific papers, and materials, as well as our own research. The initial information for the assay's calculations, matheanalysis were the resokution of many year discovering of soil microorganisms in the period 2005-2021.

The researches have shown a powerful action and diversity of soil microorganisms of the ecosystems. The Chernozem of the Steppe zone was characterized by a more stable and balanced structure of microbiocenosis, processes of mineralization-immobilization, decomposition of organic matter, and humus accumulation than the sod-podzolic, forest soils of Polesie.

Studies of soil microbiome showed a direct correlation between natural conditions and soil treatment methods and the activity of microbiocenoses, a decrease in the biodiversity of bacterial groups through the use of plowing. The increase in the proportion of micellar organisms occurred with the prolonged application of mineral fertilizers.

Keywords: ecosystem, microbiome, biodiversity, soil microorganisms, microbiocoenosis.

Resumen

El objetivo del estudio es resumir los resultados importantes de los estudios a largo plazo de los microorganismos del suelo: estructura, interacción, funcionamiento, actividad y diversidad en los principales tipos de suelos en diferentes zonas naturales y climáticas de Ucrania.

Los métodos para el estudio son la generalización y el análisis de fuentes literarias y documentos científicos, materiales, así como nuestra propia investigación. Los datos iniciales para el análisis, los cálculos y el análisis matemático fueron los resultados de los estudios plurianuales de los microorganismos del suelo en el período 2005-2021.

Los resultados del estudio mostraron una alta actividad y diversidad de los microorganismos del suelo de los ecosistemas. El Chernozem de la zona esteparia se caracterizaba por una estructura más estable y equilibrada de la microbiocenosis, de los procesos de mineralización-inmovilización, de la descomposición de la materia orgánica y de la acumulación de humus, que los suelos forestales de Polesie.

Los estudios del microbioma del suelo mostraron una correlación directa entre las condiciones naturales y los métodos de tratamiento del suelo y la actividad de las microbiocenosis, una disminución de la biodiversidad de los grupos bacterianos por el uso del arado. El aumento de la proporción de organismos micelares se produjo con la aplicación prolongada de fertilizantes minerales.

Palabras clave: ecosistema, microbioma, biodiversidad, microorganismos del suelo, microbiocenosis.

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Introduction

Soil is an important component of the ecosystem for the development and activity of many species of microbiocenoses. The quality of soil depends directly on the diversity of the species composition of the microbiome as well as its activity. Soil microorganisms take part in all stages of humus formation, from the decomposition of plant residues to the creation of simple humic acid compounds and their gradual transformation directly into soil humus. Microbiota are also involved in the processes of humus degradation and renewal of soil structure. The biological activity of soils in turn determines their ecological condition and fertility.

At the present stage of development of agrotechnologies more and more increased attention is being given to study of the potential of soil's microbiome. Active microbial structures carry out various processes of decomposition of organic matter, the transformation of elements, as well as the processing of nutrients required for crop development. Depending on the zone of climat, also soil sort in the convert environment, significant changes can occur in the construction and variety of the ground's microorganisms because of the using certain agronomic impacts.

Despite the rather urgent topic of research, there is still no clear understanding of the mechanism of interaction of soil microbes with the environment, other organisms, as well as with the impact on their development of specific soil treatment methods.

Generalization of a scientific research study of soil microbiota functioning, its structure, interaction, activity, and diversity creates a research basis for understanding the interaction of ecosystems, which are made possible by a clear consideration of the role of soil microbes.

Research Focus

Many scientific works are devoted to the study of the processes of functioning of microbial diversity of soils, but studies of microbial resources of soils in Ukraine are quite rare.

That is why rigorous and exhaustives crutiny of the fundamental regularities of organization microorganisms groupings, functional action which depend on the natural, climatic zone, also the applied agrotechnical methods of soil treatment, as well as the degree of land pollution due to anthropogenic impact, especially in the context of Ukraine, as one of the largest suppliers of agricultural products.

Research Aim and Research Questions

Study aim – generalization of significant outcomes of prolonged studies ground microorganisms: formation, interplay, activity, multiformity in the basic soil's sort in any kind native and Ukrainian climatic zones.

To achieve the goal, the following tasks were defined:

- analysis of modern scientific studies of soil microbiota functioning, its structure, interaction, activity, and diversity;
- analysis of the calculated results of long-term soil's analysis of microorganisms in stady field of assays of the National Academy of Agrarian Sciences of Ukraine (2005-2021);
- assessment of the variety and action of ground microorganisms in various native and Ukrainian climatic zones: Steppe, Forest-steppe, Polesie;
- formation of conclusions on the interaction of soil microbes with the environment, with other organisms, as well as with the influence of specific tillage methods on their development.

Literature Review

Soils are the natural physical covering of the earth's surface and the unique foundation of all terrestrial ecosystems, capable of producing the resources necessary for the development of all alive microorganisms. Soil biome are involved in many biogeochemical processes and are responsible for the mineralization of organic matter, the cycle of elements, synthesis of proteins and nucleic acids, and conversion of forms of nitrogen, phosphorus, other nutrients, making them available to vegetation (Furtak & Gajda, 2018). The most active component of the soil biocenosis are microorganisms (bacteria, archaea, fungi, etc.), whose maine role in soil ecosystems. Condition of the soil environment, in addition to soil activity, is related to the diversity of soil microorganism (Fazekašová & Fazekaš, 2019). The presence, diversity, and activity of microorganisms depends on the chemical composition, moisture, pH, and soil structure. The vital action of soil microorganisms affects the processes of biomass decomposition, biodegradation of impurities, which will support soil structure, the cycle of nutrients and nutrients that become available to plants and animals (Demyanyuk et al., 2020). Microbiological aspects of soil fertility are extremely important traits, but they are often underestimated or neglected altogether. Some symbiotic microorganisms have a lead positive effect on crop productivity by increasing the bioavailability of nutrients. Baliuk et al., (2017) cite three sources of fertility associated with microbial activity: mineralization of organic residues; involvement in the biological cycle of chemical elements from minerals; and biological nitrogen fixation It is well known that an important function that occurs due to soil microorganisms is the degradation of organic matter into simpler molecules. Thus, up to 90% of degradation processes are carried out by bacteria and fungi (Głodowska & Wozniak, 2019). Microbial communities play a main role in the nitrogen cycle, mediate nitrogen fixation, influence the processes of denitrification and nitrification of soil (Aislabie et al., 2013). Ukraine has very favorable conditions for agricultural production, so more than 68% of its territory is occupied by agricultural land, which is several times higher than in developed countries of the world. Therefore, particularly negative ecological effects such as soil depletion and changes in microbial diversity and microbiome structures are created, proving the study (Symochko, 2020). Scientific papers by Chen et al., (2020) and Ukrainian researchers Alyokhin et al., (2020) on soil microorganisms show that cultivation, fertilization, and pest control have a significant impact on the physical and chemical parameters of soils and, as a consequence, on the functioning of soil microbiota. Changes in the direction of biogeochemical cycles of biophilic elements, the content, and composition of organic solutions, soil density structure, air and irrigation regime etc., lead to changes in the number, action and diversity, activity of soil microorganisms. Reduced activity or death of soil microbiota reduces the availability of nutrients in the soil. Therefore, an assessment of soil diversity and microbial activity is critical to determining the application of tillage technology (Balanovska et al., 2021). Agro-technology used in tillage can affect soil microbiocenosis directly or indirectly through changes in physicochemical parameters of microclimate and carbon release, reorganization of microbial group composition, and functional activity, as evidenced by studies (Auffret et al., 2016, Qamar et al., 2018). Crowther et al., 2019). Structure of the soil microbiome, activity, and microbe community diversity are sensitive indicators of soil property. Changes in microbial activity and reduction in individual microbiota species can affect plant vegetation and yield, and this has been noted in scientific papers (Yang et al., 2018; Wakelin, 2018; Liu et al., 2020). For example, scientists Nannipieri et al., (2020) and Jezierska-Tys et al. (2020) in their works noted the soil's skill to execut its acts directly relies on the biological activity of soils, the reduction in any group of microbiota species affects the overall processes in the soil. The stability of the structure of soil microorganisms is important for the activity of processes in grouds. A change in any soil function decreases it is and value, ability and quality to provide agrocenosis fertility (Jacoby et al., 2017; Looby & Martin, 2020). Soil fertility management has been studied by Meliani et al. (2011), Bertola et al. (2021), Cusumano et al. (2022). Their works have proven that fertility control is the management of the microbiological processes that occur in it. Unfortunately, there have been few studies by van der Bom et al. (2018), Martin et al. (2019), Weng et al. (2021) quantifying useful relationships between microbial diversity and soil and plant activity and quality, and ecosystem resilience. The soil microbiome of Ukraine has been studied by a small number of scientists such as Demyanyuk et al., (2020), as well as Tsyuk et al., (2018), Illienko et al., (2021). Patyka et al., (2019) and a group of scientists studied the functioning of microorganisms in the Steppe of Ukraine. Their scientific papers indicate that ecosystem functioning is mainly regulated by soil microbial dynamics. Therefore, it is necessary to generalize the results of studies of soil microbiome and detailed full tests of the main regularities of formation of microorganisms groupings and their functional action based on agrarian methods and factors.

Methodology

The study was based on the analysis of literary sources and scientific papers and materials, as well as our own research. The initial data for the analysis, calculations, and mathematical analysis were the results of many year reserching of soil microbiome in the stady field of assays of theNational Academy of Agrarian Sciences of Ukraine (2005-2021).

The following research methods were used: analytical, abstract-logical, monographic, expert.

Results and Discussion

From north-west to south-east Ukraine soils can be divided into three large aggregations in different natural-climatic zones: a Polesie - sandy podzolized soils, the central of Ukraine includes of black very rich harvest chernozems, Steppe – brown forest and saline grounds.

In the Steppe and Forest-steppe zone formed unique fertile soils, 60% of which occupy - chernozems. They are the main means of production in agriculture and forestry and the main source of crop production. Forest steppe is covered with podzolized typical chernozems, which contain up to 9% of humus, and the land structure is well-drained with water and high fertility. In the northern strip of the Steppe - ordinary chernozems (4 - 6 % of humus), and in the middle strip - southern chernozems (3 - 4 % of humus) (National atlas of Ukraine, 2009). The taxonomic construction of the microbiocenoses after analysis showed that the soils give for natural environment, and defined like a sustainable proportion of microbes (streptomycetes, myxomycetes) For common chernozem - 94%: 4.5%: 1.1%, brown forest - 77.0%: 16.1%: 7.0%, gray forest - 82.9%: 15.3%: 1, 8%, sod-podzolic - 77.2%: 20.3%: 2.5%, respectively. Bacteria are usually found in soils rich in organic nutrients, whereas relatively high numbers of saprophytic fungal groupings tend to increase when soil fertility decreases Illienko et al.(2021) The results of Demyanyuk et al. (2020) showed that the impact of agricultural activities on soil microbiota was most pronounced in the brown forest, podzolic, and gray forest soils of Polissia Ukraine. The total pool of soil microorganisms ranged from 7.4 million to 5.4 million CFU/g in natural ecosystems and from 3.7 million to 2.8 million CFU/g of dry soil in transformed ecosystems. Prolonged cultivation of unfertilized crops resulted in a 2.2-fold to 4.5-fold decrease in the total pool of microorganisms. The composition and number of microorganisms are closely related to the environment of their existence and the depth of the studied soil layer. In the studies of Beznosko et al. (2022), different phytocenoses changed the activity index of soil microorganisms of typical chernozem, which was less manifested in the root-bearing layer of soil (0-5 and 5-20 cm) and was more pronounced in the 20-40 cm layer (Figure 2).

The biogenicity of typical chernozem within the root-containing 0-5 cm layer was 1.5-3.5 times higher than grounds depth in 0-40 cm and was defined by the lowest values in the arable and the highest in the forest belt and fracture. It is predicted that this is due to the activation of soil processes due to grassing and the presence of significant biomass of plant residues in the forest belt. In the 5-20 cm layer, the increase in the number of soil microbiomes was influenced by water-air and temperature regimes in addition to the inflow of plant biomass.

The number of microorganisms in the 20-40 cm layer was 1.5-2.0 times less compared to the 5-20 cm layer, except for the forest belt variant, where the difference is 1.25 times. On depth 0-40 cm soil layer the maximum biofillic was in the line of forest variant, where the indicator arrived 38,9 mln./year and then in descending order - 30,98 mln./year of the virgin soil, 29,8 mln./year of the arable land, 27,1 mln./year of the swidden land, 24,2 mln./year of the mown virgin land. Plowing of virgin lands and additional oxygen supply lead to an increase of microorganisms activation.

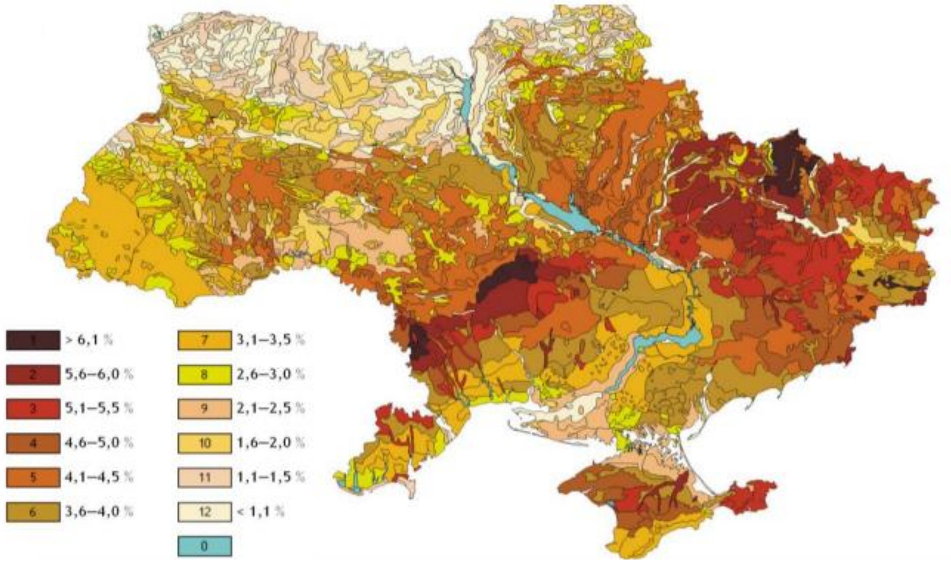

Figure 1. Humus content of soils of Ukraine (National Atlas of Ukraine, 2009)

Without sufficient organic matter in the form of plant residues and fertilizers, the nutrient medium for the soil microbiome is the decomposition of humus (Kosovska et al., 2022).

The population of soil microorganisms depends not only on the of soil's kind but also on the depth and type of vegetation cover. This is shown by the results of a study (Meliani et al., 2011). Soil specimens were collected from different levels of ground (5-10, 10-15, and 15-20 cm), they was formed from 30 various sites (randomly) of sod-podzolic soil. The exampls were tasted for pH, chemical composition, and soil structure. The ecological qualities of the researched soil presented in Table 1.

Table 1.
Ecological characteristics of the soil under study (Meliani et al., 2011)

Soil type	Sampling depth, cm	Plant	Ground temperature, ◦C	Average annual precipitation, mm
Chernozem	495 m for all samples	Vicia spp. (C1-C2-C3) Triticum spp. (C4-C5-C6) Lens spp. (C7-C8-C9)	16,50	46,00
Grey forest	710 m 695 m 670 m	Pinus spp. (C10-C11-C12) Asphodelus spp. (C13-C14-C15) Tamarix spp. (C16-C17-C18)	16,00	19,00
Sod-podzolic	710 m 695 m 670 m	Triticum spp. (C19-C20-C21) Cirsium spp. (C22-C23-C24) Hordium spp. (C25-C26-C27)	19,00	25,00

Soil types influenced the activity of microorganisms in ground. The maximum fungal was noted Triticum spp. density, rhizosphere (1.35x109 CFU/g) at the depth (0-5 cm), and the minimum for Vicia spp., rhizosphere (1.8x109 CFU/g) (10-20 cm). Actinomycetes showed a maximum of 1.98x1010 CFU/g in Triticum spp., rhizosphere (5-10 cm), and a minimum of 1.8x109 CFU/g in Vicia spp., rhizosphere (10-20 cm). Studies by Bertola et al. (2021), and Cusumano et al. (2022) also confirm that the diversity and abundance of soil microorganisms can be strongly influenced by some abiotic and biotic factors, such as the type of agriculture.

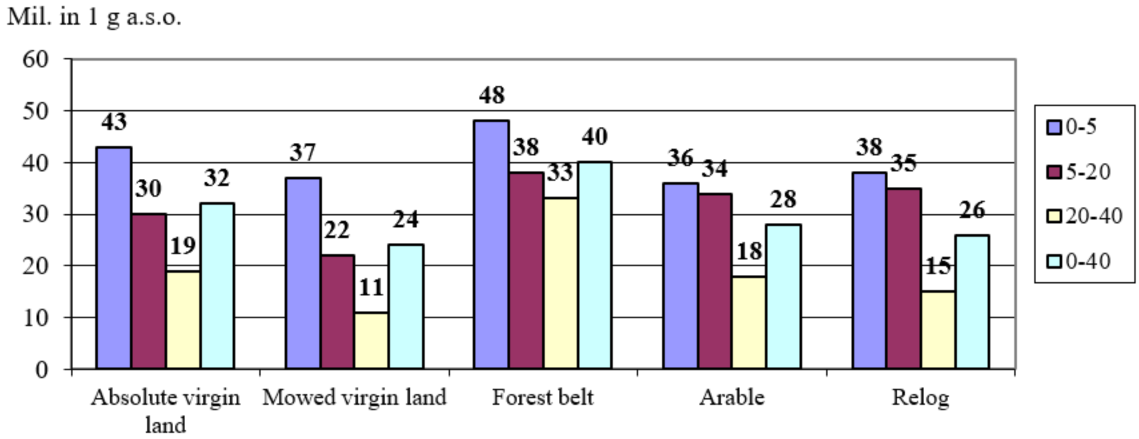

Fig. 2. Numbers of the microbiota of typical chernozems in different agrocenoses

Table 2.
Numbers of microorganisms in the area contaminated by radiation (Illienko et al., 2021).

Pollution dose rate, μG/year	Organisms assimilating organic N, mln/y	Organisms assimilating mineral N, mln/y	The number of microorganisms, ths./y
0,2	3,754 ± ,192	2,155 ± 0,145	935,5 ± 25
1	6,550 ± 0,435	1,002 ± 0,102	285,1 ± 15
1,57	2,115 ± 0,285	7,855 ± 0,525	2215 ± 195

Table 2 shows outcome results of the number of microorganisms in the contaminated area. The result of sowing on the contaminated soil showed the highest number of colonies of microorganisms, points with an index of 1.57 μG/h (the highest level of contamination with radionuclides) about 2215 thousand / g are highlighted. On the radioactively contaminated soils in the points with a higher level of contamination with radionuclides decrease of the content of humus substances in the soil was observed, which was combined with the increase of activity and increase of the number of soil microorganisms.

The depth of transformation and aeration of the soil major affects to activity of the soil microbiome. Inputs of organic fertilizer provide a positive influence on the establishment of micro-populations. As deep of ground increases, organic solutions, aeration content redoctions as microbial community decreases. It shows that the soil's upper layer is productive for microbial population because a favorable terms is created for their development.

Studies by Patyka et al. (2019) cheked that on soil layer in depth 0-40 cm, the maximum bioactivity was characterized by the forest belt variant, where the index obtained 39.8 million CFU/h, due to the input of a major total of plants remains, followed in descending: absolute virgin soil (31.0 million CFU/h), arable (29.5 million CFU/h), overgrowth (26.2 million CFU/h), mowed virgin (23.1 million CFU/h).

Analis of biological and also molecular components of eubacterial community of steppe and steppe chernozems showed a major superiority of untreatment bacterial variety in the "absolute virgin land" variant (up to 68%) compared to the "arable land" variant (up to 17%).

Researching of diversity of prokaryotic complex of chernozems revealed a reduce in the biological variety of bacterial groups when plowing was applied.

The modern agrarian soil treatment uses chemical fertilizer, which limits the use of organic one. As a result – soil microbes are malnourished, and their rise stops, which in turn leads to an imbalance of environment, deterioration of its structure and soil richness. To restore the balance of the microbiocenosis, it's needed to assure the introduction of organic compounds into the ground, loosen the soil mass, ensure optimal soil moisture, reduce the impact of heavy agricultural machinery, reduce the use of chemicals in land treatment, and use natural sources of manure. These measures are aimed at balancing and restoring a high population, diversity, with soil's microbiome mobility.

Conclusion

Soils of natural ecosystems of Ukraine are describe by a elevated microorganisms contant with well-balanced organization and big species variety. Also ukrainian soils are well done transformation and mineralization of organic substance.

The taxonomic structure of microbiocenosis has shown that soils of the natural ecosystems of Ukraine are defined like a sustainable proportion of microbes (streptomycetes, myxomycetes). For the common chernozem - 94%: 4.5% brown forest - 77.0%: forest soil (grey) - 83.1%: 15.25% sod-podzolic - 77.2%: 20.3%. Ukrainian chernozem was characterized by high stability and phylogenetic diversity of soil microbial biogeny of typical chernozem within the 0-5 cm layer is 1.5-3.5 times higher than in the 0-40 cm layer. The considerable influence of agricultural activity on soil microbe is tested in soils with lower content of microbial substance. The high level of microbial diversity and the complex structure of relationships give more opposition, resistanceof the microorganisms in soil to negative conditions caused by human-induced influences.

Types of soils of Ukraine influenced the activity of microorganisms from the ground. The biggest solidity of fungi was noted in Triticum spp. – ($1.35x10^9$ CFU/g) at the depth (0-5 cm), and the lowest - in Vicia spp., ($1.79x10^9$ CFU/g), at the depth (10-20 cm). Actinomycetes was the highest $1.98x10^{10}$ CFU/g in Triticum spp. at the depth (5-10 cm) and the lowest of $1.8x10^9$ CFU/g in Vicia spp., at the depth (10-20 cm).

Most of the territories of Ukraine are under the influence of anthropogenic factors from intensive land cultivation, cattle breeding, hay stocks, etc. On average in the soil layer (0-40 cm) the maximum bioactivity was in the test from the forest line - index obtained 39.8 mln CFU/h, which is connected with the ingress of the considerable quantity of the plant remains, further in the downward line of descent.

The result of sowing on the contaminated soil of Polesye showed the most colonies of microorganisms at 1.57 μg/h, about 2215 thousand CFU/h. On radioactively contaminated soils we observed a reduction in the repletion of humus substances in the ground, which was combined with an increase in the activities and abundance of microbiome.

Consequently, regardless of the climatic zone of Ukraine and soil type, important alterations in the formation, difference of the soil microorganisms were detect in the transformed ecosystem as a result of agricultural measures.

Due to changes in climatic conditions, aggressive farming methods, use of chemical fertilizers and pest control agents, soil contamination with heavy metals and radiation, losses of organic matter, and changes in the natural micro biodiversity occur. All of these factors affect soil microbes, so the interpretation of field data from scientific studies of soil properties becomes more difficult, especially when several factors are involved that affect association of microorganisms. Onward discovering is require to confirm the complex action of these factors.

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Social assistance and psychological counseling in Ukraine against the backdrop of Russian armed aggression

Asistencia social y asesoramiento psicológico en Ucrania en el marco de la agresión armada rusa

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Abstract

The work aims to analyze the specifics of social assistance and psychological counseling against the background of the spread of the Russian-Ukrainian war. The object of the work is psychological aid to servicemen, children, internally displaced persons, and general peculiarities of psychological counseling development in Ukraine against the background of Russian aggression. The work uses general scientific methods of research: axiological, comparative, historical, systematic, and others. The results consider the structural changes in relation to psychology and the organization of psychological help that took place in Ukraine after 2014. Particular attention is paid to the coverage of the peculiarities of assistance to children affected by war. Active hostilities affect the disruption of children's habitual life: they begin to experience fear, anxiety, and despair at the level of adults. Such

Resumen

El objetivo del trabajo es analizar las particularidades de la asistencia social y el asesoramiento psicológico en el contexto de la propagación de la guerra ruso-ucraniana. El objeto del trabajo es la ayuda psicológica a los militares, los niños, los desplazados internos y las peculiaridades generales del desarrollo del asesoramiento psicológico en Ucrania en el contexto de la agresión rusa. El trabajo utiliza métodos científicos generales de investigación: axiológico, comparativo, histórico, sistemático y otros. Los resultados consideran los cambios estructurales en relación con la psicología y la organización de la ayuda psicológica que tuvo lugar en Ucrania después de 2014. Se presta especial atención a la cobertura de las peculiaridades de la asistencia a los niños afectados por la guerra. Las hostilidades activas afectan a la alteración de la vida habitual de los niños: empiezan a experimentar

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conditions need correction by specialists. The paper also considers the problem of support for servicemen - veterans of the Russian-Ukrainian war. It is concluded that since the beginning of the full-scale Russian offensive (February 2022) there has been an urgent need for psychological help for many categories of the population: internally displaced persons, children, servicemen. It is noted that Russian aggression has changed the system of psychological assistance, in particular, due to the involvement of certain American models of psychological rehabilitation.

Keywords: psychological help, social adaptation, counseling, the war in Ukraine.

miedo, ansiedad y desesperación al nivel de los adultos. Estas condiciones necesitan ser corregidas por especialistas. El documento también considera el problema del apoyo a los militares - veteranos de la guerra ruso-ucraniana. Se concluye que desde el comienzo de la ofensiva rusa a gran escala (febrero de 2022) ha habido una necesidad urgente de ayuda psicológica para muchas categorías de la población: desplazados internos, niños, militares. Se observa que la agresión rusa ha cambiado el sistema de asistencia psicológica, en particular debido a la participación de ciertos modelos estadounidenses de rehabilitación psicológica.

Palabras clave: ayuda psicológica, adaptación social, asesoramiento, guerra en Ucrania.

Introduction

Psychological support in wartime plays an important role in the rehabilitation of victims. At the same time, the Ukrainian experience is quite unique since the long confrontation with the Russian Federation and the open aggression of the Kremlin regime against Ukraine in 2022 allowed to trace in practice all strong and vulnerable places of this system. Characteristics of the use of psychological support tools that are used in Ukraine is a relevant issue for modern psychology, as it can form certain paradigms of action in the event of large-scale military action elsewhere. In addition, research into the specifics of social adaptation and psychological support for war-affected children remains an important problem. Children directly are one of the most vulnerable categories, for whom it is psychologically difficult to adapt to new conditions or to move away from acute experiences. Therefore, this article aims to analyze social assistance and psychological counseling in Ukraine against the backdrop of Russian armed aggression. In the course of realization of this goal, certain aspects of the development of psychological support will be examined:

1. Peculiarities of the introduction of psychological support and social counseling to victims of war in Ukraine.
2. Providing psychological aid to children affected by the Russian invasion.
3. Introduction of the American experience of psychological help and rehabilitation of servicemen, participants of combat operations.
4. The contemporary Ukrainian context of psychological aid to the victims.

Literature review

The methodological basis of the article is the work of authors who have investigated certain aspects of the development of the Russo-Ukrainian war and the specifics of counseling and support for the affected population against the background of Russian aggression. For example, Ahmad & Carey (2022) investigated the specifics of the impact of the Covid-19 pandemic and the Russo-Ukrainian war on the forms of transformation of modern charitable organizations. Kharchenko (2019) characterized key cognitive representations of traumatic emotional experiences among demobilized combatants in Ukraine. This specialist surveyed 100 servicemen and concluded that most demobilized combat participants were expressed in all cognitive representations of traumatic experiences, which are close in content to feelings of injustice or humiliation. Klochko (2020) studied the problem of social assistance in Ukraine against the background of military actions. Fatyga et al. (2022) investigated the specifics of medical support for Ukrainian refugees in Poland. At the same time, Shushkevich (2022) characterized the domestic life of Ukrainians living in the war zone.

However, important for this study are the works of those specialists who also investigated the peculiarities of the spread, the main components of the Russian-Ukrainian war. In particular, Almäng (2019) studied the key features of hybrid wars, characterized their peculiarities of development. Bînă & Dragomir (2020) analyzed the information component of the Russian-Ukrainian hybrid war and characterized the main ways of conducting it. Ghilès (2022) characterized the political, economic, and social components of the Russian-Ukrainian war against the background of the spreading gas crisis. However, Johnson (2022) investigated the Russian invasion of Ukraine through the prism of social transformation. Kent & Samokhvalov (2016) analyzed the historical origins of the Russian-Ukrainian confrontation. These experts noted that Ukraine's strategy should minimize the influence of both Russia and the "republics" on its foreign and domestic policies. Kulyk (2017) characterized the transformation of Ukrainians' national identity against the background of Russia's armed aggression. However, Manolea (2021) described key features of hybrid wars and characterized their contemporary manifestations. At the same time, Martz (2022) examined the Russian Federation's crimes against Ukraine through the prism of social and economic aspects. Materniak (2020) characterized the key lessons of the Russian-Ukrainian confrontation. At the same time, Yuskiv et al., (2021) investigated the specifics of the deployment of the information war between Russia and Ukraine, analyzed the main manipulative mechanisms used through Russian channels and their impact on the consciousness of the population.

However, the problem of social and psychological counseling of children, who are a particularly vulnerable category, remains understudied. At the same time, the issue of the peculiarities of the organization of psychological support for military personnel who have returned from war, captivity, and the Russian-Ukrainian war has also been little studied due to the intensity of the spread of the Russian-Ukrainian war since 2022.

Methodology

The work used general scientific methods of research: inductive, deductive, systematic, comparative, structural-functional, axiological. In particular, using the method of comparison the features of social and psychological support of different categories of the population (adults, children, military) were characterized. The axiological method allowed us to move from general (accepted in the scientific literature) axioms to specific conclusions. The systemic method treats psychological aid in Ukraine as a multi-valued system consisting of a multitude of elements. Using the prognostic method of research, the paper predicts the possibility of using certain techniques to improve the condition in adults and children affected by the war. The use of the method of concretization reflects the problem of adaptation of servicemen and the introduction of American techniques of psychological rehabilitation in Ukraine. However, additional methods of research were historical and retrospective. In particular, based on the historical method of research the problem of development of the Russian-Ukrainian war from 2014 up to now and the peculiarities of psychological aid on the background of its spread.

Results and Discussion

Psychological Assistance to Victims: The Current Ukrainian Context

After the Yugoslav crisis of the 1990s, Europe has long been free of major military conflicts. The situation changed in 2014 when Russian troops occupied the Crimean peninsula and supported local separatists in the East. The deployment of the Anti-Terrorist Operation (ATO) escalated into a larger conflict involving military equipment, artillery, and aviation (Ghilès, 2022). Russian support with fighters and equipment froze hostilities for a time (Dijkstra et al., 2022). The start of the Russo-Ukrainian war and the deployment of Russian strikes in 2022 opened a new page in the history of European wars (Cybulsky, 2022). Along with military action came the issue of psychological care for the victims, military personnel, children, refugees, etc. (Ahmad & Carey, 2022). The Ukrainian experience with the threat is unique because other European countries have not faced challenges of similar magnitude.

In 2014, the psychological support system in Ukraine was not ready for the explosion of the first phase of the Russian-Ukrainian confrontation. However, in 2022, positive changes in both the development of communication with the population in general and the previously accumulated experience had an impact. Since 2018, gradual processes of digitalization of administrative services, digitalization of education, especially intensified after the COVID-19 pandemic, and the introduction of distance learning began (Ishchuk, 2022). The development of these areas greatly facilitated the provision of psychological assistance after the start of Russian aggression. Psychological help became available on the smartphone through mobile apps, messengers, or helplines. This greatly facilitated access to necessary information, as practicing psychologists were insufficient to provide prompt assistance (Shushkevich, 2022). For this reason, having received advice remotely, many parents were able to provide initial psychological support to their children and then, having evacuated to a safe place, contacted specialists later. This was also the case with the support of the elderly who had suffered from military action. This made it possible to provide assistance much more quickly.

The methods of sociological processing of information and the development of further treatment strategies have also significantly improved. For example, according to the analysis of testimonies of rape victims in the Kharkiv region, 31% of women in the core group noted that they began to experience changes in their bodies after the violence, they became uncomfortable with their sexuality, they began to fear communication with men, they did not accept touching their bodies, etc. All these circumstances were taken into account in the next counseling session with the doctors.

Another peculiarity of psychological aid during military operations in Ukraine was the active involvement of volunteers, who were often either applicants for higher education in a relevant specialty or active citizens who were not always specialists in their field but had basic training. In particular, in the psychotherapeutic process, counselors had to be empathic, neutral, tactful, confidential, and tolerant, expressing only those judgments that would help victims to be open and feel safe and in a state of self-control.

An important element was also the public reaction to psychological aid. If by 2014 the outdated perception of psychology as a certain amusement of well-to-do people was widespread in the mass consciousness, by 2022 no one doubted anymore that survivors of war needed to be referred to specialists. For example, women's behavior after experiencing violence was influenced by incorrectly learned social precepts and women's ideas about family and marriage, such as the need to sacrifice and endure for the sake of children, the idea of divorce or breaking up with a partner as a sign of defeat and guilt, false pity for the aggressor, etc. The current state of public opinion seeks to definitively reject such prejudices, which are unacceptable to modern psychology.

Social and Psychological Assistance for Children Affected by Military Operations

Under conditions of war, children are especially vulnerable categories of the population, acutely perceiving crisis events. This in turn entails unstable dynamics of their psychological-emotional relations with adults. Acute war events influence the disruption of children's habitual life: they push fear, anxiety, and despair to the level of adults. At the same time, given the activity of a full-scale Russian offensive (February 2022), not all psychological tools work effectively (Klochko, 2020). Even in cases where children are not directly involved in a military conflict, they still experience significant stress as her immediate surroundings are disturbed. At the same time, a child relocated with (or partially or without) her family from a war zone is exposed to a number of other stressors (Shushkevich, 2022). We are talking about a change of residence, a change in the environment, uncertainty about the future, and prospects in the future life. For this reason, such children are acutely traumatized and therefore need psychological support. In the scientific psychological literature, there are several categories of children displaced from an acute combat zone (See Table 1).

Table 1.
Main categories of children resettled from the war zone

Main categories of children resettled from the war zone	
1. Existence of a close environment	a) Resettled without families b) Resettled with single-parent families c) Resettled with a full family
2. Exposure to a traumatic factor	a) Witnesses to shelling, bombing b) Have lost someone close to them or a family as a result of hostilities. c) Feeling a significant threat of loss of a safe environment (were not witnesses of open military combat) d) Traumatized by the loss of security due to constant anxiety as a result of mass shelling, lack of information about what is happening, lack of basic vital resources: water, heat, gas, etc.
3. Peculiarity of emotional, behavioral manifestations	a) refuse any social connections and contacts with adults or professionals b) refuse contacts with specialists (psychologists, social workers). c) willingly come into contact with different categories

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So, those children who are in the first three categories are the most traumatized and require special treatment from social workers, psychologists, or volunteers. Despite this, we note that children in general experience traumatic situations differently. Often, as a result of a lack of skills to discuss their own experiences due to age-related changes or a difficult emotional state, children do not openly express their unpleasant states (Klochko, 2020). Meanwhile, professionals who care for children can identify those who are experiencing stress. The effects of stress are observed in emotions, behavior, or bodily level. A variety of play with peers, traveling with adults, fantasizing, etc. will help to get over it. (Fatyga et al., 2022). We believe that psychological aid to children from displaced families should be aimed at elimination of consequences of being in stressful circumstances and prevention of the spread of stress disorders. The professional should understand that psychological activity with children must be comprehensive, systematic, and focused. For this reason, we can allocate such key areas of work of the psychologist with suffering children:

1 Activities with the child's environment
2 Work with the child's loved ones
3 Activities directly with the child.

Note that the environment in which the child is should have such features as rhythm, safety, comfort, consistency, and constancy. At the same time, activities with persons close to the child should include psychological, consultative, and educational work. Psychological work (assistance, support) with the child is key in this system. It should be aimed at restoration of the child's state of safety and psychological resources, activation of mechanisms of self-healing, adaptation to the new environment (Fatyga et al., 2022). The most accurate and effective techniques in improving the condition of children who have been exposed to complex stressors are play, sand, imaginative, psychological therapy, art therapy (drawing, molding from clay, plasticine, weaving, etc.) (Klochko, 2020).

In addition, since 2022, psychological help and support has been provided systematically in educational institutions. Consequently, as a result of Russia's military aggression against Ukraine, a complex issue of the psychological health of Ukrainian schoolchildren has arisen. Therefore, one of the priority tasks of educational institutions is daily psychological support of all participants of educational activity. The first psychological support is carried out by all teachers (as well as teachers, classmates, and medical workers). The parents of students have to be separately involved in this process.

The American system of social and psychological assistance to combatants: difficulties of use in Ukraine

Among modern countries, the United States has the most experience in rehabilitating its military. Participation in the war in the Persian Gulf, joint military actions with NATO allies against the Serbian regime of Slobodan Milosevic in the former Yugoslavia, the anti-terrorist operation in Afghanistan and Iraq are only commonly known military actions. In which the U.S. military participated. They also provide significant advisory support to police and army units in South America (to strengthen the fight against drug trafficking and drug cartels), actively conduct training with European partners, since 2022 help the Ukrainian army in the war against Russia (Johnson, 2022). All this makes it possible to adopt the best examples of psychological rehabilitation currently used in the structures of the army system, which is the most experienced in this respect.

Providing psychotherapeutic care to participants in military conflicts is not new to the United States. As a result of in-depth processing of this problem, a lot of methodological medical manuals were published, specific recommendations were developed, which are of psychotherapeutic and pharmacological nature and designed to provide practical assistance to war veterans (Kharchenko, 2019). In particular, in the structure of the U.S. Armed Forces, there is a Division of Veterans Affairs (which is a structural subdivision of the U.S. Department of Defense). Specialists of this Division have formed detailed protocols on psychotherapeutic and pharmacological assistance, based on the materials of scientific methods and modern developments in the field of medical drugs (Stoner, 2022). Consequently, at different stages of the rehabilitation process, American experts suggest focusing on the prevention of trauma, when this cannot be achieved - to prevent complex and chronic manifestations of post-traumatic disorders with distinct, persistent, and recurrent symptoms that require a deep and comprehensive treatment approach (Kent & Samokhvalov, 2016).

The effectiveness of such care and counseling is measured by progress on several fronts (See Table 2).

Table 2.
The main directions of assessment of the effectiveness of psychological assistance to servicemen-participants of combat operations

Directions for Evaluating the Effectiveness of Psychological Assistance to Servicemen
1. Positive changes of a social and professional nature that will occur in the life of a veteran of a military conflict after the war.
2. Decrease of somatic diseases, side-effects, and asocial behavior (for example, alcoholism is mentioned.
3. General improvement of well-being
4. Decrease of manifestations of psychological traumas
5. Positive evaluation of veterans on the received rehabilitation services

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The primary focus of the relevant services is the prevention of psychological trauma and the appropriate training of fighters, with a focus on training that is as combat-ready as possible (Kharchenko, 2019). Individuals without proper training are not allowed to serve in potentially risky operations. It is believed that panic and excessive stress can be detrimental at the most crucial moment, so fighters are trained ahead of time to make direct fire contact.

In the event of a traumatic event, thorough surgical care is provided, the main task of which is to find out how deep the trauma is and whether there will be negative consequences in the future. As a rule, the human body is capable of resisting stress, so that in a few days a normal state of behavior can be restored. Thereafter, early psychological help is provided, followed, if necessary, by thorough professional treatment in appropriate structures using not only therapeutic means but also medical drugs (Wieviorka, 2022). Pharmacological medications can have a therapeutic effect, they can be used for a long time, and in difficult cases, the appropriate medications can be taken permanently. Stress relief is also provided for when certain relapses occur.

The American structure of rehabilitation and counseling assistance has been built for years, so some of its methods have already been formed and repeatedly tested (Kharchenko, 2019). For the provision of psychological assistance to the Ukrainian military in the future, this can be an extremely positive point, and the active cooperation between the Ukrainian and American military departments should also be taken into account. True, psychological counseling in Ukraine may experience certain difficulties in implementation.

Among the problematic aspects is the general distrust of psychologists in Ukraine. In fact, it was not until the beginning of the 20th century that psychological counseling in Ukrainian society began to be perceived as a separate branch of medicine - according to outdated Soviet medical models, psychology and psychiatry were often confused (Kharchenko, 2019). Also, gradually (since the beginning of the antiterrorist operation in Donbas in 2014) there has been a perception of the need for rehabilitation services for mental recovery after combat operations. For the structure of the Ukrainian army, this need proved to be unexpected - the recruitment and training of military psychologists promptly increased, while ATO participants also turned to civilian psychologists (Materniak, 2020). Pharmacological support remains problematic - for Ukrainian taxpayers, the purchase of appropriate drugs in the necessary volumes is problematic. This issue can only be solved through international or volunteer assistance.

The biggest problem of psychological rehabilitation in Ukraine can be defined as the follow-up of traumatized servicemen. Usually, assistance is provided at the operative or early levels, while it is not customary to think about the next fate of those struck by psychological traumas. Obviously, Russian aggression actualizes this hitherto unresolved problem. Perhaps the Armed Forces of Ukraine will also need to create its own "Department for Veterans' Affairs" or at least expand the rights of the Ministry of Veterans, which until 2022 performed primarily administrative functions and did not directly provide social and medical support to combatants.

Conclusions

Thus, Ukrainian psychologists faced a tangible challenge in their work. The Russian aggression in 2014 and the Russian-Ukrainian war in 2022 became a tangible crisis that showed all the advantages and disadvantages of psychological services. In particular, the current Ukrainian experience has demonstrated that primary assistance using digital channels of information dissemination and remote work (messengers, telephone help lines) is an effective tool in times of military crisis. It makes it possible to quickly disseminate the necessary knowledge, to teach volunteers, to give advice to parents on how to calm children, etc. The use of volunteer help has also become an important aspect because the number of professional psychologists in Ukraine is not always able to cover all the victims, who sometimes had to be helped remotely. At the same time, thanks to the Russian-Ukrainian war, society felt the importance of psychological support - before 2014, Ukrainian society had a lukewarm attitude toward the work of psychologists, while now the importance of assistance is recognized as indisputable.

Helping children has demonstrated the effectiveness of modern play techniques. The involvement of teachers and instructors in providing primary aid to victims was also positive - thanks to the educational system, this category of specialists mastered some elements of psychologist training. An important problem that will still have an effect will be the psychological and mental disorders of combatants. It is proposed to use the American experience, which provides for intensive therapy in combination with pharmacological support. The problem on the way to implementing this is a lack of funding, which can be partially solved by international aid. At the same time, this problem will require additional consideration in future studies.

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Life insurance model: concept, structure and assessment of financial stability

Модель страхования жизни: понятие, структура и оценка финансовой стабильности

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Abstract

The Institute of Life Insurance is actively growing all over the world and especially in developing countries in order to provide an increase in the duration and quality of life of the population. The increasing role of life insurance in the economic and social sphere of the country requires a theoretical understanding of its place in the system of market relations and effective implementation. The purpose of the study is to develop the theoretical and methodological basis of life insurance, substantiate methodological approaches to its study in the context of a systematic approach through the prism of various models functioning. As a result of the study theoretical determinants of life insurance model are revealed, and a methodology for determining the financial stability of the applied life insurance model has been developed.

Keywords: life insurance, life insurance model, financial stability.

Аннотация

С целью обеспечения увеличения продолжительности и повышения качества жизни населения в странах мира активно развивается институт страхования жизни, особенно активно это происходит в развивающихся странах. Возрастание роли страхования жизни в экономической и социальной сфере страны требует теоретического осмысления его места в системе рыночных отношений и эффективного практического применении. Целью исследования является развитие теоретико-методологических основ страхования жизни, обоснование методических подходов к его исследованию в контексте системного подхода через призму организации различных моделей функционирования. По результатам исследования раскрыты теоретические детерминанты исследования модели страхования жизни, а также разработана методика определения финансовой стабильности применяемой модели страхования жизни.

Ключевые слова: страхование жизни, модель страхования жизни, финансовая стабильность.

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Introduction

Life insurance, in the narrow sense, is a type of personal insurance, where the insurer is obligated to reimburse a designated beneficiary a sum of money specified in the contract upon the death of an insured person or his / her survival to the term or age specified in the contract. In addition to the narrow, there is also an expansive interpretation of this concept – often, life insurance is called a whole range of personal types of insurance, which includes life insurance itself, insurance of children by the age of majority or by the time of enrolling to university, pension insurance, unemployment insurance and many others. The increasing role of life insurance in the economic and social sphere of the country requires a theoretical understanding of its place in the system of market relations and effective implementation. In this regard, the knowledge aimed at defining conceptual apparatus and purpose of the instruments of this economic category is of particular relevance. Life insurance, carried out both at the state level and at the level of the private sector (enterprises and the population), has practically the same target – to ensure an increase in the duration and quality of life of the population. Despite the fact that the existing approaches to the interpretation of life insurance essence have been considered by various researchers fully and at a high level of scientific validity, the system-convergent approach to the study of national development models seems to be insufficiently implemented and does not take into account the current state of the state's financial resources and transformational processes in the financial market.

In this article, the authors propose a comprehensive approach to life insurance issues in the process of reproduction of human capital, which involves the coordination of processes related to financial flows at different levels and having same target – to ensure an increase in the duration and quality of life of the population in the country. The choice of a life insurance model based on various combinations of its components dominance (public or private insurance) and which the state will adhere to has a special role in this.

The purpose of the study is to develop the theoretical and methodological basis of life insurance, substantiate methodological approaches to its study in the context of a systematic approach through the prism of various models functioning.

Tasks:

1) to reveal the theoretical determinants of the life insurance model study, including:

- to develop the terminological apparatus, precisely “life insurance model”, “structure of the life insurance model”;
- to reveal and characterize methods for shaping elements of the life insurance model structure;
- to carry out a typology of life insurance models and present their comparative characteristics;

2) to develop a methodology for determining the financial stability of the applied life insurance model.

Literature Review

Extensive list of scientific papers has been accumulated at the present time regarding the life insurance. The research of some authors is aimed at the economic essence and specifics of life insurance (Musgrove, 1995; Odinokova, 2021; Marmor, 2018), while others are devoted to the peculiarities of public life insurance, including social insurance (Weinstock, 1975; Zweifel, 2000), reveal the place and role of life insurance in the country's economy (Yoon, 2013; van Dullemen et al, 2016), and analyze the impact of the life insurance model on socio-economic processes in the country (Heinrich et al, 2021; Besanko et al, 2020). In addition, in 2020 many studies have been devoted to the impact of COVID-19 on the life insurance institute due to the outbreak of the pandemic (Harris et al, 2021; Nusratullin et al, 2021a; Nusratullin et al, 2021b).
However, the result of scientific literature analysis shown, that there are almost no works attempting to identify the ratio of insurance and social factors of redistribution in the mechanism of public (compulsory) life insurance. The study of life insurance development theoretical aspects inevitably leads to the problem of the ratio of mandatory (public) and voluntary (private) forms.

Wide variety of life insurance essence definitions, systematization and classification of its types, as well as the possibility of using modern methodological tools determine the need to set the task of disclosure and study of life insurance on a new research platform. In our opinion, the consideration of private life insurance in relation to public one, not from the position of factor influence, but from the position of interdependence from each other and system integrity, gives a possibility to determine the place and analyze the role of this tool in the social risk management system. In addition, this approach will reveal the problems of integration of public and private life insurance and create a guaranteed comprehensive insurance protection of the property interests of the population of the country.

We propose to use the concept of "life insurance model" to identify and understand the relationship between public and private life insurance. Today there are dozens of definitions of the model and modeling, but each time their semantic meaning changes depending on the context. Let's consider the definitions that, from our point of view, can reveal the essence of the life insurance model from the standpoint of economics:

1) model is "a system, the study of which serves as a means to obtain information about another system" or "a representation of some real process, device or concept" (Uyomov, 1971);
2) model is "a mentally or practically created structure reproducing one or another part of reality in a simplified (schematized or idealized) and visual form" (Stoff, 1963);
3) model is "an object that correlates with other similar objects, representing itself and those objects" (Isenko, 2015).

Based on the presented definitions and taking into account the specifics of the study, we propose the following definition of the life insurance model. The life insurance model is an abstract representation of the formal system of human capital insurance protection in a certain country. The study of this model is based on an assessment of the state and effectiveness of management by integrated application of elements shaping methods and allows comparison with similar systems of other countries.

This study also proposes the author's concept of the life insurance model structure as a set of segments (components, levels) of the country's human capital insurance protection system, the configuration (mutual arrangement, combination and connection) of which ensures its integrity and identity under changing operating conditions. Authors propose the following life insurance model structure:

Level I – public life insurance;
Level II – private life insurance, including corporate and individual insurance.

Various factors are influencing formation and development of the life insurance model, include (Luecke et al, 1989):

- type of economic system;
- state of the resources (factors of production) in the economy (whether there are resources or not);
- openness of the national economy to transnational capital;
- type of government policy (liberal or conservative);
- mentality of the population;
- type of social model.

There are following life insurance models depending on the complexity of the organization:

a) simple, i.e. they include the organization of only one level of life insurance functioning (public or private) and interaction with regulatory authorities;
b) combinatorial (variant), which are a complex structured system that includes two or more parts (subsystems).

There are following life insurance models depending on the state and development of the market economy:

a) balanced model where public and private life insurance have more or less equal position (approximately 50/50);
b) simple private model focused on private investment of savings in life insurance policies at the expense of the corporate sector of the economy (enterprises) and households, at the same time, there is no public life insurance which represented by social security only (+/0);
c) simple public model where is no private life insurance due to lack of development or absence and the entire burden of fulfilling social obligations lies with the state (0/+);
d) combined public model where the basis of life insurance protection is taken by the state, and the private sector acts as its complement (51+/49);
e) combined private model where the state bears minimal obligations, and the basis of life insurance protection lies with the private sector (49-/51+).

All these classifications, of course, are very conditional, because real models may take intermediate position. Besides, general models may include private ones.

Thus, each country corresponds to countless equally adequate, but essentially different models related to different tasks. The model is always only relative and does not fully disclose the specifics of the functioning of the entire life insurance system in terms of information. Several models of different types can correspond to the same systems. Model structure will be determined depending on the influencing factor.

The most frequently contrasted models in the analysis are: Northern (Swedish), Anglo-Saxon (English), Continental (German) and American models of the welfare state (Table 1). Their data analysis allows to identify the type of life insurance model (Shindo & Thorburn, 2020).

Table 1.
Comparative characteristics of welfare state models and their impact on the development of pension and life insurance (according to data for 2019).

Figure	Welfare state models			
	Anglo-Saxon (English)	American	Continental (German)	Northern (Swedish)
Support Tools	Minimum state guarantees, private insurance	State guarantees are above the minimum, but below the average level	State guarantees at the average level, private insurance	High state guarantees, private insurance
Countries adhering to this type	Great Britain, Ireland	USA, Canada, Australia	Germany, Austria, Belgium, France	Denmark, Sweden, Finland, Netherlands, Norway
Share of expenditures on Public Pension Insurance in the country's GDP, %	6.0-7.0	4.5-7.5	10.5-19.0	15.0-30.5
Share of expenditures on Private Pension Insurance in the country's GDP, on average for the group %	3.1-5.2	1.2-5.2	0.2-1.2	0.6-5.9
Share of assets in pension savings plans in the country's GDP (2019) on average for the group, %	80.7	149.2	14.8	143.4
Share of expenses on Private Life Insurance, as % of GDP (2009-2019) 2019 (on average for the group)	6.5-16.2 6.9	1.3-5.1 2.5	2.3-4.2 3.4	3.5-8.3 6.2
Life insurance model structure Public Life Insurance / (Private Life Insurance + Private Pension Insurance) in 2019, %	37 / 63	45 / 55	80 / 20	60 / 40
Type of life insurance model used	combined private model	Balanced model	combined public model	combined public model

Source: OECD, 2020a; OECD, 2020b; Swiss Re Institute, 2020; Allianz, 2020.

Considering the modern practice of organizing world financial systems, the "Global Monetary Economy" forms two contours in countries in accordance with the concept of contours of the American economist Minsky (1993):

1) financial and money markets led by a Large bank (a system of banks and other credit institutions);
2) currency and money markets led by a Large government (the formation of the state budget and extra-budgetary financial funds is expected).

The contours serve as a constructive basis for the formation of two interrelated development flows in the global economy, which in the work of (Minsky, 1993) are called two global types of economic growth: inflationary and deflationary. The inflationary one is based on the budget potential with the Central Bank as the main regulatory market institution (for example, in Russia), and the deflationary one is based on the credit potential with the stock market as the main regulator (for example, in the USA) (Yerznkyan, 2010; Evstigneeva & Evstigneev, 2010).

The specifics of the regulation subsystem organization and administration have an impact on the development of the life insurance model constituent elements. Precisely, Public Life Insurance will dominate in the country in the case of inflationary flows, and Private Life Insurance will dominate in the case of deflationary flows.

Although the need for life insurance, including pension provision, is universal, the initial conditions vary significantly between countries in terms of their financial freedom and the dynamics of demographic changes. One of the significant issues raised in each country is the issue of public consent: what share of GDP is society willing to spend on its elderly to honor their contribution to economic development and progress during their working life. However, financial freedom for future spending is determined by the current levels of the gross debt of the state and the costs of old-age benefits. The higher these two factors are compared to today's GDP, the less financial freedom of action for future generations and the more unbalanced the distribution of the financial burden of aging between generations will be (Kryvyts'ka, 2019).

This problem is especially relevant, since in the future there will be an increase in the burden on the able-bodied generation to ensure their own old age, since their pension savings were used for the pension provision of current pensioners. The sustainability of life insurance, including the pension system, and the adequacy of the measures taken largely determine the welfare of the nation and the protection of the population from the risks associated with aging and longevity of the population and, as a result, the diversification of sources of financing that citizens can use when implementing risks. The diversification of funding sources is due to the increase in assets managed by life insurers and pension funds, and the expansion of the range of their application to financial market instruments.

Methodology

The purpose of the study is to develop the theoretical and methodological basis of life insurance, substantiate methodological approaches to its study in the context of a systematic approach through the prism of various models functioning. To achieve the goal, it is necessary to solve the following tasks:

1) to reveal theoretical determinants of the o life insurance model study;
2) to develop a methodology for determining the financial stability of the applied life insurance model.

The scientific literature on life insurance was analyzed to reveal the theoretical determinants of the life insurance model study; then the concepts of "life insurance model" and "life insurance model structure" were formulated using scientific methods of analysis and synthesis. In addition, various forms (types, types) of life insurance models were determined on the basis of these methods.

The data of the following companies was used for comparison of the classical insurance models (Northern (Swedish), Anglo-Saxon (English), continental (German) and American models) and the insurance models proposed in the study: Organisation for Economic Co-operation and Development (OECD, 2020a; 2020b), Swiss Re Institute (2020) – one of the largest reinsurance companies and Allianz (2020) – the largest German insurance company.

The scheme of step-by-step determination of the life insurance model financial condition, as well as the methodology algorithm for determining the financial stability of the life insurance model are developed based on the analysis of scientific literature regarding the life insurance and formalized using such methods of scientific cognition as generalization and induction. This scheme and the algorithm of the methodology are put forward as a hypothesis, the confirmation of which requires further research.

Results and Discussion

It is proposed to study the life insurance model from the perspective of systematic methodological tools within the framework of the study. However, the use of systematic methodological tools has its own peculiarities according to the conditions of application, subjects and target orientation of the methodology, as well as information sources and methods that are available to specialists.

The subjects of management are the bodies of current and strategic supervision, as well as international organizations that monitor the development of the economy. The use of systematic methodological tools will improve the understanding of the life insurance role in the country's economy and will enable a more competent policy of its regulation.

The scheme of step-by-step determination of the life insurance model financial stability developed by the author includes four stages (Figure 1) and will allow:

1) determine the type of model and methods for shaping its elements;
2) identify and characterize the stages of model development;
3) to assess of the model state factor dependence, the interdependence of processes in the model and the economy;
4) to assess the “strength” of relations between the elements (levels) of the model, mutual influence and interdependence, as well as the depth of their convergence.

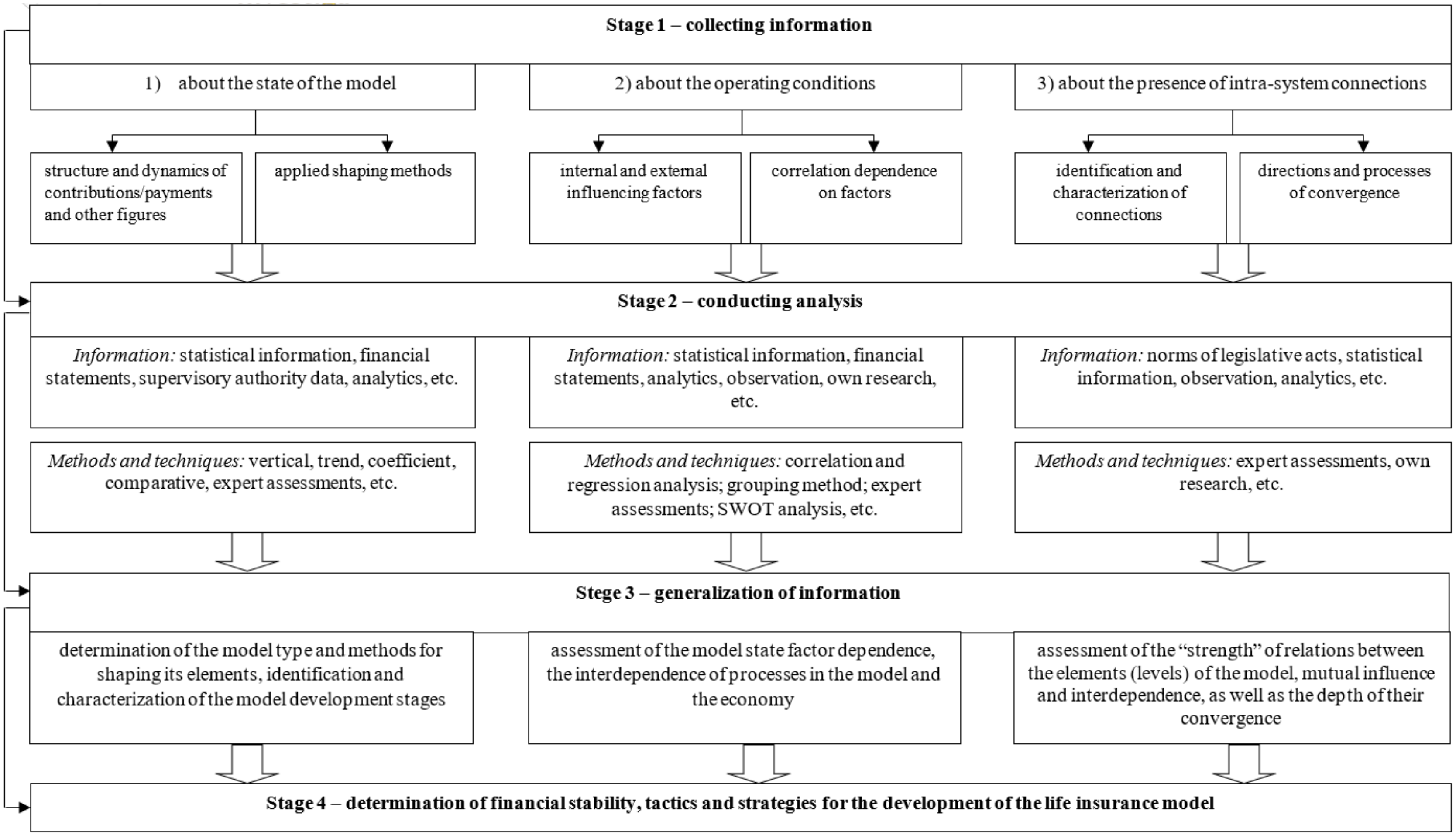

Figure 1. Scheme of step-by-step determination of the life insurance model financial stability

Table 2 describes the information in the framework of the assessment of state.

Table 2.
Characterization of information in the framework of the 1st stage of the condition assessment.

Analysis object	Characterization of information
System	Figures of the dynamics and structure of insurance premiums (contributions) collection and payments both in the whole model and in the context of its levels, as well as in the territorial context to determine the asymmetry of financial flows; figures of insured persons number dynamics, insurance payments recipients dynamics and structure in the context of the type of payments, etc.
	Density (i.e. the size of the insurance premium per capita) and the depth of insurance (i.e. the share of the total insurance premium in the country's GDP), including territorial terms.
	The financial situation of insurers and their burdens: business expenses; combined loss ratio; number and types of taxes paid; profitability; reliability of insurers; coefficient of autonomy; coefficient of financial stability, degree of solvency.
Elements shaping methods	Combinatorics: insertion of elements of one level into another; transfer of reserves to an insurer of another level; establishment or cancellation of direct regulation of insurance rates, insurance limits, etc.; application of subsidizing insurance premiums or payments; etc.
	Transformation: flexibility and mobility of savings in life insurance policies, including pension insurance; the presence or absence of an investment component in the policies, the management of which allows the policyholder to adjust the policy of the investment strategy; etc.
	Kineticism: increase/decrease in the rate of insurance premiums; indexation of insurance premiums, amounts and payments; indexation of the limit value of the base for calculating insurance premiums (in relation to compulsory pension insurance; conversion of savings into points, and vice versa; etc.
	Modular design: introduction of standardized modules of pension plans from different management companies (life insurers, Non-State Pension Fund or Pension Fund of the Russian Federation); introduction or cancellation of a unified procedure for transferring savings or settling losses (payment of the insured amount); introduction of a single standard reporting for insurers, as well as a mechanism for managing the savings and savings of policyholders (insured persons).
	Deconstruction: freedom in the possibility of transferring pension savings from one Non-State pension Fund to another, from a Non-State Pension Fund to the Pension Fund of the Russian Federation; freedom in the possibility of managing the process of investing savings under an insurance contract as in collective investment funds, etc.
Influencing factors and their effect	External: political, economic, demographic, etc.
	Internal: transaction costs, policy of actuarial calculations and insurance payments, organizational structure of management, etc.
Intra-system connections	Horizontal from the position of partnerships: management, financing, co-investment, etc.
	Vertical, hierarchy-related model structures: technological, functional, etc.

Within the framework of the 4th stage of the proposed scheme, it is necessary to focus on determining the financial stability of the current model. However, as the analysis has shown, the concept of "financial stability" has no unambiguous interpretation in either domestic or foreign literature, which complicates the quantitative assessment of this characteristic of the life insurance model.

In modern literature, financial stability is considered from the perspective of two approaches:

1) in the first approach, financial stability is considered "through its absence, i.e. through financial instability" (Chant et al, 2003; Crockett, 1996; Ferguson, 2003) and is associated with the risks of deterioration in the performance of the real sector of the economy;

2) In the second approach, financial stability is interpreted as a stable state of the financial system, which allows effectively perform its key functions, withstand shocks and eliminate imbalances. It is actually associated with systemic risk. (Cavapozzi et al, 2012; Heide, 2020).

Representatives of the first approach consider financial stability through the prism of its antipode “financial instability”, define it as a situation “where the figures of economic activity may deteriorate due to fluctuations in the prices of financial assets or the inability of financial institutions to fulfill their obligations” (Crockett, 1996) and also associate “with a certain concept of a market mechanism failure or external effects that could potentially affect real economic activity” (Ferguson, 2003). Here we should pay attention to two main aspects. Firstly, according to the definition given earlier, financial instability should be identified by the presence of potential threats to the real sector of the economy and not by the amount of damage actually incurred. Secondly, financial instability arises due to excessive volatility in financial markets, the weakness of financial institutions and the inability of banks and other financial sector companies to fulfill their obligations (Kormilitsyna, 2011).

The second approach, proposed primarily by central banks, attempts to define this concept based on various properties of a stable financial system. However, the formulation of the operational definition remains conditioned by the installation of an analytical framework, which should delimit the field of intervention of responsible authorities, determine the tools and channels for transmitting decisions made and indicate a measurement figure that allows evaluating this function. (Mohamed et al, 2012). Schinasi (2005) adheres to the second approach, believes that in the absence of a framework, a set of models, or even a concept of equilibrium it is difficult to imagine a definition of financial stability. In this regard, they are invited to consider this definition from the financial system point of view: “The financial system is in the range of stability when it is able to facilitate (rather than hinder) the functioning of the economy and eliminate financial imbalances that arise endogenously or as a result of significant adverse and unforeseen events” (Schinasi, 2005).

The determination of financial stability is also possible through the assessment of systemic risk, which characterization and analysis are carried out by using a set of quantitative indicators called the financial stability risk indicator (financial indicators) (Heide, 2020).

Responsibility for achieving financial stability at the state level, as a rule, is assigned to the central bank. In some cases, the function may also be assigned to a mega-regulator or an interdepartmental council (committee) on financial stability, which may include representatives of the central bank, the Ministry of Finance, as well as the department responsible for microprudential regulation and supervision of banking and non-banking financial intermediaries.

The author of the study suggests the following algorithm of the methodology for determining the financial stability of the current life insurance model (Figure 2).

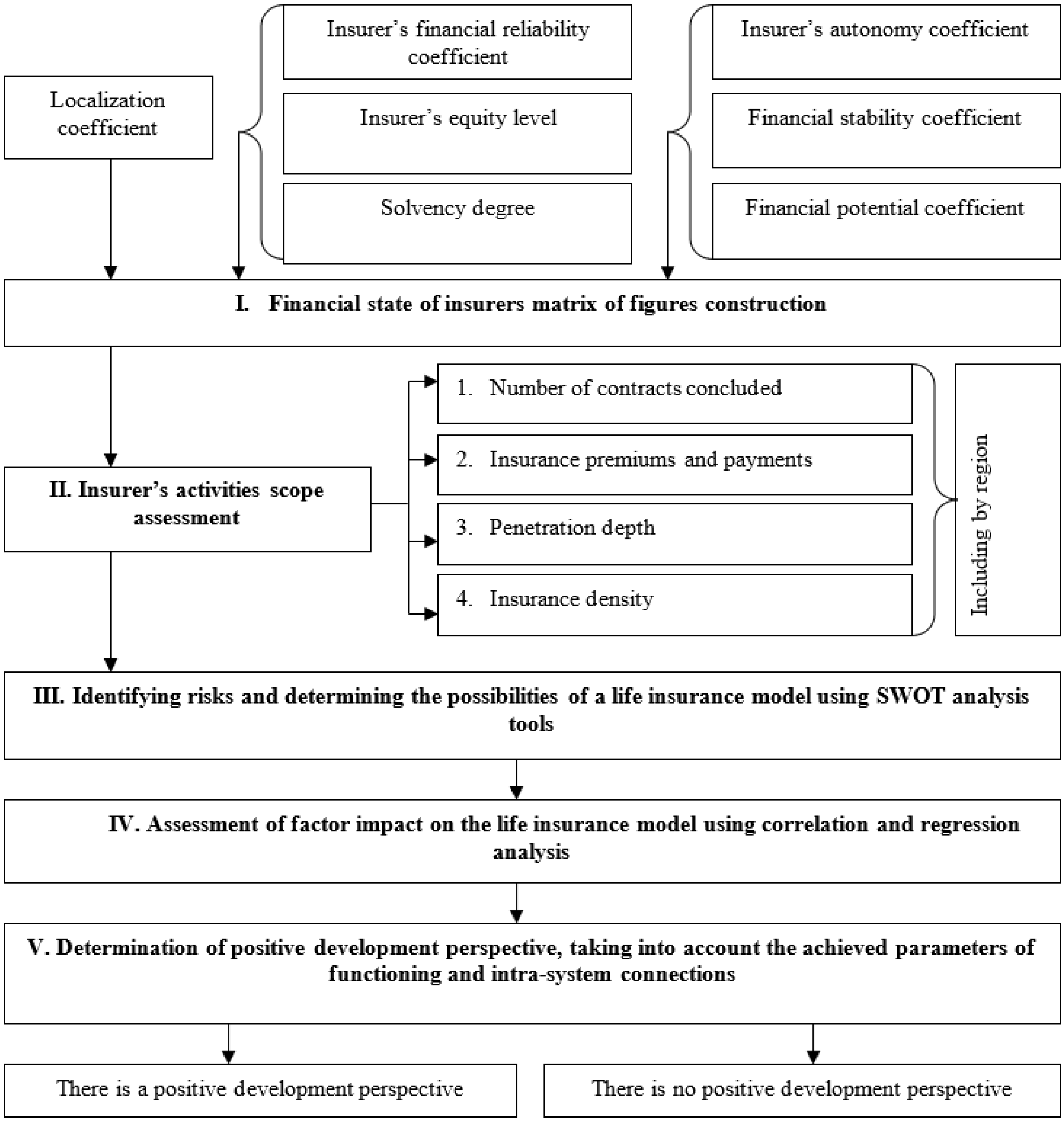

Figure 2. The algorithm of the methodology for determining the financial stability of the current life insurance model.

In our opinion, the basis of the life insurance model financial stability is the financial stability of insurers (Odinokova, 2019), since it acts as a link between the state and the population when conducting a financial policy of redistribution of resources and risks. On the one hand, the relationship with consumers of services depends on the state and policy of financial stability management of the insurer. For example, if the financial stability is high enough, then the insurance company will pursue a loyal policy towards its customers. On the other hand, the state of insurer's financial stability influenced by "macroprudential policy, which is a set of measures to reduce systemic risk in the financial market or in individual sectors" (Lobo-Guerrero, 2016).

At the same time, the financial stability of the current model should have three important characteristics. Firstly, the financial stability of the current model facilitates the efficient allocation of resources in space and time. Secondly it allows to assess, copy and distribute financial risks and manage them. Finally, the financial stability of the current model retains the ability to perform its functions regardless of financial and various economic shocks, as well as increasing imbalances.

However, it is important to emphasize once again that this set of characteristics that determine the financial stability of the life insurance model does not guarantee the effectiveness of its institutions (the Institute of Social Insurance and the Institute of Private life insurance). Although stability may be a necessary condition for the complex interaction of its (model) participants, it is certainly not a sufficient condition for efficiency.

Achieving and maintaining the financial stability of the life insurance model should be balanced with other, possibly higher priority, goals, for example, such as improving economic and institutional efficiency. This suggests that financial stability itself is not an aim for systems, but plays a supporting role in improving the ability of the model and its elements to perform their functions.

Conclusions

This study developed for the life insurance model a theoretical platform based on a new scientific idea about the systemic convergence of public and private life insurance and its structuring within the framework of various models formation: The author's interpretation of the life insurance concept proposed here, in contrast to the existing ones, is presented as a system of life insurance protection for citizens (human capital) of a certain country, ordered in accordance with the target vector of development and formalizing the process of its model organizing. The concept is based on the fundamental interrelationships of structural elements (public and private levels of life insurance) used in the study of regularity, rationality and efficiency of functioning.

In order to identify the capabilities of the models used, methods for shaping its components, such as kineticism, combinatorics, transformation, modular design and deconstruction, have been identified, the tools of which allow the state to influence the structure of the model, dynamics and development trends.

It should also be noted that the developed methodological tools allow us to study the development figures and assess the effectiveness of the life insurance model functioning in the country as a whole, as well as objectively prove the significant role of each structural component of its subsystem in ensuring insurance coverage of human capital risks.

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Assessment of the financial stability of the Russian life insurance model

Оценка финансовой стабильности российской модели страхования жизни

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Abstract

Life insurance is one of the effective mechanisms of protection against social risks. This product can protect a person in case of disability, provide medical care, increase cash savings. In Russia, in the context of a decrease in the financial capabilities of the state, fragmentation and unsystematic decision-making in the field of life insurance regulation, fundamental changes are being made in the life insurance system. A natural consequence of this situation was a downward trend in some indicators of the development of the Russian life insurance model. The research purpose is to assess the financial stability of the life insurance model used in Russia. As a result of the study, the features of the Russian life insurance model were revealed and its strengths and weaknesses, challenges and threats were identified on the basis of a SWOT analysis; the main factors influencing the balance of financial flows of the Russian life insurance model were identified; an assessment of the financial stability of the Russian life insurance model was carried out.

Аннотация

Одним из эффективных механизмов защиты от социальных рисков выступает страхование жизни. Данный продукт способен обезопасить человека в случае потери трудоспособности, предоставить медицинскую помощь, приумножить денежные сбережения. В России в условиях снижения финансовых возможностей государства, разрозненности и бессистемности принятия решений в области регулирования страхования жизни проводятся кардинальные изменения в системе страхования жизни. Закономерным следствием такой ситуации явилась тенденция к ухудшению некоторых показателей развития российской модели страхования жизни. Целью данного исследования является оценка финансовой стабильности применяемой в России модели страхования жизни. В результате исследования выявлены особенности российской модели страхования жизни и определены на основе SWOT-анализа ее сильные и слабые стороны, вызовы и угрозы; определены основные факторы, влияющие на сбалансированность финансовых потоков российской модели страхования жизни; проведена оценка финансовой стабильности российской модели страхования жизни.

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Keywords: life insurance, state life insurance, private life insurance, pension insurance.

Ключевые слова: страхование жизни, государственное страхование жизни, частное страхование жизни, пенсионное страхование.

Introduction

The modern Russian life insurance model was developed in the 90s of the 20th century, when the country entered a period of fundamental market reforms. The formation of the Russian model is based on the experience of state compulsory pension insurance, carried out within the framework of social insurance, and the experience of Soviet voluntary life insurance, provided by the Gosstrakh Insurance Company. It should also be noted that by the beginning of the 90s, "70% of the population employed in production" had long-term life insurance contracts. (Anikeeva, 2012). Today, 98% of the Russian population is insured in the state life insurance system in terms of compulsory pension insurance, in the private life insurance system – no more than 15% (Rudometova & Kartamysheva, 2015).

The Russian experience is interesting in that in the context of a decrease in the financial capabilities of the state, fragmentation and unsystematic decision-making in the field of life insurance regulation in general, as well as the use of social non-budgetary funds of the state as an applied tool for conducting socio-economic policy, fundamental changes are being made in the system of the management of these processes. A natural consequence of this situation was a downward trend in some indicators of the development of the Russian life insurance model. Based on logic, any existing life insurance model can be transformed or modified over time in order to ensure balance, thereby acting as a natural stage in the process of self-organization and self-structuring of the system (Hemrit & Nakhli, 2021).

The research purpose is to assess the financial stability of the life insurance model used in Russia.

The following objectives should be met to achieve the purpose:

1) to identify the features of the Russian life insurance model and, based on a SWOT analysis, determine its strengths and weaknesses, challenges and threats in the context of system integration of its public and private levels;
2) to determine the main factors affecting the balance of financial flows of the Russian life insurance model;
3) to assess the financial stability of the Russian life insurance model.

Literature Review

Modern people live in a so-called risk society. A very important point is the search for tools that can minimize the dangers and threats from the outside. Life insurance is one of the effective mechanisms of protection against social risks. This product can protect a person in case of disability, provide medical care, increase cash savings. Life insurance allows insured citizens to be reimbursed for insurance losses in the event of an accident, such as illness, injury or death (Joulfaian, 2014). Insurance helps create a "cash cushion" in case something happens to a person. However, other advantages of life insurance can be identified: the possibility of saving for planned expenses (treatment or education of children) (Shi et al, 2015), saving for a future pension (Faust et al, 2012).

Life insurance is a mechanism by which a person can plan to continue earning income in the event of death, disability or old age. Life insurance in its general sense is used to refer to all forms of insurance designed to protect against loss of income due to inability to work, whether due to death, accident, illness or old age (Valentina-Daniela & Gheorghe, 2015).

With the undeniable importance of life insurance as a financial mechanism for the economy and the population, its possibilities in Russia remain unclaimed in full. Besides, world practice fully confirms the great importance of life insurance functions for national economies.

The global assets of insurance and pension companies amount to more than 100% of the total GDP of the countries worldwide (in the USA – more than 150%, in the UK – more than 200%, in the Netherlands – 300%), while 80% of insurance assets are concentrated in life insurance companies. Insurance premiums amount to 9% for pension insurance and 7.96% for life insurance in GDP in Germany, 11% and 3% of GDP, respectively – in the USA, 15% and 8% – in the UK. In 2019, the share of life insurance premiums amounted to 46% of the total insurance premium worldwide, in the USA life insurance occupies 26%, in the European Union – more than 70% of the insurance market. In European countries, the average premium per capita in 2019 was EUR 3,110, including EUR 2,695 for life insurance (International Association of Insurance Supervisors, 2021).

In the Russian Federation, life insurance shows more limited results, but the prospects for its growth, taking into account foreign experience, are significant. Figure 1 shows the dynamics of the assets of insurance companies specializing in life insurance, while its total value in the country's GDP for the analyzed period increased by 3.5 times and at the end of 2020 amounted to 7.4% (Central Bank of the Russian Federation, 2021a; Central Bank of the Russian Federation, 2021b).

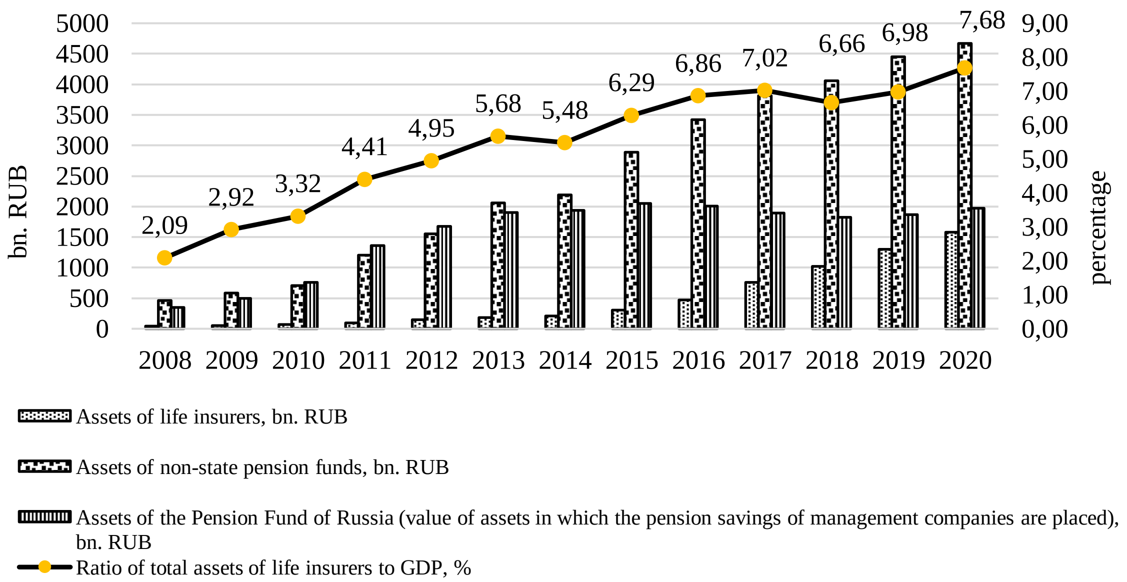


Figure 1. Dynamics of assets of insurers specializing in life insurance and its total value in GDP
Source: Central Bank of the Russian Federation, 2021a; Central Bank of the Russian Federation, 2021b

The values of the ratio of assets and equity to insurance premiums among Russian life insurers have different dynamics, for example, the Pension Fund of Russia (hereinafter referred to as "PFR") have not generated the assets in a sufficient amount due to the fact that only since 2002 the transition to the funded pension system began and the use of a forced measure of its suspension since 2014 (the introduction of a "moratorium" on pension savings) (Figure 2). In turn, the short duration of the formation of pension savings also affected the capitalization of non-state pension funds (hereinafter referred to as "NPFs"), showing a downward trend. Life insurers, on the contrary, showing a wave-like development trend, began to increase the level of capitalization since 2016. According to data for 2020, the ratio of the total assets of life insurers to the premiums received by them was 366.9%, which corresponds to the same indicator of life insurers in foreign developed countries in the early 2000s.

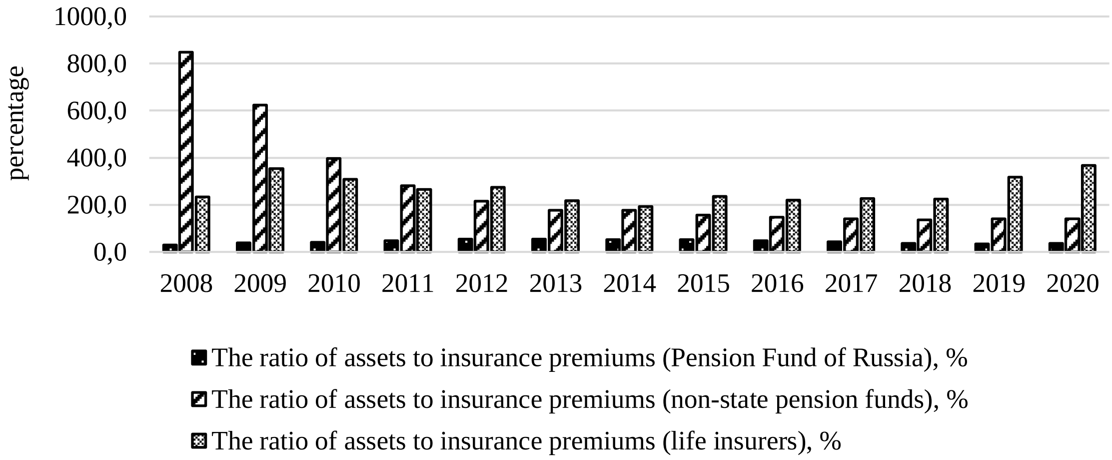


Figure 2. Dynamics of the ratio of life insurers' assets to insurance premiums, %
Source: Central Bank of the Russian Federation, 2021a; Central Bank of the Russian Federation, 2021b

Insurers' asset growth rates are cyclical, while in total terms they grow faster than the growth rates for liabilities, however, the instability of this dynamics has affected the reduction of equity capital and, accordingly, the decrease in the level of insurers' stability (reliability) in terms of the ability to cover assumed liabilities at the expense of own funds.

An economic indicator that makes it possible to assess the scale of insurers' activities is insurance density, which describes the ratio of insurance premiums to the total population. Figure 3 illustrates the density in the period of 2008-2020. It is worth mentioning that the density of insurance, especially in the segment of private life insurance, has increased significantly since 2012, which is associated with the start of sales of investment life insurance ("ILI").

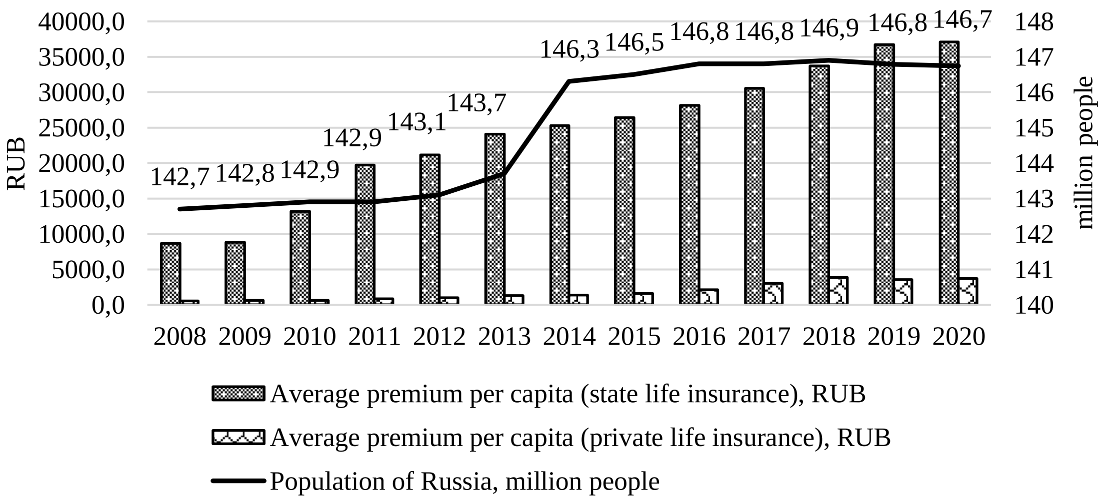
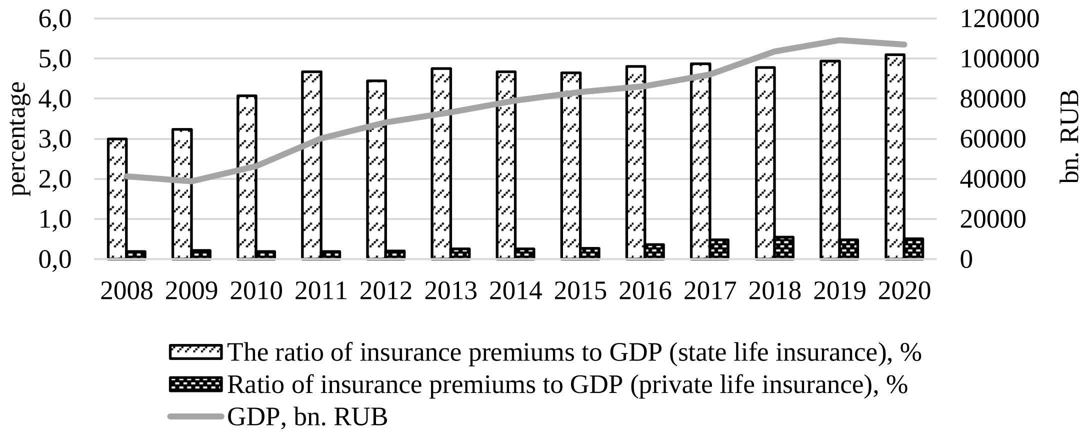


Figure 3. Density of public and private life insurance (insurance premiums per capita), RUB.Source: Central Bank of the Russian Federation, 2021a; Central Bank of the Russian Federation, 2021b

The ratio of total premiums to GDP, better known as insurance penetration, is one of the most commonly used indicators in insurance performance analysis. As shown in Figure 4, the penetration of state life insurance is much deeper than private insurance, which is explained by the widespread coverage by the compulsory pension insurance system (hereinafter referred to as "CPI") in Russia and rather high insurance rates set by the state for policyholders. It should also be noted that in 2008 the share of voluntary life insurance (hereinafter referred to as "VLI") in the total amount of the average premium for private insurance per capita accounted for 24% (RUB 135.2 out of RUB 563), while by the end of 2020 – already 80% (or RUB 2,934.5 out of RUB

3,680). This indicator suggests that the population, when investing financial resources, is not ready to tie them to a specific goal and carry out financial planning for the long term. At the beginning of 2000, the population used to easily enter into 20-30-year life insurance contracts, while at the end of 2020 the average duration of the concluded contract was reduced to 10 years (Central Bank of the Russian Federation, 2021a; Central Bank of the Russian Federation, 2021b).



igure 4. State and private life insurance penetration, %
Source: Central Bank of the Russian Federation, 2021a; Central Bank of the Russian Federation, 2021b

To identify trends in the life insurance development, it is more indicative to compare the growth rates of total insurance premiums for life insurance and GDP (Figure 5).

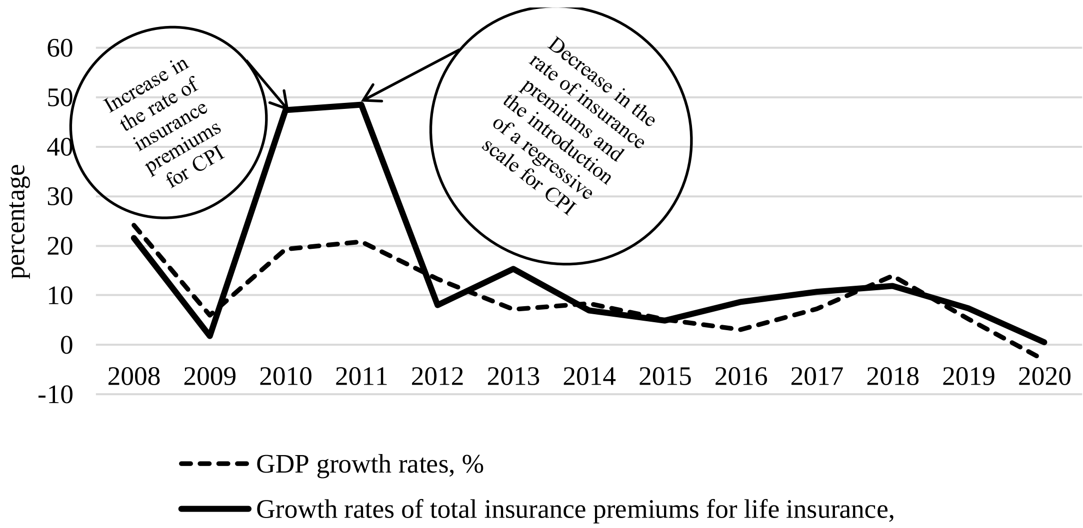


Figure 5. Dynamics of growth rates of total insurance premiums for life insurance and GDP, %
Source: Central Bank of the Russian Federation, 2021a; Central Bank of the Russian Federation, 2021b

Against the backdrop of a slowdown in the growth of insurance premiums for state life insurance, private life insurance began to develop actively (Figure 6), which was supported, on the one hand, by the transfer of citizens' pension savings by the PFR into trust management of the NPF, on the other hand, the government's policy of stimulating the citizens' savings in long-term life insurance policies (in 2009, pension savings co-financing ("PSC") programs; the possibility since 2014 of investing maternity capital or its part to form a funded pension; introduction of tax incentives for personal income tax).

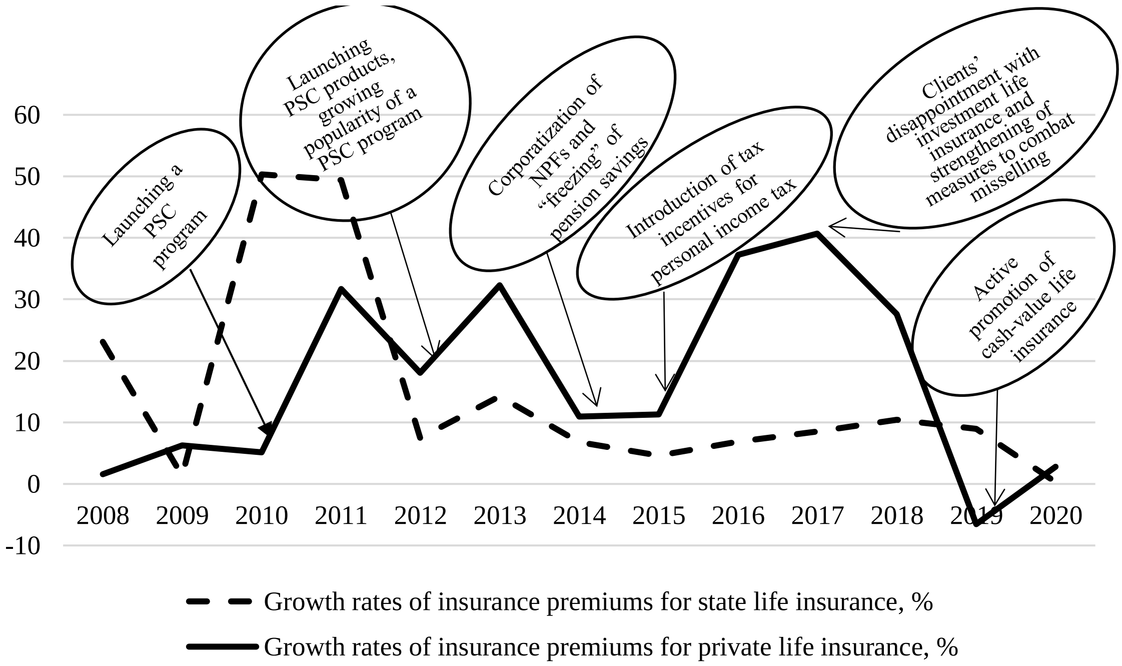


Figure 6. Dynamics of growth rates of insurance premiums for life insurance in the context of insurance protection levels, %
Source: Central Bank of the Russian Federation, 2021a; Central Bank of the Russian Federation, 2021b

The dynamics of growth rates of insurance premiums for private life insurance for the analyzed period was uneven due to the strong volatility of macroeconomic indicators. The high dependence of life insurance on the level of economic activity and income of the population and companies affects its pace of development.

Thus, the Russian life insurance model is characterized by positive development dynamics, however, these indicators are still insufficient to speak of a developed life insurance system in Russia.

Methodology

The article uses traditional methods of analysis: comparison and synthesis, as well as analytical and statistical methods to assess the financial stability of the Russian life insurance model, and the use of the logical method made it possible to determine the strategic vision for the further development of the Russian life insurance model. The data sources are Global insurance market report 2021 (International Association of Insurance Supervisors, 2021), Review of key indicators of insurers 2020 (Central Bank of the Russian Federation, 2021a), Review of key indicators of non-state pension funds 2020 (Central Bank of the Russian Federation, 2021b).

Results and Discussion

As the analysis showed, life insurers in Russia are currently going through a difficult economic period, while each of them faces certain difficulties (Odinokova & Istomina, 2018; Odinokova, 2019) due to both high dependence on external factors and the imperfection of relations between organizations at different sublevels of life insurance. In addition, sanctions against Russia (Nusratullin et al, 2021b) and the COVID-19 pandemic (Nusratullin et al, 2021a) have a certain negative impact on the development of the life insurance system.

Assessing the prospects for the development of the Russian life insurance model requires identifying its strengths and weaknesses, opportunities and threats (Table 1).

Table 1.
Matrix of SWOT-analysis of the Russian life insurance model.

Strengths	**Weaknesses**
A range of insurance services offered, interesting in its composition and the nature of the process of relationships with participants in insurance relations. Establishment and coordination of partnerships between the PFR and the NPF, within which there is a redistribution of risk and the burden of paying pensions to insured persons. Consolidation, reorganization, corporatization of NPFs and their inclusion in the national system of guaranteeing the rights of insured persons. Lessons from crisis situations in the National Economy of 2008–2009, 2014 Formation, functioning and development of the system of guaranteeing the rights of insured persons Formation and establishment of a corporate governance system for NGOs and insurance Consolidation of insurance companies specializing in voluntary life insurance and strengthening lobbying of their interests by self-regulation organizations of the Social Insurance Fund Development of a system of actuarial and special depositary control over insurers' activities	Insufficient level of automation and lack of advanced technologies in the state life insurance system The disunity of the institutional interests of the PFR, NPFs and life insurers (LIs) due to the inconsistency of ongoing institutional reforms with their requirements Insurers' low customer orientation compared to developed countries Low efficiency of the life insurance system Persistently high level of operating costs of life insurers Undercapitalization of the life insurance model High costs of doing business
Opportunities	**Threats**
Low penetration of private life insurance Reforming the country's pension system and expanding the range of individual pension capital (IPC) operators, including both NPFs and life insurers The expediency of equalizing the rights of life insurers and NPFs both in the IPC formation and at the stage of pension payments Expansion of the system of guaranteeing the rights of insured persons to voluntary life insurance contracts Growth of functional and investment attractiveness of voluntary life insurance products Increased attention to the development of life insurance in general and, as a result, strengthening of state participation in the development of private life insurance Corporatization of the Pension Fund of the Russian Federation	Imbalance of the CPI system in terms of the collection of insurance premiums and the payment of pensions to insured persons Ensuring a balanced budget of the PFR through transfer “injections” from the federal budget (or Growth of the transfer dependence of the PFR on the federal budget) Increased burden on the PFR budget due to the deteriorating demographic situation in the country and the implementation of the state policy of generous payments without the appropriate formation of insurance coverage Limited list of funding sources for covering the PFR budget deficit Volatility of the financial and other markets in the country and, as a result, excessive requirements for insurers' investment activities High concentration of organizations in the voluntary life insurance subsystem Imperfect legislation that allows for insurance fraud

One of the strong positions of the Russian life insurance model is the almost formed infrastructure, which is represented by:

1) firstly, the main insurer – the Pension Fund of Russia, which provides almost 95% coverage of Russian citizens through the introduction and functioning of compulsory pension insurance in the country and fairly “generous” conditions for its implementation both in terms of total indicators and in terms of the list of insurance risks and conditions of their insurance coverage;
2) secondly, private insurers represented by two types – NPFs and insurance companies specializing in voluntary life insurance (hereinafter referred to as “ICLs”), which, as

part of their activities, supplement the presented range of insurance services of the PFR.

However, in the institutional aspect, this model cannot be unequivocally recognized as effective due to the imbalance of development (the advantage of state life insurance), the crisis of confidence and the high proportion of the population experiencing problems with the instability of financial resources (personal finances).

However, in the institutional aspect, this model cannot be explicitly recognized as effective due to the imbalance of development (the advantage of state life insurance), the crisis of confidence and the high proportion of the population experiencing problems with the instability of financial resources (personal finances).

To assess the influence of various factors on the life insurance model, the authors will conduct a correlation-regression analysis. The main factors affecting the balance of financial flows in the Russian life insurance model were identified through the correlation analysis and are shown in Table 2.

Table 2.
The main factors affecting the balance of financial flows of the Russian life insurance model.

Targeted object	Factor rank	Correlation degree, %	Factor	Correlation degree, %	Factor rank	Targeted object
State life insurance	1	97.8	Per capita income of the population, RUB	88.9	2	Private life insurance
	2	95.9	GDP per capita at purchasing power parity in USD, RUB	86.8	3	
	4	-93.5	Gini coefficient	-92.0	1	
	5	-91.6	Income differentiation coefficient (fund ratio), times	-86.6	4	
	3	93.7	Life expectancy, years	85.3	5	
	6	81.1	Financial balance of enterprise performance	85.2	6	
	7	-68.3	Consumer Price Index (CPI), %	-70.1	7	
	8	-51.8	Increase in personal savings, bn. RUB	-54.2	8	
		No correlation	Consumer confidence index, %	No correlation		

For all the factors considered, both for the state and private levels of the life insurance models, correlations are the same (direct or inverse one). The revealed positive correlation indicates a direct relationship between the change in the factor and the targeted object (typical for per capita income of the population, GDP per capita at purchasing power parity (PPP) in USD, the financial balance of enterprise performance and life expectancy upon reaching retirement age).

In turn, a negative correlation indicates an inverse relationship between the change in the factor and the targeted object (typical for the Gini coefficient and income differentiation coefficient (fund ratio), the consumer price index (inflation) and the increase in personal savings).

High and noticeable correlation (in the ranking, the last (6-8) places are the same: direct correlation – the financial balance of enterprise performance; inverse correlation – the consumer price index (CPI) and the increase in personal savings.

In terms of state life insurance, a very close relationship is observed in five indicators that are somehow strongly interconnected, therefore, they show a relationship in percentage from 91.6 to 97.8% as they decrease: the greatest dependence on (they react more sensitively to) per capita income of the population (97.8%), then on GDP per capita at PPP in USD (95.9%), then on life expectancy of the population (93.7%), while the dependence on these factors is direct (the larger the factor, the higher development rate of state life insurance). Further, there is an inverse dependence on the Gini coefficient (93.5%) and on the income differentiation coefficient (91.6%) (the higher the indicator, the lower the indicator of development of state life insurance). This dependence is due to the fact that state life insurance, based on the principle of generational solidarity, is somehow aimed at the equalizing nature of insurance payments.

As for the factors under consideration, private life insurance shows the closest correlation with the Gini coefficient (inverse correlation) – 92%. In the second and third places with a high dependence are the links with per capita income of the population (88.9%) and GDP per capita at PPP in USD, respectively, showing a direct dependence, then in the fourth place is the income differentiation coefficient (86.6 %), and it shows inverse correlation. Since the main insurers in private life insurance are the citizens themselves, then, as a result, there is also a greater dependence on their well-being (the Gini coefficient and per capita income of the population), which is confirmed by the correlation analysis.

Thus, state and private life insurance show dependence on the factors under consideration, but react differently to them, respectively, this should be taken into account by the state when implementing the policy of regulation of this area of activity.

Based on the analysis conducted, the following conclusions can be drawn:

The first level (state life insurance) of the life insurance model

1) is the basis of financial well-being for a significant part of Russian pensioners;
2) lacks its own sources of financing, as a result, it has become dependent on support from the federal budget, “the possibilities of which are far from limitless” (Sabitova et al, 2015);
3) there are no guarantees to ensure an acceptable level of pension provision for insured persons “in an adequate amount”. According to the Strategy for the Long-Term Development of the Pension System of the Russian Federation, by 2030, an old-age pension equal to 40% of lost earnings will be considered adequate in the country, and not lower than 2.5-3 pensioner subsistence minimums (Decree No. 2425-r, 2012);
4) the accumulative component of the CPI in the form in which it currently exists does not have a special impact on the financial situation of pensioners. The average funded pension in 2020 was RUB 1,031, and an urgent pension payment was RUB 1,894 (Pension Fund of the Russian Federation, 2021). Moreover, the variety of payments from pension savings (funded pension, fixed-term pension payment, lump sum payment) allows insurers to apply various schemes aimed at not assigning a life-long funded pension to citizens, but paying pension savings at a time;
5) there is no mechanism to ensure the balance of financial flows in the event of a situation where there may be a significant excess of the amount of funded pension payments in relation to the total amount of initial pension contributions and income from investing pension savings due to the manifestation of insurance risk that comes with the uncertainty associated with life expectancy (survival risk);
   due to the imperfection of the legislation and constant changes made to it, it allows insurers to level their burden in fulfilling the liabilities assumed before the insured persons (for example, a six-month period for inheriting the amount of the funded pension);
   provides a narrow choice of strategies for managing the insurance protection of insured persons in the event of adverse events in their lives and defines a small list of tools for investing pension savings;

the second level (private life insurance) shows better development indicators, however:

1) insufficiently high capitalization of insurers;
2) strong dependence on external factors;
3) inefficient management with “internal” risks, as a result, the growth of the business of ICLs and NPFs is not accompanied by adequate capital growth: since 2008, the average ratio of own funds (equity capital) to liabilities for the main activity has decreased by 2021 for ICLs from 45 to 12.5% and for NPFs from 15.7 to 10.8% (Central Bank of the Russian Federation, 2021b);
4) an insignificant role of pension payments in the incomes of current pensioners (the average amount of insurance payments for NGOs is RUB 3,700, for voluntary pension insurance in ICLs – RUB 1,300 (Central Bank of the Russian Federation, 2021b).

Taking into account all of the above, the current Russian life insurance model is financially unsustainable, non-transparent and inefficient. This conclusion is confirmed by an assessment of the potential and reality of insurance of the most important risks for the life of the population, which is summarized in Figure 7.

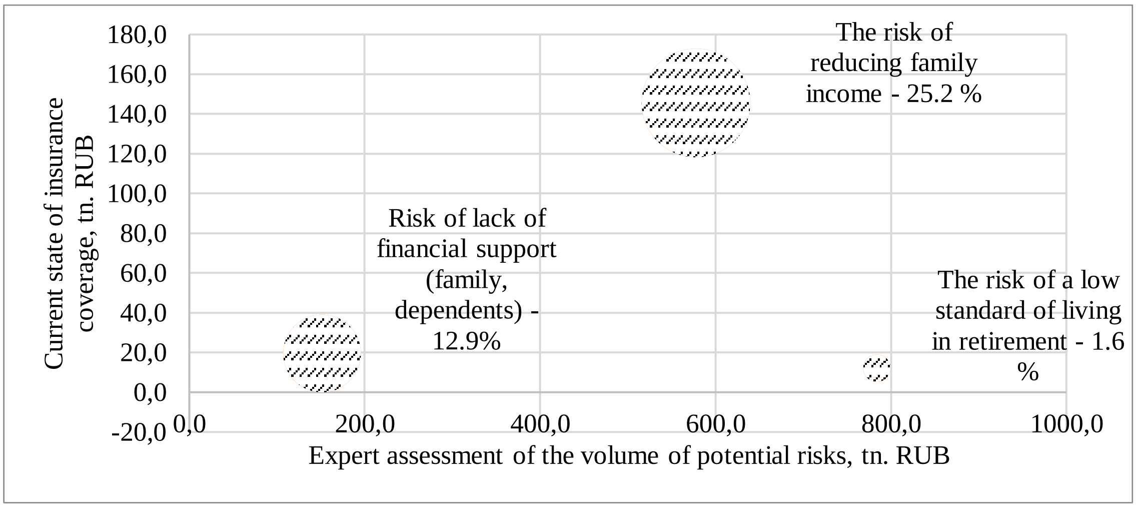


Figure 7. Coverage of potential risks by insurance.
Source: author's calculations

Thus, it can be seen that in Russia the level of funds allocated in the economy for pensions is rather low. All comparisons show that the average world level and the level of economies with the development similar to the Russian economy is about 10-11% of GDP, in Russia it amounts to 7.5% of GDP. Calculations show that at the current level of income of the population, in Russia there is no alternative to the mandatory solidarity pension system in the economy, i.e. attempts to develop the funded part of the pension at low wages are not possible.

In addition, the Russian life insurance model faces the following problems:

- the imperfection of the legislative and regulatory framework, which allows all its participants to use the asymmetry of information;
- low financial literacy and, as a result, the lack of an insurance culture;
- a significant proportion of the population with no opportunity to create savings;
- territorial asymmetry of the population's standard of living;
- citizens' inertia, which is expressed in an indifferent, unresponsive attitude to the creation of their pension and insurance savings;
- the lack of desire among many citizens to financially plan their lives for more than three years;
- citizens' paternalistic attitude;
- the lack of a single database among insurers (PFR, NPFs and life insurers), which would reflect data on policyholders, insured persons and beneficiaries;
- high transaction costs for insurers;
- citizens' low awareness;
- inefficient tax incentives for the population and organizations to create and manage savings in long-term insurance policies;
- limiting the insurers' possibilities in the field of investment policy;
- distrust of the population not only to NPFs and life insurers, but also to the PFR;
- low level of customer orientation and quality of insurance services.

The consequence of the identified problems is that the interaction of life insurers, NPFs and the PFR becomes difficult. In addition, there are various difficulties associated with the integration of individual business processes into common operational-strategic contours. Consequently, such problems do not allow to fulfill the potential of life insurance in Russia at the present stage of development.

Conclusions

Under the current conditions, it seems necessary to develop the Russian life insurance models, both in terms of its state sub-level by ensuring its long-term balance of financial flows and the private sub-level. The existing Russian life insurance model should guarantee a certain standard of living for the insured, be transparent, understandable and preferably profitable.

The strategic vision of the Russian life insurance model is as follows:

1) currently, the Russian life insurance model is in the process of transition from the divergence of state life insurance and private life insurance and their factorial influence on each other to system integration, within which measures are being sought and

implemented to combine the efforts of its financial institutions in order to level risks of participants in the insurance protection system;
2) the Russian life insurance model is highly dependent on external factors and, in order to reduce this dependence it is necessary to intensify the processes of convergence between its financial institutions, thereby achieving greater financial stability and process stability;
3) the state level of the Russian life insurance model provides protection against the risks associated with reaching retirement age, establishing disability and the death of the insured person; in this regard, other risks associated with the life cycle remain the responsibility of the insured person;
4) despite the ongoing measures within the framework of the pension reform and due to their weak efficiency, the state level of the life insurance model will continue to follow the inertial development scenario;
5) private life insurance, within which non-state pension funds and life insurers carry out their activities, is a small but the fastest growing level of the Russian model;
6) the instability of internal processes introduces a certain instability into the model, which, being in balance, does not have a safety margin, since any small shock may upset the balance, which will eventually lead to the destruction of the system as such;
7) the weakness of intra-system relationships due to the negative attitude of a fairly large proportion of the population towards NPFs and life insurers does not contribute to their goals in providing comprehensive insurance protection for the population, which, along with low financial literacy of citizens, weakens the potential of society;
8) the low efficiency of some elements of the Russian life insurance model does not make it possible to turn it into a strategically important sector of the Russian economy, which ensures an increase in the economic stability of society, an increase in the social protection of citizens and a decrease in social tension in society through effective insurance protection of the property interests of citizens and business entities, attracting investment resources to the country's economy.

As the analysis has shown, currently each level of the Russian life insurance model functions separately and it is often reflected in the duplication of operations and competition for a solvent client. In such relationships, in order to "survive", both segments seek to draw over the financial resources of enterprises and citizens, while not always being interested in the party (the insured person) in whose interests they act.
It is necessary to use an integrated approach to addressing life insurance issues in the process of human capital reproduction, which involves coordinating the processes related to cash flows at different levels and having one goal – to increase the duration and improve the quality of life of the Russian population, while these processes are not possible without active participation of its main participant – an individual whose interests are protected by the actions of the mentioned insurers.

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Analysis of conceptual approaches to the definition of the concept of "functional literacy"

Анализ концептуальных подходов к определению понятия "функциональная грамотность"

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Abstract

The relevance of the article is due to the attention paid by the pedagogical community to the category of "functional literacy", the ambiguity of its interpretation in scientific research, the requirement to respond to the changing demand of society for the quality of education. Moreover, the results of a survey of practicing teachers indicate some difficulty in understanding functional literacy. The purpose of the study is to analyze conceptual approaches to defining the concept of "functional literacy" and develop a generalized model of the structural elements of functional literacy. To achieve this goal, a combination of general scientific methods was used: a descriptive method, including methods of comparison, interpretation and generalization; synchronous theoretical analysis of conceptual approaches to the definition of the concept of "functional literacy" and its components; questioning; pedagogical forecasting; modeling. As a result of the study, conceptual approaches to the definition of the concept of "functional literacy" were analyzed, the definition of the concept of "functional literacy" and its components – mathematical literacy, natural

Аннотация

Актуальность статьи обусловлена вниманием педагогической общественности к категории «функциональная грамотность», неоднозначностью его трактовки в научных исследованиях, требованием реагирования на изменение запроса общества на качество образования. Кроме того, результаты опроса учителей-практиков свидетельствует о некоторой сложности понимания функциональной грамотности. Цель исследования – провести анализ концептуальных подходов к определению понятия «функциональная грамотность» и создать обобщенную модель структурных элементов функциональной грамотности. Для достижения поставленной цели был использован комплекс общенаучных методов: описательный метод, включающий приемы сопоставления, интерпретации и обобщения; синхронный теоретический анализ концептуальных подходов к определению понятия «функциональная грамотность» и ее составляющих; анкетирование; педагогическое прогнозирование; моделирование. В результате исследования проанализированы

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science literacy, reading literacy, financial literacy – was given. In the conclusions, the authors note that the analysis of conceptual approaches to the definition of the concept of "functional literacy" and its components contributes to the improvement of the ways and mechanisms for the formation of functional literacy of students.

Keywords: functional literacy, mathematical literacy, reading literacy, financial literacy, natural science literacy.

концептуальные подходы к определению понятия «функциональная грамотность», дано определение понятия «функциональная грамотность» и её составляющих: математическая грамотность, естественнонаучная грамотность, читательская грамотность, финансовая грамотность. В выводах авторы отмечают, что анализ концептуальных подходов к определению понятия «функциональная грамотность» и его составляющих способствует совершенствованию путей и механизмов формирования функциональной грамотности обучающихся.

Ключевые слова: функциональная грамотность, математическая грамотность, читательская грамотность, финансовая грамотность, естественнонаучная грамотность.

Introduction

Functional literacy in education is becoming one of the main topics for discussion at all levels: from government agencies in the field of education to educational institutions. (Häggström and Schmidt, 2021). The modern world has become much more complex, the visual-digital world has replaced the analogue-textological surrounding world, which requires the expansion and reinterpretation of the concept of "functional literacy" (Mangnus et al., 2021). Since functional literacy is understood as the ability of a person to use the knowledge acquired during life to solve a wide range of life tasks in various fields of human activity, communication and social relations, its development in schoolchildren is necessary for the development of society as a whole. An insufficiently developed level of functional literacy among adolescents prevents their adaptation and socialization in society (Yates, 1995).

The purpose of this study is to describe the approaches of Russian and foreign researchers to the definition of "functional literacy" and its components. This goal predetermines the solution of the following tasks:

- to analyze and generalize the approaches to the definition of the concept of "functional literacy" in scientific research;
- to ascertain the ideas of educational practitioners about functional literacy through a survey;
- to develop a generalized model of the structural elements of functional literacy.

The research hypothesis is a generalized model of the structural elements of functional literacy, developed on the basis of an analysis of the conceptual approaches of Russian and foreign researchers of the problem under consideration, will reveal the problems of the formation of individual components of functional literacy in a unified approach to reading literacy, mathematical literacy, natural science literacy, financial literacy.

Literature Review

Due attention is paid nowadays to the formation of students' functional literacy in Russia: regular government events are held, road maps have been developed for methodological support of teachers on the formation of functional literacy in students, grants are allocated for the implementation of measures to improve the functional literacy of students, etc. (Zuckerman et al., 2013). Researchers note a change in society's demand for the quality of general education in Russia. This is due to objective information about the quality of general education in the Russian Federation in comparison with international standards (Basyuk & Kovaleva, 2019).

The concept of "functional literacy" first appeared in the works of Russian scientists in the early 2000s. For example, Leontiev (2016) characterized this concept as follows: "A functionally competent person is a person who is able to use all knowledge, skills and abilities that are constantly acquired throughout life to solve the widest possible range of life tasks in various spheres of human activity, communication and social relations". Leontiev (2016) notes that a person with a high level of functional literacy is able to use the acquired knowledge, skills and abilities to solve various life problems, problems in social, scientific activities, in communication. Functional literacy is the ability to adapt as quickly as possible in the external environment and to function actively in it.

Azimov & Shchukin (2009) define functional literacy as "the ability of a person to enter into a relationship with the external environment and adapt and function in it as quickly as possible." Functional literacy should be distinguished from common literacy, which presupposes a person's possession of such skills as reading, writing, listening, and solving arithmetic actions of different levels. Functional literacy is a higher level of skills and abilities that contribute to the successful, productive solution of social, professional tasks (Azimov & Shchukin, 2009).

Vinogradova et al., (2018) defines functional literacy as a basic education of a person, which allows its systematic practical use. The definition of functional literacy in the PISA (Program for International Student Assessment) study is associated with the skills and knowledge required by fifteen-year-olds to function fully in modern society. Thus, functional literacy according to PISA is a set of defined competencies, where competence refers to the ability of students to apply knowledge and skills acquired in school in life situations (OECD, 2019).

In some works, the concept of functional literacy is used in terms of "information literacy" in vocational training. Thus, Koler-Povh & Turk (2020) note that the systematic training of engineering students in Slovenia in compulsory information literacy programs objectively increased their competence in publishing. Similar results in medical students at the University of Texas in the formation of professional competencies were noted by Waltz et al., (2020).

Methodology

A combination of general scientific methods: a descriptive method, including methods of comparison, interpretation and generalization; synchronous theoretical analysis of conceptual approaches to the definition of the concept of "functional literacy" and its components; pedagogical forecasting; modeling was used to achieve this goal.

The methodological basis of the research is the modern philosophy and methodology of pedagogical science. Within the framework of the study, the epistemological principles are of particular importance: the relationship between theory and practice in the process of scientific cognition, the principle of consistency, the dialectical unity of the general and the particular in pedagogical phenomena.

Results and Discussion

To understand functional literacy, the authors will consider its components, namely: reading, mathematical, natural science, financial literacy.

Reading literacy can be considered the foundation of literacy in general and functional literacy in particular. The concept of "reading literacy" appeared in Russian pedagogy relatively recently. This term has become widespread due to a number of international diagnostics, in which Russia has participated since the end of the 20th century. The original definition of reading literacy was developed for the first PISA study in 1998-2001 based on the consensus of a group of experts from countries-participants in the PISA-2000 test (OECD, 2019). This definition was based in part on the International Reading Literacy Survey and the International Adult Literacy Survey. The definition of reading literacy used in the PISA-2000 test has developed under the influence of modern reading theories based on the idea of the active nature of reading, models of text comprehension and theories of solving reading problems. In accordance with these ideas, the linguistic person understands the text due to some "previous" background knowledge, which makes it possible to perceive and interpret the text depending on the socio-cultural characteristics of the reading context and the reader himself. The reader needs to apply different strategies and skills to make sense of the text, which depend on the goals of the reading and the type of text (Walgermo et al., 2018).

PISA defines reading literacy as the ability of a person to understand and use written texts, reflect on them and engage in reading in order to achieve their goals, expand their knowledge and capabilities, and participate in social life (Zuckerman, 2010). This definition gives grounds to assert that the concepts of "reading literacy" and "reading" are synonymous only in part. Reading in Russian pedagogy is considered as "the process of transcoding a graphically fixed text into sound speech, its understanding" (L'vov, 1997). Reading results in comprehension and comprehension of written texts. The concept of "reading literacy" implies an active, purposeful and constructive use of reading in different situations and for different purposes. The reader brings into the act of reading his cognitive abilities (attention, memory, ability to critical analysis, logical thinking, visualization); motivation (purpose of reading, interest in content, self-assessment of reading efficiency); knowledge (lexical and thematic knowledge, linguistic and discursive knowledge, knowledge of understanding strategies) and experience.

The Progress in International Reading Literacy Study (PIRLS) considers reading literacy as “the ability to understand and use written language in all its variety of forms for purposes required by society and / or valuable to the individual. Readers construct their own meanings based on a variety of texts. They read to learn, to participate in school and out-of-school reading communities, and for fun” (Mullis & Martin, 2015). The presented definition also indicates the metacognitive competence of a linguistic personality with a high level of reading literacy, namely: involuntary intellectual control of information processing processes; knowledge of the stages of metacognitive actions; reflection of cognitive processes; justification of the chosen methods, techniques and methods of teaching; inclusion of this product in the overall picture of the world and oneself.

In modern Russian teaching practice, the most popular and generally accepted definition was proposed by Vinogradova et al., (2018): reading literacy is the need for reading activity for the purpose of successful socialization, further education, and self-development; readiness for semantic reading and perception of written texts, analysis, assessment, interpretation and generalization of the information presented in them; the ability to extract the necessary information to transform it in accordance with the educational task; navigate with the help of various textual information in life situations. The presented definition, in our opinion, reflects the key points of reading literacy and indicates such important aspects as motivational (the need for reading activity), cognitive (perception of written texts, analysis, evaluation, interpretation and generalization of the information presented in them) and pragmatic (textual information makes it possible to solve specific problems in certain life situations).

The above definitions help to single out and characterize the main structural elements of reading literacy.

1. Situation. This nomination is understood as life circumstances that presuppose the solution of a problem or the achievement of a particular goal based on the text. Conventionally, four types of situations can be distinguished: personal, educational, public, business. Each type of situation presupposes its own set of texts: personal situations – biography, letter, live journals, blogs, etc.; educational – textbook, manual, article and other scientific and educational literature; public situations – official documents, forums, news websites, etc.; business situations – announcement, instruction, laws, decrees, orders.
2. The text with the help of which a problem is solved or a certain goal is achieved. Depending on the format of information presentation, the texts can be continuous (information is presented exclusively in a verbal way); discontinuous (information is presented in a non-verbal way in the form of tables, diagrams, figures, etc.); mixed (inside one text information is located both in solid and non-continuous formats).
3. Reading skills. The indicated structural component presupposes the readiness of the subject to most effectively perform actions in accordance with the goals and conditions in which one has to act, namely: to find information in the text; integrate and interpret it; evaluate the content and form of the text. Moreover, reading skills provide for mastering different strategies for reading texts: strategies for pretext activity, strategy for textual activity, strategy for post-textual activity.

Mathematical literacy is also an important component of functional literacy. It should be noted that at present the concept of "mathematical literacy" is not well-established in both domestic and foreign scientific literature. This term was one of the first to be mentioned in the United States back in 1944, when the National Council of Teachers of Mathematics (NCTM) commission announced in its post-war plans that the school should ensure the formation of mathematical literacy for all students. However, the definition of this concept was not given. The 1989 NCTM standards set out five general goals to help students achieve math literacy: "1) to learn to appreciate math; 2) to gain confidence in their ability to master mathematics; 3) to be able to solve mathematical problems; 4) to master mathematical speech; 5) to learn to reason mathematically" (Crosswhite et al., 1989).

The first attempt to provide a clear definition was made in the original PISA program in 1999 (OECD, 1999), which was subsequently revised and supplemented several times for subsequent PISA cycles. Currently, most researchers, both Russian and foreign, use the following definition: “mathematical literacy is the ability of an individual to reason mathematically, formulate, apply, interpret mathematics to solve problems in various contexts of the real world” (OECD, 2018). The context can be personal, professional, scientific or public spheres of a person's life.

In the scientific and methodological literature, many related concepts can be found: "quantitative literacy", "statistical literacy", "logical literacy", "critical mathematical literacy". For example, Nikolskaya (1978) defines the concept of logical literacy as an indicator of the assimilation of a complex of logical knowledge, abilities, skills to be mastered by the graduate of a secondary school.

Kovaleva (2005) defines the concept of mathematical literacy as "the ability of a person to determine the role of mathematics in the world in which he or she lives, to express well-founded mathematical judgments and to use mathematics in such a way as to satisfy the present and future needs of a creative, interested and thinking citizen".

A number of Russian researchers consider the mathematical literacy of students in the context of the formation of their functional literacy. Thus, Valeev (2020) characterizes a functionally competent student in terms of mathematical competence as capable of performing the chain of actions indicated in the model of mathematical literacy of the PISA study: "to recognize the problems of the surrounding reality, formulate them in the language of mathematics, solve them using mathematical methods, analyze the methods used, interpret the results obtained taking into account the problem posed and formulate the results of the solution." Thus, the concept of "functional mathematical literacy" is introduced in order to emphasize the inclusion of mathematical literacy in the process of forming a functional one.

In addition, the problem of the relationship between the concepts of "mathematical competence" and "mathematical literacy" is widely discussed in the scientific literature. According to Denischeva & Krasnyanskaya (2017), functional mathematical literacy implies the formation of students' mathematical competence through a specially designed system of tasks, divided into three groups. The first group includes tasks that require the reproduction of mathematical facts and methods, and the performance of calculations for their solution. The second group includes tasks aimed at establishing connections and integrating material from different areas of mathematics. The tasks of the third group require the isolation of the problem in life situations, solved with the help of mathematics with the further creation of a solution model. Based on this research, Valeev (2020) proposes a three-level model of the mathematical competence of schoolchildren, on the basis of which he classifies the tasks from the PISA mathematical literacy study according to the corresponding levels.

In the understanding of Jablonka & Niss (2014), "mathematical literacy", "quantitative literacy" and "numeracy" focus on mathematics as a tool for solving non-mathematical problems, while the concepts of mathematical competence (and competencies) and mathematical proficiency focus on the fact that means mastering mathematics in general, including the ability to solve both mathematical and non-mathematical problems.

In all the listed approaches to the definition of the concept of "mathematical literacy", common features can be distinguished. Thus, all researchers emphasize its activity-oriented and integrative nature. There is also agreement that mathematically literate citizens should not be experts in mathematics and that mathematical literacy is based on knowledge that should be available to everyone.

In PISA (OECD, 2018; OECD, 2019), natural science literacy as a component of general functional literacy represents a person's ability to take active citizenship on issues related to natural sciences and their willingness to take an interest in natural science ideas. A natural science literate person seeks to participate in a reasoned discussion of problems related to natural sciences and technology, which requires the following competencies from the person: to explain phenomena scientifically, to evaluate and plan scientific research, to scientifically interpret data and provide evidence.

According to Fakhriyah et al., (2017), studying the level of education in physics and biology among prospective primary education teachers in Indonesia, "scientific literacy is interpreted as the use of scientific information to solve problems in everyday life." According to researchers, scientific knowledge should be reflected in skills, attitudes and literacy for solving various problems, therefore, it is necessary to be proficient in research methods, noting that professional knowledge is based on the functional level. Achieving the functional level is possible only through the involvement of students in research activities and the practical use of these activities.

Thus, natural science literacy is a level of education that makes it possible to solve standard life tasks in various fields of activity on the basis of practice-oriented knowledge, including a set of skills and abilities that ensure a person's full participation in the life of society, a person's ability to enter into relations with the external environment, quickly adapt and function in it.

The PISA science literacy model formulates contexts: personal, local (national) and global issues, both contemporary and historical, that require an understanding of science and technology issues. Students are required to demonstrate basic competencies: scientific explanation of phenomena; understanding the main features of natural science research; interpreting data and using scientific evidence to draw conclusions in a specific context. Attitude towards science should be determined by an interest in technology, an understanding of the value of scientific study of issues, where necessary, and awareness of environmental problems, as well as an awareness of the importance of solving them and knowing: understanding the basic facts, ideas and theories that form the foundation of scientific knowledge. Such knowledge includes knowledge of nature and technology (knowledge of content), knowledge of methods of obtaining scientific knowledge (knowledge of procedures), understanding of the validity of these procedures and their use (methodological knowledge) and determines the results of learners.

According to the results of interim monitoring (Froumin et al., 2018), a particular difficulty for schoolchildren is the "transfer" of a life issue, a problem into the scientific field. This indicates that the process of teaching the disciplines of the natural science cycle should include the competence-oriented tasks based on real life situations, experimental work, etc. that, in our opinion, have been already reflected in modern textbooks and educational-methodical complexes.

The next component of the functional literacy framework is financial literacy. The relevance of the formation of the foundations of financial literacy is determined by the modern socio-cultural situation, the development of a market economy and the functioning of market entities, which are all citizens of the country. In connection with this, a significant number of studies appear on the problem of improving the financial literacy of various social groups: from preschoolers to retirees.

It is worth noting that financial literacy does not imply deep theoretical knowledge of the specifics of the financial market, banking, etc. A financially literate person should know how to effectively manage and control the family budget; how to plan cash expenses for the near future and for the future; how to act in case of unexpected loss of income; how to form a financial reserve, etc. (Opletalová, 2015). At the same time, foreign researchers associate financial literacy of students mainly with understanding the value of savings, the ability to manage them, discussing money issues with parents and teaching financial literacy at school. (Grohmann et al., 2015; Moreno-Herrero et al., 2018).

The low level of financial literacy limits the ability of children, and then adults, to make informed financial decisions, namely: to create reserves of cash and regular savings, to plan for old age, to know the main portfolios of financial products, to be able to assess the risks associated with certain financial products (Atkinson and Messy, 2012). Therefore, research focuses on the organization of financial education, starting from the initial stage of education, which can be the key to improving financial decision-making among the population.

Summarizing the above, the authors note that financial literacy is the assimilation of certain behavioral models, understanding and forecasting financial risks. Financial literacy is essential for making sound financial decisions and managing personal finances. It will be able to manifest itself as a certain social quality of a person, which makes it possible to consciously participate in various processes related to money, inevitably leading to personal and social financial well-being.

The formation of functional literacy in the general education system is determined, first of all, by the high-quality professional training of teachers, since the level of educational achievements of schoolchildren depends on the nature of the educational tasks offered to them by the teachers. As part of the monitoring of the formation of students' functional literacy, a questionnaire was conducted among teachers working in schools in the Krasnoyarsk Territory (Russia) about their ideas about what functional literacy is. Out of 287 teachers surveyed, the overwhelming majority of 78% preferred to choose an answer from the proposed formulations, and only 22% of respondents offered their own version of the wording of this concept. For example, "a person's ability to navigate in all spheres of life"; "The ability of a person to enter into relations with the entire external environment", "the ability to use knowledge in everyday life", "the ability to apply knowledge to solve life problems." 14% of respondents chose the most generalized superficial version of the wording as a definition: "a person's ability to understand the processes of real life", which does not include the active application of knowledge in real life. 25% of the respondents preferred the choice of the answer as "a person's ability to navigate in modern information" that is, it also includes a predominantly component of understanding, rather than the effective implementation of knowledge and skills. 39% of teachers emphasized the third formulation, which includes "a person's ability to use in life what he was taught in school", which is more consistent with the official version of the definition of functional literacy, since it reflects the ability to use constantly acquired knowledge, skills, and abilities to solve life tasks.

The analysis of the key concepts of the research issue (mathematical, natural science, reading, financial literacy) allowed the authors to develop a generalized model of the structural elements of functional literacy (Fig. 1).

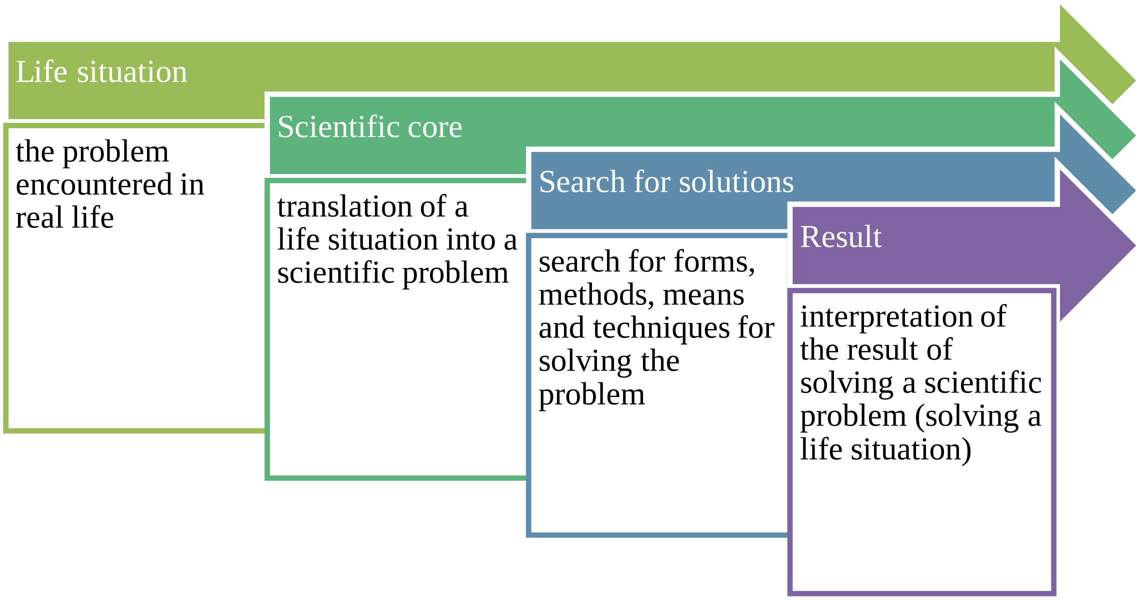

Fig. 1. Generalized model of the structural elements of functional literacy.
Source: compiled by the author.

In the context of the research, the authors are interested in the solution of the "life situation", that is, the problem that students may face in real life. The analysis of international comparative studies of education quality shows that the second element of the "scientific core" model causes the greatest difficulty for Russian schoolchildren; students solve a fundamental problem (for example, an equation, inequality, etc.) quite confidently, but they experience certain difficulties when translating a life situation into a scientific problem. The solution of a fundamental problem (the third element of the structural model is "search for a solution") involves the search for forms, methods, means and techniques for solving a scientific problem and their use to obtain a result. Russian schoolchildren do not experience any particular difficulties at this stage. Interpretation of the result of solving a scientific problem (life situation) is difficult only if the student cannot independently translate the "life situation" into a "scientific problem".

Conclusions

A detailed analysis of conceptual approaches to defining the concept of functional literacy and its components in scientific Russian and foreign research was carried out by the authors. The results of the analysis confirm the feasibility of considering the definition of "functional literacy" and provide a detailed theoretical basis and a wide range of tools for pedagogical modeling and design. The author's generalized model of the structural elements of functional literacy makes it possible to understand the problems of the formation of individual components of functional literacy in a unified approach to reading literacy, mathematical literacy, natural science literacy, financial literacy.

Nowadays, it is important to consider not only the assimilation of a certain amount of knowledge by students, but also the quality of general education in Russia, which determines the importance of conducting research on the state of the problem of the formation of functional literacy. As a scientific result of the study, the authors conclude that certain scientific works on the problem of understanding functional literacy and its components repeat the existing ones, particular duplication of research is observed. In this regard, the proposed scientific results are, first of all, of theoretical value for researchers of the stated problem and educational practitioners, whose understanding of functional literacy often remains fragmentary. The analysis of conceptual approaches to the definition of the concept of "functional literacy" and its components, in our opinion, will contribute to the improvement of the ways and mechanisms for the formation of functional literacy of students. The authors intend to propose a model for the formation of functional literacy, taking into account the regional specifics.

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Socio-economic inequality and altruism

Социально-экономическое неравенство и альтруизм

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Abstract

The article addresses the attitudes to inequality in the Russian society depending on the role of the individual in a reference group. It is shown that people are ready to accept significant income inequality if they believe that the income is well earned. No correlation was found between subjective well-being and inequality. The vast majority of people compare themselves with friends, neighbours and relatives. The next most important reference group is colleagues, followed by celebrities. The rejection of representatives of lower social classes is negatively correlated with life satisfaction. At the same time, the respondents expressed willingness to build a society where, having due means, people would organise help to those who cannot provide for themselves.

Keywords: inequality, altruism, charity, views of income inequality.

Аннотация

В статье исследуется отношение к неравенству в российском обществе в зависимости от роли индивида в референтной группе. Показано, что люди готовы принимать значительное неравенство доходов, если считают доход заслуженным. Корреляции между субъективным благополучием и неравенством не обнаружено. Подавляющее большинство людей сравнивают себя с друзьями, соседями и родственниками. Следующая по значимости референтная группа – коллеги, затем идут знаменитости. Негативное отношение к представителям более низких социальных классов отрицательно коррелирует с удовлетворенностью жизнью. При этом респонденты выразили готовность к построению такого общества, где, имея средства, люди будут организовывать помощь тем, кто не может себя обеспечить.

Ключевые ресурсы: неравенство, альтруизм, благотворительность, представление о неравенстве доходов.

Introduction

One of the issues in contemporary economic theory is population inequality and well-being (Nusratullin et al, 2019; Vishnever et al., 2019), as well as the impact of some people's income on others' perception of personal well-being. There are two main types of individual attitudes to

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income distribution in the society. The first approach can be viewed as the individual's disinterested assessment of income inequality (normative assessment of inequality). Inequality in standard treatment is assessed by the individual regardless of where he/she is within the distribution level, or even whether he/she is present at all in this system or not. The second approach, in the context of relative positioning, will depend critically on the control group that the individual has in mind. This group may include two subgroups: relative (comparative) reference group which serves as a standard for comparison in terms of self-assessment, and standardised reference group which is a source of norms, attitudes and values of concerned individuals. The relative reference group is a point of comparison that allows for identifying the individual's own status when he/she is part of a group. The standardised reference group includes those whose attitudes constitute a coordinate system for the individual (Merton & Rossi, 1968).

The individual's response to income inequality will depend both on the role adopted by the reference group and on the status of his/her membership of the group. The individual's well-being, in the relative reference group of which he/she is a member, usually keeps to the position that one is negatively influenced by those who earn more than him/he, while positively influenced by those who earn less. Relative reference groups can also influence one's behaviour, even if the individual is not currently a member of the group. If the individual aspires to become part of the group in question, then the comparison with wealthier individuals in the group can trigger positive emotions since the individual expects to become as well-to-do as the other group members, when he joins the group. This idea of relative reference group towards which the individual aspires is akin to the Hirschman-Rothschild's tunnel effect (1973).

The article explores the attitudes to inequality in the Russian society depending on the role of the individual in a reference group. The study revealed that:

- people are prepared to accept significant income inequality if they believe that the income is well earned;
- no correlation between subjective well-being and inequality was found;
- the vast majority of people compare themselves with friends, neighbours and relatives. The next most important reference group is colleagues, followed by celebrities;
- negative attitudes towards members of lower social classes correlate negatively with life satisfaction. At the same time, respondents expressed willingness to build a society where, having due means, people would organise to help those who cannot provide for themselves.

Literature Review

A substantial body of papers appeared lately considering the relationship between income and well-being, where the authors construct their concepts realising the significance of the Easterlin et al., (2010) paradox. The individual's perception of inequality may depend on his/her position in the income distribution. At any given time, richer people tend to be happier than poorer people. However, since GDP per capita increases over time, Easterlin et al., (2010) suggested that the average subjective level of welfare remains constant in many countries. The extent to which subjective well-being remains actually permanent over time is a subject of quite heated debate (Bloch et al., 2004). The comparison of individual's income or consumption with that of others (or with own income in the past) is often proposed as an explanation for this paradox. There are many ways to show that the individual's well-being depends negatively on the income of others, which has been shown empirically by numerous scholars (Brown et al., 2008; Brown et al., 2011; Heffetz, 2011).

Natural experiments may serve as the most convincing evidence in this respect, where the income or consumption of the control group varies randomly. Some of these experiments are adduced below.

Card et al., (2012) describe the following experiment. According to a California court ruling, the information about any state employee's salary became publicly available. The local newspaper set up a website facilitating the search for this information. After launching this website, the researchers informed a random group of employees at three California campuses about this site. Several days after, all employees at the three campuses were questioned. The study revealed that being informed about others' earnings reduced the subjective well-being of those found to be relatively less well paid than others in their reference group, and increased it if they were found to be paid more. The survey in fact revealed lower job satisfaction in people paid below the average in their reference group and their greater intention to seek new employment.

The effect of both of these variables on people relatively well paid was not significant.

Kuhn et al., (2011) described the following situation. A zipcode lottery is regularly held in the Netherlands. Every week, this lottery randomly selects a zipcode and distributes a prize of €12,500 for a lottery ticket acquired within the zipcode area. In addition, one of the participating households in the zipcode-winner area receives a new BMW car. These zipcode areas are small and constitute about 20 households on the average. The people who do not live in the winning zipcode area and those who did not buy a ticket receive nothing. The households in the winning zipcode areas were surveyed six months after receiving the prize. One of the key findings of the article is that people non-participating in the zipcode lottery (those living next door to the winners) were more likely to have bought a new car since the lottery date than the other non-participants. This suggests that people compare their well-being with their neighbours and buy a new car as a symbol of welfare.

The following example of natural experiment is the one in which the comparison with a baseline position or expectation influences the observed behaviour. In New Jersey, police unions negotiate their salaries with their municipal employer and, in the event of of a dispute, an outside arbitrator takes the final decision. Mas (2006) concluded that the number of crimes cleared per capita is 12% higher when the trade unions win cases, compared with the situations when they lose.

Natural experiments of this kind are relatively rare. Instead, most studies aim at obtaining survey data and modelling subjective welfare as a function of individual's own income and that of a likely reference group. The latter reference group is almost always imposed by the researcher as some measure of income obtained, for instance, by people of the same gender, age and education, or those living in the same region or working for the same firm. Direct information about the people in the individual's reference group is very infrequent in survey data (Clark & Senik (2010) is an exception).

Clark & Oswald (1996), using the data from the British Household Panel Survey (BHPS), showed that the estimated valuation multiples for people's own income and income of others in the job satisfaction equation are statistically equal and vice versa. Similar findings were obtained by Ferrer–i–Carbonell (2005) who analysed the national socio-economic surveys (SOEP) in Germany, as well as by Luttmer (2005), who based his findings on the US National Family and Household Survey.

The above studies refer to relative reference groups of which the individual is a member. However, a different situation is possible, when income increases in a comparative control group to which the individual aspires, but of which he/she is not yet a member. Some papers in fact show that individual well-being is positively correlated with the income of the reference group, and they attempt to interpret this correlation in terms of aspirations and future results. The positive correlation between one's own well-being and the income of others is consistent with the Hirschmann's tunnel effect where the others' income provides information about one's own future prospects.

Clark & Oswald (1996) noted a positive effect of other people's welfare on subjective well-being. In these cases, the measure of other people's income contains some element of the individual's likely future prospects. And this influence is higher to the extent of probability of one's joining a reference group. As an example, the work by (Clark & Senik (2010)) shows, using the data from a representative sample, that people were initially content with the higher income of others (closer to the upper limit of income distribution) since it was supposed that this was to reflect their own future opportunities. Once it becomes clear that only some relatively few people will actually be able to access such income, the satisfaction correlation becomes more comparable to the net negative effect in subsequent years of the sample. Similarly, one's income may be compared with the income of those who are poorer, i.e. those who are worse off.

One of the shortcomings of the studies described above, in our opinion, is that the researchers always make assumptions only for a proper reference group, with obvious consequences for precise measurement of relevant income differences.

Below, some works on subjective well-being are addressed. D'Ambrosio & Frick (2007, 2012) show in their papers that subjective welfare depends more on a measure of relative deprivation than on absolute income, since the correlation between income satisfaction and absolute income is 0.357, whereas the correlation between subjective well-being and relative deprivation is 0.439. Thus, individual welfare is estimated as a function of advantageous and disadvantageous inequality in a control group. Bossert et al., (2007) introduce time as additional dimension in assessing the individual's level of deprivation. They suggest that a person's sense of relative deprivation presently depends on comparison with those who are better off. In addition, they adduce an additional consideration: the feeling of deprivation towards someone who has higher income today is more pronounced if the latter person was not better off than the person in question on the previous day. Stated differently, relative deprivation is sensed more keenly in comparison to those who outdistanced the person in income distribution within the period from yesterday to today.

Individual well-being is negatively influenced by comparison with those who are consistently richer, and positively – by comparison with those who are permanently poorer. At the same time, it can be asserted that the presence of new richer and poorer people plays the informational role described in the tunnel effect. The one who is richer than me today but was poorer than me yesterday gives me a positive signal about my own future prospects. Indeed, D'Ambrosio & Frick (2012) show that individual satisfaction is positively correlated with such people's income today. Similarly, income gap with respect to those who are now behind the individual but used to be ahead of him/her reduces the person's satisfaction, which is consistent with the negative signal that he/she may fall within this group tomorrow.

In evaluation of well-being, altruistic behaviour should be addressed as well, when giving one's own money to others increases the welfare not only of the recipient, but also that of the donor. The experimental approach described in Konow & Earley (2008) shows that people showing high scores on the subjective well-being scale are subsequently more generous to others. A number of essays provide evidence of the fact that both tangible and intangible assistance to others has a positive impact on subjective welfare (Aknin et al., 2013; Kiffin-Petersen et al., 2012; Ricard, 2016). Dunn et al., (2008) in their study describe the observed positive correlation between social spending and subjective well-being, by making an experiment in which some people have to be generous. Aknin et al (2013) also concluded on direct correlation between pro-social spending and happiness: spending on social needs increases the extent of happiness. Boehm & Lyubomirsky (2009) show that people in the experimental group who were asked to perform three additional acts of kindness in a day experienced sustained increased satisfaction compared to the control group. Carpenter & Myers (2010) show that volunteering also generally leads to increased subjective well-being.

It is interesting to note that self-assessment of altruism is significantly correlated with all types of volunteering, with the exception of volunteers working with animals (Maki & Snyder, 2015).

An interesting area of research in this regard covers charity. People donate on charity either because they care about the recipients of their generosity or because they derive some benefit from the very process which is independent on the focus of application of their charity (Andreoni, 1989) calls this 'impure altruism'). Alternatively, philanthropy can be viewed as a benefit that confers the status of benefactor on the giver.

Konow (2010) shows in his research that giving to others cannot be explained by altruism alone. Konow (2010) calls for overarching role of context-dependent norms in specifying the notions of giving/bestowing to others, denoted by him as fairness and need in his experiments. Kranton et al., (2013) also emphasise that people can be altruistic towards other people, but tend to compare themselves and compete with others.

Below, within the scope of this study, the reference groups in the Russian society and their propensity for altruism is examined.

Methodology

A total of 1,745 people were interviewed, as part of the quantitative research, in 44 regions of the Russian Federation, aged 18 to 74, including Moscow, regional centres and small towns in Central Russia. The survey was conducted by telephone interviewing. In addition, nine focus-group sessions were conducted in Moscow, Vladimir and Gus Khrustalny, with a total of 90 respondents (30 persons aged 20-30, students and professionals with higher education, 30 persons aged 35-55 with secondary education, 30 persons aged 56+ having secondary education).

The study focused on identifying societal attitudes towards inequality and values underlying the attitudes towards inequality.

Results and Discussion

The economic indicators of inequality as measured through the means of economic statistics are not fully comparable with similar ones measured by sociological surveys. However, even a rough comparison shows that subjective perception of inequality has increased significantly, much more than the one measured objectively (Figure 1). This figure and below, where the data are given in percentage terms, shows the quantitative survey.

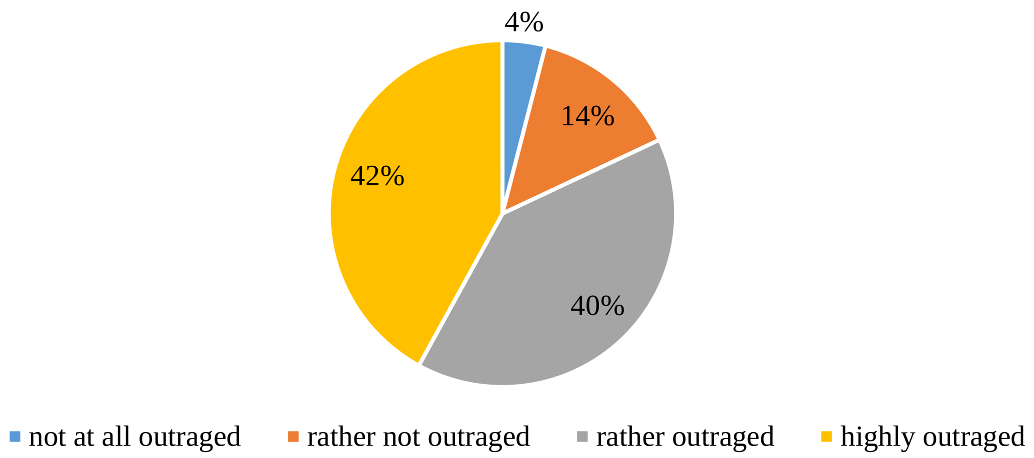

Figure 1. Assess how much each of the 5 forms of social inequality below is resented by you (economic inequality results)
Source: received by the authors

The survey results show that economic inequality is resented by the overwhelming majority of respondents across all demographic groups. This form of inequality is somewhat less resented in the younger age group (79% of the respondents are outraged, while it is most of all resented in the 41-60 age group (85% of the respondents).

It is generally assumed in the reference group of which the individual is a member that individual well-being is negatively influenced by those who earn more, but positively influenced by those who earn less. It is therefore necessary to identify the individual's reference group.

We asked in the focus groups about whom people compare their welfare with (colleagues, neighbours, celebrities, officials, someone else). The following answers were received: friends and relatives, colleagues, neighbours, oligarchs, famous bloggers. Next, this question was included in the mass survey. The results are presented in Figure 2.

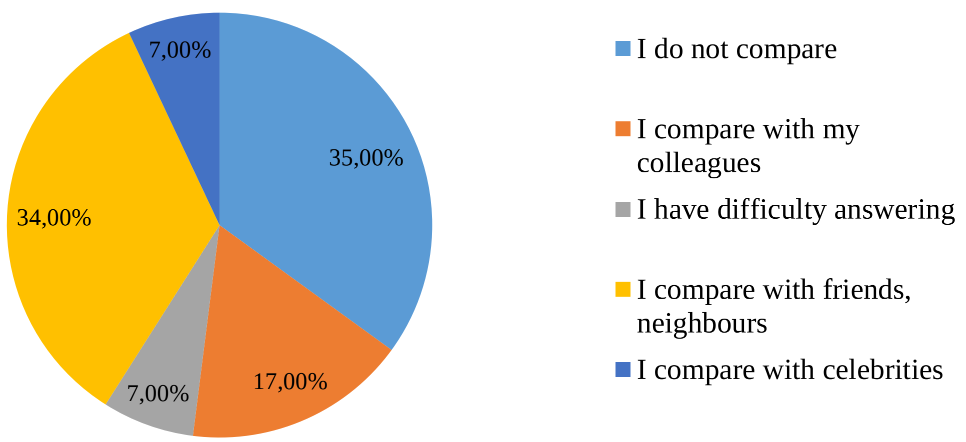

Figure 2. Do you compare your financial well-being with others (reference groups)?
Source: received by the authors

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This way we identified the reference groups and the frequency of comparing oneself with a reference group. The older the respondents, the less frequently they compare themselves to reference groups: 65% and up among the young people to 45% among the elderly. The vast majority of people compare themselves with friends, neighbours and relatives. The next important reference group is colleagues, followed by celebrities (about 7% of the respondents in all demographic groups compare themselves with them). People with medium level of education and low income compare themselves with celebrities a bit more frequently, which cannot but worsen their psychological state which is reflected both in their subjective assessment of own chance to success and in evaluation of inequality level.

Figure 3 shows the rating assigned by Russians to themselves in their reference groups.

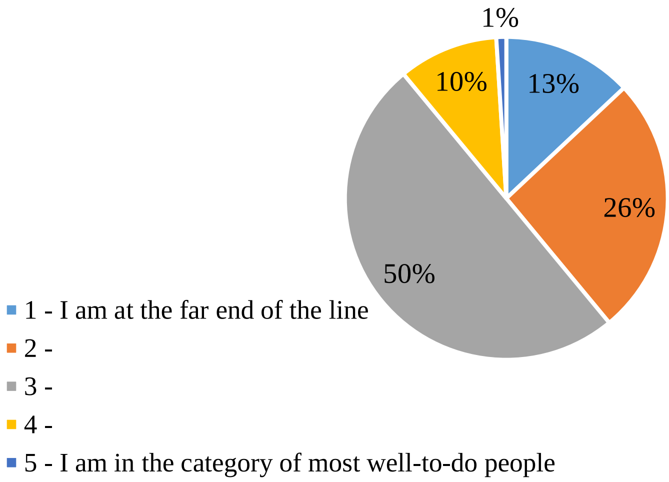

Figure 3. If you compare your financial well-being with that of your environment, where do you rank yourself on a scale from 1 to 5.
Source: received by the authors

Half of the surveyed people (50%) with low income and having no higher education often rate their position in own environment as low and very low. As much as 4 per cent of low-income people, 14 per cent of middle-income people and 24 per cent of upper-middle-income people rate their position as high or very high.

Thus, the main reference group is friends, neighbours and relatives; the respondents who assess their position in a reference group as low and very low are 3.5 times more numerous than those who assess their position as high and very high (39% versus 11%).

Let us further reveal the attitudes towards the members of other social groups, since the views on income redistribution may be determined not by financial interest, but by its impact on one's social position. For instance, if the decremented inequality leads to influx of people from lower social classes to a particular setting (neighbourhood), then this influx will be opposed by those who do not want to "mix" with people from these classes. The people's answers are presented in Figure 4.

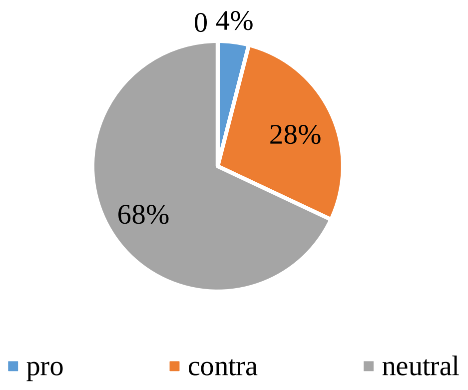

Figure 4. If the decremented inequality leads to influx of people from lower social classes (including migrants from undeveloped countries) into your neighbourhood, would you approve this /oppose this/ feel neutral about it?
Source: received by the authors

The negative attitudes towards representatives of lower social classes increase with people's age; these attitudes are worst in small towns and cities, being best in Moscow; people with higher education are more tolerant to lower social classes than people with secondary education. The respondents' assessment of subjective well-being is presented in Figure 5.

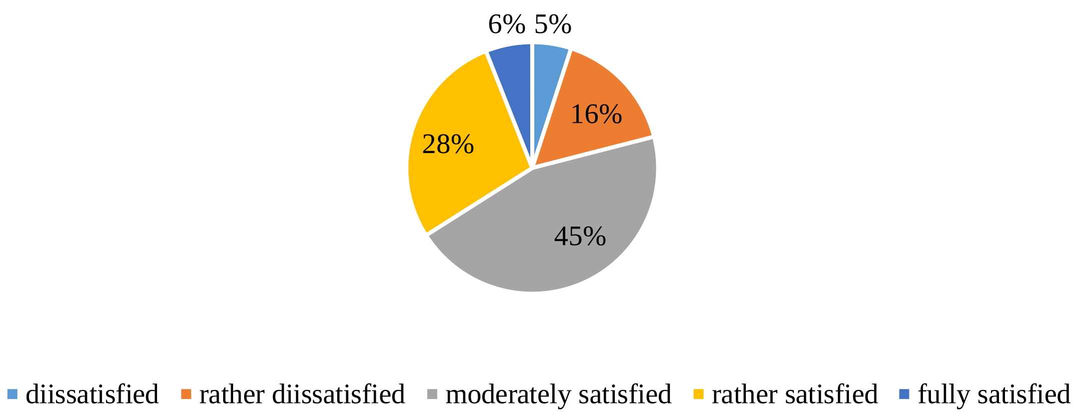

Figure 5. How satisfied are you with your life on a scale from 1 to 5 where 1 is – dissatisfied, 2 – rather dissatisfied, 3 – moderately satisfied, 4 – rather satisfied and 5 – satisfied.
Source: received by the authors

Predictably, life satisfaction is lower among people with low income. However, while economic inequality is strongly resented by 82% of the population, we were unable to find a correlation between subjective well-being and inequality. As much as 34% of those surveyed were satisfied or rather satisfied with their lives, while only 21% were dissatisfied or rather dissatisfied. We attribute this to the fact that it is not the economic inequality per se that is resented by people, since, when asked "Do you agree that inequality is unfair NOT in all cases", 86% of the respondents gave an affirmative answer. It is the corruption-based inequality, generating close association with all sorts of officials, that causes outrage. However, as far as the vast majority of citizens are unable/unwilling to engage in corruption (whereas officials are not included in any normative comparison group involving the respondents), no clear correlation between inequality and subjective well-being is observed.

Having identified the reference groups among the Russians, their perception of own rank within these groups and their attitudes towards members of lower social classes, we shall further show whether Russians behave altruistically towards the others. In order to assess the extent to which Russians are altruistic, we asked whether they donate anything to charity, and about their satisfaction with own income. The results are presented in figures 6-7.

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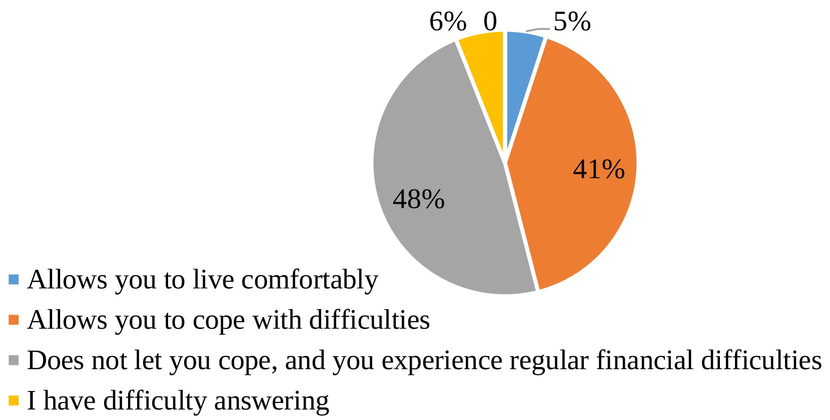

Figure 6. Your current salary
Source: received by the authors

It can be seen that almost half of Russians experience regular financial difficulties. In this regard, the answers to the question about donations look quite logical; it can be seen from them that a similar proportion of respondents experience financial difficulties and are unable to donate anything.

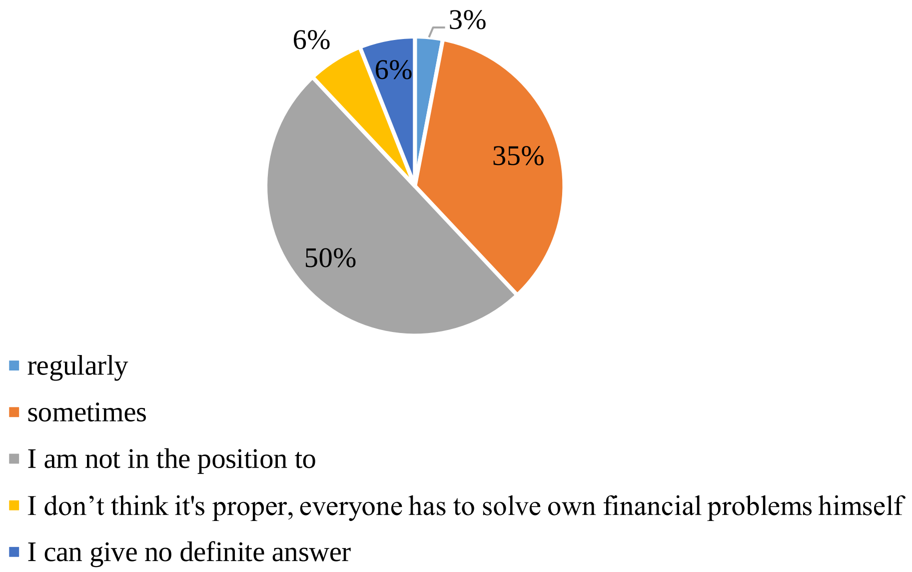

Figure 7. Do you contribute anything for charity?
Source: received by the authors

Among those who donate regularly to charity, those with above-average income, pensioners and residents of regional centres stand out. Among those who donate to charity occasionally, the minimum is observed among people with low income (32%), and the maximum – among those with above-average income (41%). Men, significantly more often than women (7% vs. 4%), believe that everyone should solve own problems himself/herself. The highest share of those who share this view is the people with above-average incomes (11%). This can probably be explained by the fact that these people believe that they have achieved everything on their own.

We got the following distribution of answers in the focus groups:

1. Regularly – 3 persons.
2. Occasionally – 52 persons.
3. I am not in the position to – 23 persons.
4. I don't think it’s proper, everyone has to solve own financial problems himself – 12 persons.

After that, the motivation of those who donate to charity (regularly or occasionally) was identified. All of the respondents reported feeling compassion for those in need (value motivation); moreover, this way they sort of get rid of the feeling of guilt for being in a better position (protective motivation), or this makes them feel a worthy person (self-improvement motivation). The protective motivation was reported by 12 persons, the self-improvement motivation – by 43 persons.

Can one talk in this context that donation behaviour represents an unconscious desire on the part of Russians to reduce inequality in the country? Probably, this is partly true. Why? The indignation at the fact that people, and especially children, have to collect money for medical operations was repeatedly voiced in every focus group. In this sense, our respondents rather expressed indignation about social inequality in the form of unequal access to social benefits (education, medicine etc.). Strong resentment of social inequality was expressed by 88% of the survey respondents.

In this context, it is interesting to see what Russians expect from the government. We asked the respondents to rate each below statement on a scale from 1 to 5 where: 1 – the government should not address it, 5 – the responsibility for this lies entirely with the government (see Table 1).

Table 2.
Role of government in addressing inequality in the country

The government's role to:	1 – The Government should not address this, %	2	3	4	5 – The responsibility for this lies entirely with the government
Reduce the income gap	3%	4%	17%	23%	53%
Give a chance to poor children to get to the university	3%	2%	11%	24%	60%
Provide jobs for everyone who wants it	1%	2%	10%	22%	65%
Ensure a decent living standard for the unemployed	5%	10%	38%	21%	26%
Ensure a decent income level, one for all	8%	9%	24%	20%	39%
Play a key role in protecting and promoting economic well-being of its citizens	1%	1%	9%	22%	67%
Ensure equal opportunities	1%	2%	11%	23%	63%
Ensure equitable distribution by transferring money from the richer to the poorer	8%	10%	22%	21%	39%
Ensure public responsibility for those who are not able to provide for themselves independently	3%	6%	23%	26%	42%

The following ideas towards tackling the inequality problem find maximum support of the population: providing jobs for all who need them; activating the deeds to protect and promote economic well-being of citizens; giving poor children a chance to enter the university, ensuring equal opportunities.

In the above context, we are interested in the last line of the table. Ass much as 68% of the respondents agreed that the government should "ensure public responsibility for those who are not able to provide for themselves independently". In other words, the people expressed willingness to build a society where, given due means, people would organise help to those who cannot provide for themselves. Moreover, 48% of Russians already do this, insofar as possible, donating to charity regularly or occasionally.

Conclusions

The authors found that income inequality in the country is resented by 82% of the respondents. At the same time, people are ready to accept significant income inequality if they believe that the income is well earned rather than acquired through corruption. The vast majority of people compare themselves with friends, neighbours and relatives. The next most important reference group is colleagues, followed by celebrities – about 7% of the respondents in all demographic groups compare themselves with them.

The most common reference group is represented by friends, neighbours and relatives; the respondents who assess their position in the reference group as low and very low are 3.5 times more numerous than those who assess their position as high and very high (39% versus 11%).

Predictably, life satisfaction is lower among people with low income. However, although economic inequality is strongly resented by 82% of the population, no correlation between subjective well-being and inequality was found. As much as 34% of those surveyed were satisfied or rather satisfied with their lives, while only 21% were dissatisfied or rather dissatisfied. We attribute this to the fact that it is not the economic inequality per se that is resented by people, but rather the corruption-based inequality, causing close association with all sorts of officials. However, as far as officials are not included in any normative comparison group involving the respondents, no clear correlation between inequality and subjective well-being is observed.

At the same time, the number of people who do not want to mix with people from lower social classes (which could happen if the social inequality is mitigated) accounts for 28%. The negative attitudes towards members of lower social classes are negatively correlated with life satisfaction. That is, people who are dissatisfied with life do not want to mix with those who live even worse, reserving the right to believe that they are superior to some other social group.

Almost half of Russians experience regular financial difficulties. And almost as many, regularly or occasionally, contribute to charity, mainly out of compassion for those in need who cannot afford to pay for a medical operation or other expensive medical treatment. In this sense, the donating behaviour can be viewed as an attempt to reduce not economic, but social inequality in the country.

Finally, 68% of the respondents agreed that the government should "ensure public responsibility for those who are not able to provide for themselves independently". In other words, the people expressed willingness to build a society where, given due means, people would organise help to those who cannot provide for themselves.

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History of formation and development of liability for damage caused by sources of extreme danger in Vietnam: Issues of legal influence

История становления и развития ответственности за причинение вреда источниками повышенной опасности во Вьетнаме: Вопросы правового воздействия

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Abstract

This article analyzes the influence of Western legal ideology and socialist law on the formation and development of liability for damage caused by sources of extreme danger in the law of Vietnam. The authors have examined all the important legal documents that are associated with the issue of liability for damage caused by sources of extreme danger. The research materials are also based on the works of Western and Eastern authors writing about Vietnam during this historical period. To achieve this goal, the authors used the following methods: comparative legal, analysis, synthesis and historical method. The conclusions of the study showed that: under the influence of French legal ideology during the period of French colonization, liability for harm caused by sources of increased danger first appeared in the law of Vietnam. For the first time in Vietnamese civil law, the term "source of extreme danger" is used with the adoption of the Circular of the Supreme People's Court No. 173-TANDTS dated March 23, 1972. From 1986 to the present, this liability has been created and developed under the influence of old Soviet law and current Russian law.

Аннотация

В данной статьи анализировано влияние западной правовой идеологии и социалистического права на возникновение и развитие ответственности за вред, причиненный источником повышенной опасности в праве Вьетнаме. Авторы исследовали все важные юридические документы, которые связываются с вопросом об ответственности за вред, причиненный источником повышенной опасности. Материалы исследования также основаны на работах западных и восточных авторов, пишущих о Вьетнаме в этот исторический период. Для достижения поставленной цели авторы использовали методы: сравнительно-правовой, анализ, синтез и исторической метод. Выводы исследования показали, что: под влиянием французской правовой идеологии в период французской колонизации ответственность за вред, причиненный источником повышенной опасности, впервые появилась в праве Вьетнама. Впервые во вьетнамском гражданском праве используется термин «источник повышенной опасности» с принятием Циркуляра Верховного народного суда № 173-ТАНДТС от 23 марта 1972 г. С 1986 года по настоящее время данная ответсвтенность создавалась и развивалась под влиянием старого советского права и действующего российского права.

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Keywords: tort obligation, history of formation and development, sources of extreme danger, French legal ideology, socialist law.

Ключевые слова: деликтное обязательство, история становления и развития, источники повышенной опасности, французская правовая идеология, социалистическое право.

Introduction

In every society, the national ideology is the basis, the foundation of all legal systems, all legal policies. In every historical era and civilization, ideology determines most of the processes in society, predetermining state policy. The history of Vietnam is characterized by the struggle to build and defend the country to free the people from the shackles of feudalism and colonialism. Along with the formation and development of the government, the Vietnamese legal system was influenced by many factors, including Eastern and Western ideologies or other socialist legal ideologies. Under the impact of these ideologies, many new norms have been fixed in Vietnamese legislation, one of which can be called the institution of liability for damage caused by sources of extreme danger.

Liability for for damage caused by sources of extreme danger is one of the types of non-contractual obligation. A special characteristic of this liability, in contrast to a contractual obligation, is that a non-contractual obligation does not require a contractual relationship between people (Wallinga, 2020). Its purpose is to force those who commit illegal or guilty acts to compensate for the damage they cause.

The study of the history of the formation and development of civil liability for damage caused by sources of extreme danger from the perspective of the influence of French legal ideologies and socialist legal ideologies helps to understand the legal policy at each stage as well as the development trend of this legal institution in the Vietnamese legal system. American scholar Jim Phillips argues that the study of legal history can learn about the nature of law, including the contingencies that led to it (Phillips, 2010). The historical context can deepen our knowledge of the legal system and improve our understanding of the law's practical and theoretical operation (Raack, 1988). It is also noted that we cannot resolve questions about the future of the law without an adequately understood past (Raack, 1988).

The purpose of this study is to analyze the influence of Western legal ideology and socialist law on the formation and development of liability for damage caused by sources of extreme danger in the law of Vietnam.

In Vietnam, the formation and development of legal provisions on liability for damage caused by sources of extreme danger are mainly studied through the division of historical periods under the perspective of the Vietnamese Constitution. A typical work to mention is “Liability for damage caused by sources of extreme danger according to Vietnamese civil law” by scholar Hoang Dao (Hoang, 2011). In the above work, the formation and development of the liability regime for the damage caused by sources of extreme danger are divided into five stages: before 1945, from 1945 to 1983, from 1983 to 1995, from 1995 to 2005 and from 2005 up to now. With this approach, the author asserts that civil liability for damage caused by sources of extreme danger was first recognized in Vietnamese law in 1972 with Circular 173/TANDTC of the people's court. In “Liability for damage caused by property under Vietnamese Civil Law” (Nguyen, 2017), scholar Nguyen Van Hoi also takes this guideline and introduces a similar statement. The results of mentioned authors' studies led to a conclusion that the institution of liability for damage caused by sources of extreme danger was mainly approached from the birth of the Democratic Republic of Vietnam and its constitutions. However, does Vietnam have a legal institution of civil liability for damage caused by sources of extreme danger before the country gained independence? What factors influence the birth and development of this institution?

Scholar Dao Tri Uc, in his work “Basic Information for Legal Research - A Case Study on Vietnam”, stated that Vietnamese legal thought throughout its long history has always been influenced and dominated by Eastern and Western legal ideologies. Although many generations have experienced numerous ups and downs in history, Vietnamese people have learned to absorb ideological and cultural values in general and legal ideas in particular from countries with historical relations with Vietnam to build national bravery for existence and development (Dao, 2003). The influence of Eastern and Western thought has become a significant turning point in the change of the Vietnamese legal system. Besides, in "Law at war Vietnam 1964-1973" by scholar George S. P., it is affirmed that the French heritage remains heavy in the entire legal system, military, and civilian (Prugh, 1975). The older, more renowned lawyers and judges are often found to be French-educated, French and non-English speaking. Professional works are often published in French. The French trappings, as well as institutions, are adapted by the Vietnamese, and these are superimposed over the Vietnamese society without much change. The Napoleonic Code's influence is naturally strong, and the civil code system, as distinguished from the common law, is employed (Prugh, 1975: 21). Using the existing statements of leading scholars in the study of Vietnamese legal history, the authors delve deeper into Vietnam's legal documents in order to answer the question of whether there is an influence of foreign legal ideologies on the formation and development of the legal institution of liability for damage caused by sources of extreme danger. What is the development trend of this institution in Vietnam in the current period?

Methodology

The authors use a civilizational-cultural approach in legal studies to research the influence of French legal thought ideology and socialist law on the formation and development of the institution of liability for damage caused by sources of extreme danger. Accordingly, in modern jurisprudence, law is considered a phenomenon of civilization and culture (Nemytina, 2017). It is consistent with the civilization-culture approach, the concepts of "civilization" and "culture" are combined. Observation of the legal system of Vietnam from a cultural and civilizational point of view, which is influenced not only by traditional factors but also by external factors (foreign legal ideologies), as well as the process of Vietnam's active integration into the international economy; and the fluctuations of those factors are the basis for the authors to divide the development stages of the mentioned above institution. Thus, the study of this topic will be more comprehensive with this approach. It not only clarifies the matter in the period before Vietnam gained independence without a constitution but also shows the role of the factors leading to the formation and development of the above institution in Vietnam.

In this article, the authors used the following scientific methods: analysis and comparative legal. Accordingly, the analysis method is used to analyze and clarify the essence of legal provisions on liability for damage caused by sources of extreme danger. In addition, this method helps to understand Vietnamese legislators' legal and scientific thinking when building this liability.

Based on the comparative-legal method, the authors compare the legal provisions on liability for damage caused by sources of extreme danger in the three Civil Codes of the French colonial period with the legal provisions of Circular № 172/TANDTC. In addition, this method is used to compare the provisions on liability for damage caused by sources of extreme danger in the Vietnam Civil Codes 1995, 2005, and 2015 with the legislation of the former RSFSR and the law of Russia today.

Legally supporting documents: report on the renovation results from 1986 to 1990, the sixth national party congress document, and the government's report on the 1995 Civil Code project of the Socialist Republic of Vietnam.

Results and Discussion

1. *Timeline of the establishment of the institution of liability for damage caused by sources of extreme danger in Vietnam.*

Under the profound influence of French legal ideology, the liability for damage caused by sources of extreme danger first appeared in Vietnamese legal documents in Vietnam during the French colonial period.

French law and its legal ideology also influenced most of the legal documents in Vietnam during this period. Several important codes of law are considered to be copies of civil laws promulgated by the French or by Vietnamese kings: the Abbreviated Civil Code 1883 (Bộ Dân luật Giản yếu) in the South, the Civil Code Implements in Vietnamese Courts in the North 1931 (Bộ Dân luật thi hành tại các Tòa Nam án Bắc kỳ) in the North, the Central Vietnam Civil Code 1936 (Hoàng Việt Trung kỳ Hộ luật) (Bui, 2006).

Chapter IX of The Abbreviated Civil Code 1883, a provision on liability for damage caused, states: Especially for liability for damage caused by vehicles, liability arises when an act causes damage in the use or operation of a vehicle itself. In addition, this Code also defines the liability for damage incurred by vehicles in specific cases, such as damage caused to pedestrians or passengers; or damage caused during vehicle theft. Article 711 of the Civil Code Implements in Vietnamese Courts in the North 1931 and art. 763 of Central Vietnam Civil Code 1936 provide: "People are responsible not only for the damage they caused themselves but also for the damage caused by those they, whom they have guardianship over, or the property owns by them. If an inanimate object causes damage by itself, its custodian is presumed to be at fault, regardless of whether the object was touched with the hand or not. Evidence is needed to disprove this assumption. Liability is imposed on all of the above cases unless the responsible person has evidence that the arising act of such responsibility cannot be prevented". According to the above mentioned, a property (inanimate objects) can cause damage in two ways. The first case is because the property manager has committed an intentional or unintentional fault in the property's management, operation, and use, resulting in damage (damage caused by illegal acts, at the fault of the owner or manager of the property). In the second case, the property causes damage through no fault of anyone (damage caused by the property). The fault of the owner (property manager) in this case is presumed (if he had taken all the precautions, the property would not have made any damage). Therefore, the owner (property manager) must compensate for the damage. He can be released from liability for damage only in two cases: when he can prove that the damage was caused by an illegal act of a third party's fault or the damage was caused by force majeure (when he cannot prevent the cause of the damage). Compared with the French Civil Code, it can be argued that the content of the above laws is copied from article 1384 of the Napoleonic code 1804 (French Civil Code), according to which "Everyone is liable not only for the damage caused by his own actions, but also for the damage caused by people for whom he is responsible, or by the property he manages". Example: Parents are liable for the torts of their minor children living with them. In case of the father's death, the responsibility is on the mother. The above-mentioned liability exists only if the responsible person is unable to prove that he could not prevent the commission of the act entailing this liability. Moreover, in our opinion, the specificity of the provisions on liability for damage caused in the three legal documents issued during the French colonial period is reflected in the failure to use the term "source of extreme danger" to imply damage caused involving inanimate objects, for example, damage caused by using or operating vehicles. There is no major difference in comparing the above regulations with Circular 173/TANDTC.

2. *Stages of formation and development of liability for damage caused by sources of extreme danger in Vietnam.*

Before the French colonial rule, the liability for damage caused by sources of extreme danger was not specified in Vietnamese legal documents (Hoang, 2011: 28). The cause of this lack of regulation was, first of all, the feudal state of Vietnam at that time had formed with a predominantly agricultural economy. As a result, Vietnam's science and technology in this period were still underdeveloped, leading to a lack of conception of the source of extreme danger. Secondly, the development of law in the feudal legal system of Vietnam is influenced by Eastern and Confucian thought (Vu, Nguyen and Pham, 2019). The influence of Eastern thought (i.e., Chinese thought) on Vietnamese feudal legislation is clearly shown through the content of two ancient Vietnamese feudal laws: the Le Dynasty Code of 1483 (Nguyen, 2021). Le dynasty legislators selectively copied the Chinese legal system while following the Chinese legal system on the one hand and on the other hand combining it with Vietnamese cultural traditions (Insun, 1990). The law code of the Le dynasty defended the people's legal ownership and even it could be compared in many aspects to the law viewpoints from the West. The Nguyen Dynasty Code of 1811 was built based on amendments and references to the Le Dynasty Code but was also mainly taken from the Qing Dynasty of China (Nguyen, 1989; Nguyen, 2002). Studying the content of the two codes above shows that the general limitation of Vietnamese feudal law is the prevalence and dominance of the criminal legal norm (Dao, 2003: 196)(Nguyen, 2011). The law of this period did not have a clear division between criminal and civil law. In addition, with the provisions of the feudal codes of Vietnam, the king's position was elevated, and he became the person with the supreme power and made all classes of people respect (Vu, Nguyen and Pham, 2020). Any act infringing upon the king's interests can be considered disloyal and severely punished by law (Dao, 2003: 201). In our opinion, the reason for these limitations is that the king promulgated Vietnamese feudal law to ensure social order and maintain the king's position. Despite that, Vietnamese feudal law has provisions on the owner's responsibility to compensate for damage caused by the property under his/her ownership (art. 581 of the Le Dynasty Code), (6th book of the Nguyen Dynasty Code). From our perspective, although the legal system is still limited, the legislators of this period had initially laid the basis for making regulations on liability for damage caused by sources of extreme danger in Vietnam for the next period.

When the French colonialists appeared in Vietnam, Western legal ideology initially influenced the transformation of Vietnam's feudal legal system. However, along with the influence of the feudal state regime and political ideas, the regulations on liability for damage caused by sources of extreme danger continued to develop. To better understand the role of French legal ideology and socialist legal ideology in the formation and development of liability for damage caused by sources of extreme danger in Vietnam, we suggest re-classifying the transitional stages of this institution based on the civilizational-cultural approach in legal studies.

From 1858-1954.

René David argued that the Roman-Germanic legal family expanded to the world in two ways: first, through the colonial conquests of the countries of continental Europe; secondly, through voluntary accession due to the need for modernization or the desire for Westernization of legislation in countries that are not colonies of continental European countries (David and Brierley, 1978). Thus, French law belonging to the Roman-German family of laws expanded into Vietnam along the first path that had historical milestones in 1858 (French and Spanish troops began to use force to invade Vietnam) (Tran, 2008), in 1867 (French troops finished invading all six southern provinces, turning this place into a French colony), and 1884 (A peace treaty signed between Vietnam and France made Vietnam completely lose its status as a legally independent country, becoming a protectorate of France) (Vu, 1973). It can be said that the French colonialists not only invaded Vietnam in terms of territory but also on the ideological front with the introduction of French legal ideology into Vietnam. Accordingly, Vietnam started using French law in the late nineteenth century (Quigley, 1988). A special feature of the law of this period is the separation of civil liability from criminal liability. Specifically, under French colonial rule, Vietnam was divided into three parts. With the profound influence of the French legal ideology, three codes were enacted that apply to three parts of Vietnam's territory with the aim of establishing the colonial governing regime in Vietnam, which included provisions on liability for damage caused by sources of extreme danger.

With the victory of the August Revolution in 1945, Vietnam abandoned the French colonial regime, and the Democratic Republic of Vietnam was born (now the Socialist Republic of Vietnam) as Southeast Asia's First People's Democratic State. However, Vietnam still cannot escape the influence of French legal ideology on the Vietnamese legal system. Scholar Bui N. S. asserts that French Civil Law continued to influence Vietnam even after the country regained its independence from France (Bui, 2017). Remnants of the colonial legal system persist more than a decade after the 1946 Constitution declared Vietnam independent from French rule (Gillespie, 2006).

On October 10, 1945, the provisional government of the Democratic Republic of Vietnam issued Decree 47/SL on the temporary application of legal documents of the old regime. This decision is because the fledgling government of Vietnam cannot immediately enact a new legal system, while the country cannot one day be without laws (Pham, 2011). Therefore, the first and foremost fundamental task of the Communist Party of Vietnam was to establish its power over the whole country and then to create a mechanism that ensures the Party's power is maintained and accepted by the majority of the people (Smith, 1978: 575).

From 1954-1986

This period can be considered a period of Vietnamese legal thought's interference when French legal ideology gradually reduced its influence, and socialist legal thought was introduced into Vietnam.

On July 20, 1954, the Geneva Agreements were signed, forcing France to accept the armistice throughout Indochina, committing to withdraw its troops from here. This event is considered a milestone marking the decline of French influence in Vietnam (B. C. 1956).

Before the French colonialists withdrew from Vietnam, the policy of building socialist law was set forth at the First Congress of the Vietnam Workers' Party in September 1951 (Hoang, 1962). The Third Party Congress of 1960 adopted the Soviet doctrine of “socialist legitimacy” (sotsialisticheskaia zakonnost) (Tran, 1971). The difference between the introduction of socialist and French legal ideology is reflected in the fact that the Vietnamese Party and government actively approach the socialist legal ideology. The introduction of socialist legal and political thought in Vietnam in the 1960s and 1970s is demonstrated by explaining the similarities between Soviet and Vietnamese legal thinking in the Vietnamese approach to borrowed legal documents (Gillespie, 2005). The transition from French legal ideology to socialist legal ideology was identified by the Communist Party of Vietnam as a tool of the dictatorship of the proletariat to defeat the enemy, protect the democratic rights of people (Dinh, 1961). The Party determines the content of the law. The combination of Party policy and law allows the Party and state to use the law as a management tool to regulate or balance social relationships (Dinh, 1961). It was not until the 1970s that Vietnamese legislators unanimously accepted the imported socialist legal thinking as their own (Pham, 1970) (Ngo, 1982).

A unique feature of the law of this period is that instead of legal certainty, Vietnamese legislators are interested in creating legal documents to ensure the compliance of society. This interest is expressed in an effort to improve the legal terminology, making it more familiar to all citizens. As a result, Vietnamese legislators have replaced many Sino-Vietnamese legal terms with everyday Vietnamese terms (Dinh, 1964). Moreover, it seems that on the basis of inheriting the promulgated legal regulations and trial experience for many years: Circular of the Supreme People's Court № 173-TANDTC of March 23, 1972, on the guidelines for the consideration of a case for compensation for non-contractual damage and Circular № 03/TATC, April 25, 1983, of the Supreme People's Court on guidance in dealing with certain issues of compensation for damage caused to motor vehicles. In general, in comparison with previous legal documents, the content of the provisions on liability for damage caused by sources of extreme danger in these two circulars is essentially the same. The difference between the circulars is manifested in the fact that for the first time in Vietnamese legal documents, the term “source of extreme danger” is used to refer to objects in the physical world that possess hazardous properties in damage caused to others. In addition, these circulars clearly define the conditions for liability for damage caused: the existence of damage; the unlawful action of thein-doer; the causal relationship between an illegal action and negative consequences; the fault of the harm-doer. However, in the situation when damage is caused by a source of extreme danger, a person is held liable under three conditions as mentioned above, except for the “fault of the harm-doer”.

From 1986 to present

Since 1986, Vietnam has started a comprehensive renovation of the country. In the process of transforming the economy from a centralized and subsidized mechanism to a market mechanism, it is required that laws, especially civil laws, be changed in proportion to commodity-monetary relations (Gillespie and Pip, 2005). Along with the development of the market economy, Vietnamese law has gradually integrated into regional and international legal life. Socialism and legal changes in Vietnam are actively seeking access to capital and international markets. Commercial laws and practices are introduced to ensure these advantages (Gillespie and Pip, 2005: 4). The influence and process of introduction into Vietnam of some democratic and progressive legal institutions in the East and the West have contributed to the extensive improvement of the legal system. The legal system, which was subjective and voluntary in the period of the centralized economic mechanism, has changed in the direction of the legal system of the socialist-oriented market economy. However, Western or Eastern values are simply an addition to Vietnam's efforts in renovating the Vietnamese legal system to suit the country's development situation, leading the country to progress to socialism. However, they cannot replace Vietnam's traditional and cultural values (Dao, 2003: 213).

At the end of the first five-year renovation plan (1986-1990): GDP increased by 4.4%/year; the total value of agricultural production increased by an average of 3.8 - 4%/year; industry increased by 7.4%/year on average, of which the production of consumer goods increased by 13-14%/year; export value increased by 28%/year. This growth is considered the initial success of concretizing the content of socialist industrialization in the first stage. Most importantly, this is the stage of a fundamental transformation of the old management mechanism to the new one, taking a step in renewing socio-economic life and initially liberating the productive forces, creating a new driving stimulation for development (Do, Nguyen, 2013). In addition, the primary motto is to constantly expand comprehensive cooperation with the Soviet Union in all fields and various forms.

The new advances in comparative economics and legal thinking show that different situations require different institutions to balance, stabilize society, and eliminate dictatorship (Djankov et al., 2003). Learning from the collapse of the Soviet Union, on the one hand, Vietnam promotes the development of a market economy; on the other hand, it still preserves the traditional values of the nation and maintains close relations with other countries of the world (Pham, 2005: 86).

From 1986 to now, Vietnam has had three Civil Codes, respectively the Civil Code 1995, 2005, and 2015. Among them, the liability for damage caused by sources of extreme danger is specified in art. 627 of Civil Code 1995, art. 623 of the Civil Code 2005, and art. 601 of the Civil Code 2015. Accordingly, "Sources of extreme danger are motorized vehicles, power transmission systems, industrial plants in operation, weapons, explosives, inflammable, poisons, radioactive substances, wild animals, and other sources of extreme danger prescribed by law. The owner, possessor, and user of a source of extreme danger are obliged to compensate for the damage even in the absence of fault, except for the following cases: a) the damage was caused entirely through the intentional fault of the aggrieved party; b) the damage occurred due to an event of force majeure or an urgent situation unless otherwise provided by law". The common point of liability for damage caused by sources of extreme danger in the above codes is the construction method of openly listing the objects as sources of extreme danger without providing a specific definition of the term "source of extreme danger". Compared with the laws of other countries, this construction method is recognized in art. 404 of the Civil Code of the RSFSR 1922, art. 454 of the Civil Code of the RSFSR 1964, art. 90 of Fundamentals of Civil Law 1961, art. 128 of Fundamentals of Civil Law 1991 and art. 1079 of the current Civil Code of the Russian Federation. *Accordingly, legal entities and citizens whose activities put others at increased risk (use of vehicles, mechanisms, high-voltage electrical energy, atomic energy, explosives, potent poisons, etc.; construction and other related activities, etc.) are obliged to compensate* for damage caused by sources of extreme danger, *unless they prove that the damage was a result of force majeure event, or by the aggrieved parties' intent.* Based on the comparison above, the authors believe that the way to build the institution of liability for damage caused by sources of extreme danger in Vietnamese civil law is influenced by Soviet law and Russian law today.

Conclusion

By using a civilizational-cultural approach in legal studies - a not yet popular method in Vietnam when studying the institution of liability for damage caused by sources of extreme danger - new knowledge about the establishment and development of this institution along the historical flow of Vietnam has been opened up. It is to redefine the time of emergence and redefine the stages of development of the institution of civil liability for damage caused by sources of extreme danger based on fluctuations in French and socialist legal ideology as well as the country's context and the Party's policy towards the construction of the legal system.

This article shows that the institution of liability for damage caused by sources of extreme danger first appeared in Vietnam under the influence of French legal ideology with the manifestation of three codes: the Abbreviated Civil Code 1883 in the South, the Civil Code Implements in the Vietnamese Courts in the North 1931 in the North, the Central Vietnam Civil Code 1936. After the French left Vietnam, the French legal ideology gradually reduced its influence, creating conditions for laying the foundation of socialist legal thought in Vietnam. Liability for damage caused by sources of extreme danger in this period is recognized by a change in legal terminology, whereby the term "source of extreme danger" is included for the first time in Vietnamese civil law documents (Circular 173/TANDTC). In the current period, the way of building this institution is influenced by the ideas of Soviet or Russian legislators.

However, the provisions of the current law on civil liability for damage caused by sources of extreme danger in Vietnam have shortcomings that need to be addressed. The objective reason for such shortcomings is that science and technology are constantly developing, which leads to the emergence of new objects with a high potential to damage people around them. Meanwhile, the speed of legal changes has not kept pace with the development of science and technology.

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Gamification, coaching, scribbling, storytelling in Ukrainian literature classes: innovative potential and effectiveness of application

Gamificación, coaching, scribbling, storytelling en las clases de literatura ucraniana: potencial innovador y eficacia de la aplicación

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Abstract

The article is devoted to the peculiarities of the application of innovative technologies and methods in the lessons of Ukrainian literature. The article aims to highlight the main characteristics, content, and practical importance of the innovative potential of gamification, coaching, scribing, storytelling, their impact on improving the quality of teaching. To evaluate the effectiveness of the application of these innovative methods, the article applied theoretical and empirical methods, including the study of professional literature and the conduct of scientific and pedagogical experiment in the lessons of Ukrainian literature in the seventh grade of secondary school. As a result, confirmation of the effectiveness of such innovative teaching methods as gamification, coaching, scribbling, storytelling was obtained. The scientific novelty of the study lies in the demonstration of the emergence of the effect of complementarity in the application of these

Resumen

El artículo está dedicado a las peculiaridades de la aplicación de tecnologías y métodos innovadores en las lecciones de la literatura ucraniana. Para ello, el artículo presenta la justificación, el desarrollo y la prueba experimental de la eficacia de la gamificación, el coaching, el scrabbling y el storytelling en la enseñanza. Para evaluar la eficacia de la aplicación de estos métodos innovadores, el artículo aplicó métodos teóricos y empíricos, incluyendo el estudio de la literatura profesional y la realización de un experimento científico y pedagógico en las clases de literatura ucraniana en el séptimo grado de la escuela secundaria. Como resultado, se obtuvo la confirmación de la eficacia de tales métodos de enseñanza innovadores como la gamificación, el coaching, los garabatos y la narración de historias. La novedad científica del estudio radica en la demostración de la aparición del efecto de complementariedad en la aplicación de estos métodos en el aula, lo que permite aumentar la

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methods in the classroom, which makes it possible to increase the effectiveness of their application. The practical value of the research consists in the fact that its results and conclusions can be used in pedagogical activity aimed both at training students and professional development of specialists in the field of pedagogy.

Keywords: gamification, innovation, coaching, education, scribbling, storytelling.

eficacia de su aplicación. El valor práctico de la investigación consiste en que sus resultados y conclusiones pueden utilizarse en la actividad pedagógica dirigida tanto a la formación de los estudiantes como al desarrollo profesional de los especialistas en el campo de la pedagogía.

Palabras clave: gamificación, innovación, coaching, educación, scribbling, storytelling.

Introduction

The stages of modern school development are characterized by an intensive search for new techniques and methods of teaching subjects and its implementation in the theory and practice of the educational process. Pedagogical innovations are the result of a continuous search for original and non-standard solutions to a variety of pedagogical problems. The product of this search is educational technologies, original educational ideas, forms and methods of teaching, non-standard approaches. The product of innovative activity is the growth of pedagogical excellence, the level of its culture, thinking, worldview. The very implementation of innovative processes is a mechanism of intensive development of education and pedagogy.

Ukrainian teachers have recently been actively applying modern approaches such as gamification, coaching, scribbling, and storytelling in the lessons of Ukrainian literature. In this regard, the need arose to review the experience of applying these approaches. This is the purpose of this study, which is to highlight the peculiarities of the application of modern approaches such as gamification, coaching, scrabbling, and storytelling in the lessons of Ukrainian literature and to identify their innovative potential and effectiveness of their application. Achieving this goal required focusing on the following main tasks of the study, the implementation of which is outlined in the relevant sections of this article:

1. Review of the literature on the use of gamification, coaching, scribbling, and storytelling approaches in literature classes, and in particular in Ukrainian.
2. Improvement of the methodology for the implementation of these approaches.
3. Justification of the expediency of applying these approaches.
4. Revealing, by comparison, the innovative potential of these approaches and the effectiveness of their application.

Literature Review

The old-school paradigm in education is being replaced by an innovative one. The prospect of improvement within the school is seen in vocational education, where it is possible to teach Ukrainian literature of the school cycle. This leads to significant changes in approaches to learning. An important aspect of these changes is, as Khrykov (2018) notes, a focus on students' independent work, engaging them in exploratory activities, teaching them to analyze processed material.

Analysis of the quality of students' knowledge in recent years proves that the educational process requires serious changes and approaches to teaching methods. In this regard, there is a need for the greater interest of both students and teachers themselves in improving the quality of education. In recent years, Ukrainian universities are moving to a new level of education, introducing new approaches to teaching. The teacher in this approach acts as a moderator, applying the technique of targeting at the result. Reducing the classical, conservative workload requires a restructuring of the evaluation system, ways of getting feedback, reevaluation of the use of teaching methods.

All of this fully applies to lessons in Ukrainian literature. However, as Mykhailov & Volkova (2018) and Liakhotska et al., (2018), in addition to purely methodological and organizational aspects, the process of teaching Ukrainian literature is significantly affected by changes in the worldview of children and students at school age, which are reflected in their attitude to the artistic text and the features of its reading and perception. Children today perceive the text differently and use other reading and decoding strategies. These reasons, according to Kuzan & Hordiienko (2019), require a revision of the ways and methods of teachers. The use of innovative technologies becomes a necessity for positive learning and the development of domestic education in general.

In this regard, we agree with the assessment given by Pereiaslavska & Kozub (2021) to the training course “Gamification in the educational process at school” at Luhansk Taras Shevchenko National University, according to which it is a good example of improving teaching skills and bringing the Ukrainian educational process to a new, more modern level. In the process of preparing this course, the subject of study was introduced, normative documents, educational standards were created, educational documentation was developed, the necessary literature, methodological recommendations, etc. were written. This course was supported and approved by the European Commission. Program standards were developed not only for university programs but also for lyceums and colleges. The course program reveals instructions for learning the basics of game methods, as well as for the implementation of game mechanics and modern technologies in the pedagogical process.

The theoretical basis of the gamification method was laid in the field of business (Grobelny, Smierzchalska, & Czapkowski, 2018), but it is successfully used in other fields related to communication, in particular in education (Jacobs, 2018), for which special methods Meer, 2018; Meer, 2019) were developed. These methods and techniques, adapted to the lessons of Ukrainian literature, were the basis of the methodology of this study.

Methodology

The methodology of effective organization of school subjects with the introduction of innovative methods carries not only theoretical significance but also a whole complex approach. Still, pedagogy is a practically oriented, experimental science. Therefore, the main value of methodological aspects is the practical implementation and application of innovative technologies in the lessons of Ukrainian literature. In order to get the results, lessons in different classes (groups) were conducted and analyzed, taking into account different ages. In these lessons were used methods: gamification, coaching, scribbling, and storytelling.

The main methodological innovation of the practical part of the study was the use of four methods at once in one lesson, followed by a comparison of this lesson with the classical version. The teacher developed an innovative lesson plan beforehand, taking into account the necessary stages to be studied. The basis of the experiment were the lessons from the school program for the students of the seventh grade on Ukrainian literature. Directly at the lessons, a game atmosphere was created, which caused the emotional interest of almost all the students in the class. After the lessons were finished, the levels of achievement achieved through the use of innovative technology were compared with the levels achieved in the lessons conducted without it. For this purpose, grades from the school register were used. The control part of the practical study included a control test of the students' knowledge, with special attention paid to the topic used in the experiment.

Results and Discussion

The subject of Ukrainian literature is part of the basis for the formation of communicative competence. In addition to gaining knowledge of the subject itself, teaching, in general, is also aimed at the development and education of students. But still, the main goal is to form a personality filled with knowledge and spirituality, the ability to use freely and competently the native language, the achievements of Ukrainian authors. Therefore, this subject can be considered one of the key subjects in the school program. For a more modern, interesting, effective teaching of subjects, productive interaction with the class, teachers are increasingly turning to innovative methods of teaching, which have the common name of SMART-education. One such link that is rapidly spreading and is a trend of the primary process among applicants of different categories is gamification (Azouz & Lefdaoui, 2018). As noted by Kuzan, H., & Hordiienko (2019), the term refers to the implementation of the learning process in the immediate context of play. Gamification can act as the main, and additional method of organizing and conducting a lesson, as a form of learning work, as well as a holistic organization of the learning process.

For a creative and interesting lesson of Ukrainian literature in the format of gamification it is necessary to follow the basic rules and components of the methodology. According to this methodology, the main scene is action. The student or a group of students needs to perform a task to achieve the goal. Particular attention should be paid to the execution and observance of the rules voiced by the teacher. This orientates students to honest and fair assessment, feedback from the teacher, achievement of a positive result. Characteristic elements of the game should be its course and the roles performed by students, components of the game, its dynamics. An obligatory condition is the limitation of time.

A good example is the object game “Find”. The students are asked to find among visually highlighted on the table or in the form of a presentation (in combination with the scribbling teaching method) objects (flowers, musical instruments, books, writing materials, etc.) that are associated with the characters of the work studied in the lesson. This method helps students to develop their creative imagination, thinking, to penetrate into the essence, role, feeling of the hero, as well as to tell why, in their opinion, these particular objects are chosen.

It is important that in the lessons of Ukrainian literature the use of a game form of teaching is possible at different stages. For example, you can effectively and at the same time interestingly check the homework or repeat previously studied material, to familiarize students with the topic, goals, objectives of the lesson. When using this method, it is easy for the teacher to lead students to the main point in the topic, to introduce, teach them to analyze, compare, summarize and consolidate the material studied. Most importantly, such lessons relax and unload students, but at the same time teach them to express themselves (Myronenko et al., 2018).

It should be noted, however, that the application of gamification in the classroom, as, in fact, any teaching method, has its advantages and disadvantages. The advantages should include self-education of students, the impetus to independent work, cooperation in groups, acquisition of useful practical skills, encouragement, and interest in the subject, creative thinking, and formation of imagination. The disadvantages can include: psychological aspects (students take defeat in the game seriously), a lack of understanding of the need to set time limits.

The effectiveness of gamification is especially evident in the younger grades. For elementary school students, the game form is perceived better. Using this method, the teacher achieves the goals of the lesson better and faster. After all, the productive work of each student is aimed at the result of the whole class.

Another innovative teaching technique is coaching. This technique is borrowed from the business world. The main purpose of its application is to identify and realize the potential of the student's personality, to build his faith and self-confidence, which will ultimately bring success (Pavlova, & Tertytsia, 2020). Coaching is based on the interaction of educational aspirants to develop their own strengths through interest, confidence, and potential.

The traditional technique of using coaching in the classroom is to ask a large number of questions at various stages. Moreover, all the questions should be thought through by the students themselves. They set goals and objectives for themselves and, with the teacher's help, achieve them. In turn, using the method of coaching, the teacher should make sure to create a comfortable physical and psychological environment for students, as well as an atmosphere of trust. This will promote discovery, the formation of independent search skills, and the improvement of students' responses.

In practice, both group (team) and individual coaching can be used. For example, the Kaidasheva Family (Nechui-Levytskyi, 2020) exercise, The View of the Other. Students are given the roles of the characters in a work about which they must express their opinions. The exercise aims to teach students to listen, understand and adequately perceive the point of view of others, as well as to make decisions, develop independence and confidence in their own abilities.

When summarizing the results, you can offer to create a work based on the pyramid. Line 1 of the pyramid - 1 word (hero name); Line 2 - 2 words (hero description); Line 3 - 3 words (scene description); Line 4 - 4 words (problem description); Line 5 - 5 words (first event); Line 6 - 6 words (sixth event); Line 7 - 7 words (denouement). Such techniques with the help of powerful stimulation of thinking allow to form in applicants of education constructive skills, goal setting, ways and methods of its achievement, a search of the necessary information, satisfaction, and assessment of own result.

Scribbling is storytelling with the help of illustrations. An elementary example of scribbling is the illustrated reproduction of information with chalk on a blackboard (facilitation). So, scrabbling is the addition of illustrations to a story, revealing the key content of what is being said (Vitomir, 2019).

The great advantage of this technique is an effective motivator, attracting the attention and concentration on the element of the lesson of the entire target audience. Especially relevant is the use of scribbling at the beginning of the study of a new topic. Graphic material allows you to interest students, to grasp the main and important points of the topic. Good results are also obtained by doing homework according to this method. For example, creating their own presentation on the topic and then demonstrating it. You can, for example, ask students to try to draw a story on the theme "Life Eternal" by Ivan Franko (Franko, 2020). Or graphically deconstruct poems by Lina Kostenko (Kostenko, 2019). When performing visual illustrations, the teacher should offer students an outline (Volkova, 2017) containing the idea, analysis of the main images for the drawings, supporting visualization elements, scenario, time.

Scribbling is divided into two main groups: video scribbling and presentation scribbling. Types of reproduction scribbling are drawing (drawing by hand), applique (reproduction of a drawing by applique technique), computer (use of computer services and programs, Internet). Among the practical activities, students use scribbling presentations more often. To make the lesson more effective, the teacher uses video scribbling. It helps to activate the learning and cognitive activity, to interest students, to achieve the easier perception of the educational material, to systematize knowledge (Khrykov, 2018).

Lessons in Ukrainian literature require students to constantly read works, to be able to comprehend them, understand the purpose of each work, and sometimes even experience and sympathize with the characters. The teacher, in turn, requires students to analyze what they have read logically. The method of Storytelling, which focuses on oral communication, creativity, and critical thinking, helps them do this.

The term storytelling refers to the technique of presenting information in the form of an interesting story (Khrykov, 2018). This methodology takes on the corresponding functions:

– educational (to form knowledge, skills, and abilities);
– stimulating (allows to inspire, interest students);
– uniting (development of friendly relations);
– utilitarian (cooperation of successful and unsuccessful students);
– influential (allows confidence to form necessary beliefs);
– communicative (effectiveness of unification).

In the lesson, the teacher uses narration in text form, video, audio, photos, and their combinations. The method was applied through the exercise "I am a hero". The students were asked to choose a hero from a story or read work from the curriculum and prepare a story "I am a hero (character)" according to the appropriate points.

Why does the student associate himself or herself with the chosen hero? How did he or she affect the situation? How might he or she have changed it? What is the significance of the hero of the piece? What would the hero look like in the present and future? Such an exercise helps the teacher immerse students in the time of events, analyze the literary work and its characters, sympathize and criticize, that is, develop not only communicative skills but also emotional intelligence.

For more effective research of the topic of modern game forms of lessons, a comparative analysis of the methods used in the practical part was carried out. The comparison was based on finding and highlighting the main common aspects. It was found that the main common feature of all the methods used is that the students act as "players". This increases the dynamics of the lesson, as so-called scenarios, goals, and rules emerge that require more attention and reaction. The mechanics of the lesson, that is, the appearance of new elements (drawings, charts, diagrams, and tables) are brought to a new level. The most valuable thing is that students have the opportunity to create everything themselves. Equally important are the aesthetic, psychological, and social aspects. Playful experiences contribute to the positive dynamics of the students' mood, understanding of their importance, the interaction of the student with the class and the teacher.

As a practical application of all the studied objects at once (gamification, coaching, storytelling, scribbling) was a lesson of Ukrainian literature on the theme Vasily Symonenko "Do you know that you are human? Universal Values and Ideas" (Symonenko, 2017). The lessons were held based on seventh grades (two groups - A and B).

The first lesson was conducted according to the classical scheme, which includes a topic, a goal, a homework check (oral form of answer), the teacher's narration of new learning material, a check of the consolidated result (question-answer form), and homework (Kostenko, 2019).

In the second lesson, the teaching methods were changed by innovative methods. After announcing the topic and goal, students played the game "Finish the sentence" (an example of the application of the gamification method). The teacher started with “V. Symonenko was born in...”, “The future poet studied in...”, “The collection published during the poet's lifetime was called...”, and students continued the sentence by answering questions. The tasks were both individual and group. This set the class up for interesting and rich work and gave the students a relaxed mood.

The second step was to set goals for the year. Each desk had a piece of paper on which the students had to add something of their own to certain goals. In the lesson, the teacher took into account the voiced sentences. This technique allowed the students to express their own attitude to the problems raised in the work, to make their own conclusions based on a comparison of literary works.

The teacher was in constant contact with the students while covering the main material, and the story was structured in such a way as to push the listeners forward (Nezhynska, & Tymchenko, 2017).

Group work then took place. The first group performed an ideological and artistic analysis of the poem according to the plan: theme, idea, artistic means of the poem. The second group filled in the table, adding their own words by association. The results were discussed.

To summarize the results, the method “Interview of a journalist” was applied. Several students were chosen for the role of a journalist, who moved freely around the classroom and interviewed classmates. The following questions were asked: “We visited you in class to find out if you like poetry”, “What impression did V. Symonenko's poetry “You know you are human” make on you, “What social credo of the lyrical hero is traced in the poetry? How was it with Symonenko?” (Symonenko, 2017).

Another interesting moment was the stage of selecting epithets to the utterance “Great man”. Children very actively and emotionally discussed this topic with the teacher. The testing of knowledge took place in the format of self-assessment and assessment by students of each other.

Every step of the innovative lesson was carefully thought out in advance. Thus, we investigated that in the first lesson the students did not actively perceive the new material. They were lifeless, confused, and unemotional. Only 10% of the children listened attentively to the teacher. The second lesson had the opposite result. The students were focused and the teacher, using different methods, constantly kept the students focused and working. The activity was about 100%. The results obtained during the experiment, in general, confirm the theoretical provisions outlined in the literature we reviewed. However, certain refinements were made, primarily concerning the specifics of combining such different approaches as gamification, coaching, scribbling, and storytelling. It was found that these approaches complement each other.

Conclusions

As a result of the study, it was concluded that innovative technologies in the teaching of Ukrainian literature have common features and goals that contribute to the development of students. This gives the prospect of effective learning, aimed at quality results. Analyzing practical research, innovative methods, such as gamification, coaching, scribbling, and storytelling, it turns out that they increase the relationship with the teacher and peers, develop students' creativity, self-improvement, and evaluation skills, increase the productivity of mastering the subject.

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On the question of the role of project management in the digital transformation of small and medium-sized businesses: essence and innovative potential

Sobre la cuestión del papel de la gestión de proyectos en la transformación digital de las pequeñas y medianas empresas: esencia y potencial innovador

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Abstract

Digital transformation is penetrating all areas of activities. This process is irreversible and poses challenges to businesses. The leading role for the successful digital transformation of small and medium-sized businesses is played by effective project management. The purpose of the article is to study the role of project management in the digital transformation of small and medium-sized businesses, to identify the key issues and the scenario of transformation, to outline the portrait of a project manager. Methods used: analysisб synthesis, graphic methods, the method of establishing cause-and-effect relationships. As a research result, theoretical aspects of project management and trends in understanding its role in the digital transformation of businesses were determined. The key questions for project management are outlined and its scenario is defined. The key skills and qualities of an

Resumen

La transformación digital está penetrando en todos los ámbitos de actividad. Este proceso es irreversible y plantea retos a las empresas. El papel principal para el éxito de la transformación digital de las pequeñas y medianas empresas lo desempeña una gestión de proyectos eficaz. El objetivo del artículo es estudiar el papel de la gestión de proyectos en la transformación digital de las pequeñas y medianas empresas, identificar las cuestiones clave y el escenario de la transformación, y esbozar el retrato de un gestor de proyectos. Métodos utilizados: análisisб síntesis, métodos gráficos, el método de establecer relaciones causa-efecto. Como resultado de la investigación, se determinaron los aspectos teóricos de la gestión de proyectos y las tendencias para comprender su papel en la transformación digital de las empresas. Se esbozan las cuestiones clave de la gestión de proyectos y se define su

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effective project manager are described. The innovative potential of project management is considered. The scientific novelty of the research consists in clarifying the aspects necessary for effective project management, taking into account the trends in economic and sustainable development. The practical significance of the research results lies in outlining the areas of activity and improving the professional and extra-professional skills of project managers in the process of digital transformation.

Keywords: management, organization, soft skills, hard skills, sustainable development.

escenario. Se describen las habilidades y cualidades clave de un gestor de proyectos eficaz. Se considera el potencial innovador de la gestión de proyectos. La novedad científica de la investigación consiste en aclarar los aspectos necesarios para una gestión de proyectos eficaz, teniendo en cuenta las tendencias del desarrollo económico y sostenible. La importancia práctica de los resultados de la investigación radica en perfilar las áreas de actividad y mejorar las competencias profesionales y extraprofesionales de los gestores de proyectos en el proceso de transformación digital.

Palabras clave: gestión, organización, habilidades blandas, habilidades duras, desarrollo sostenible.

Introduction

At the current stage of development, the management of any organization must meet the challenges formed by the globalization processes in the economy. One of these challenges is the ubiquitous and unalter native digital transformation, which is both a way of optimizing businesses and a difficult and complex task for their management. Digital transformation cannot happen immediately, its process requires a significant time investment and a phased and experienced implementation. The responsibility for the successful implementation of digital transformation lies with all participants in the process: the government, organizational leaders, managers, stakeholders, consumers, etc.

A special role in the digital transformation process is assigned to project management as one of the innovative management methods. Digitalization of business activities can be regarded as a large-scale project, which has a final goal, stages, time constraints, and, therefore, is an object of management for project managers. Of particular importance is the digital transformation of small and medium-sized businesses, which in developed countries are among the main drivers of the economy, provide a large number of jobs, and are the most adaptive, mobile, and innovative business units.

The active process of digital transformation is reflected in numerous works of Ukrainian and foreign researchers. Strutynska (2020) and Garzoni et al., (2020) in their studies point to the need for digital transformation and propose certain scenarios or projects to facilitate its implementation in the activities of small and medium-sized businesses. The theoretical foundations of digital transformation are considered in the works of Vial (2021) and Ebert and Duarte (2018), where digital transformation is primarily linked to the implementation of the latest technologies in the activities of businesses. However, some works aim to explore recent developments in the understanding of the digital transformation process, in particular, Nadkarni and Pruegle (2021) emphasize that digital transformation is not only about the application of innovative technologies, but also about the effective management of the process. That is recent trends in understanding digital transformation and defining criteria for its success bring the human factor of the process to the forefront. First of all, this applies to the management of digital transformation by project managers, because, as noted earlier, the digital transformation of a single business can be seen as a project that requires successful management, setting goals, defining time limits, budget, milestones, etc.

There are also many works devoted to the study of project management. Gasemagha and Kowang (2021) note the key role of project managers in the success of any project as a whole. Henkel et al., (2019) note that the most important trait of a project manager is the ability to build relationships between project implementers, communication, and leadership skills. Alvarenga et al., (2019) note the need for technical skills in project managers, but also emphasize that they are not crucial for members of the profession.

Stjepić et al., (2020) is one of the few researchers who note the importance of the connection between an organization's management, its leaders, all stakeholders, and digital transformation. However, it should be noted that the own role of project management in the digital transformation of small and medium-sized businesses in the works of scientists is considered extremely fragmented, as researchers usually focus on one of the aspects under study - either the process of digital transformation or the basis of project management. Therefore, an important scientific issue is the study of these aspects in their combination, because, as mentioned above, digital transformation is not limited to new technologies: the leading role in its successful implementation is played by the factor of effective management of the process by specialists with the appropriate qualifications and relevant skills.

The purpose of the article is to investigate the role of project management in the digital transformation of small and medium-sized businesses, to identify key issues and the scenario of this transformation, and to define a portrait of a modern project manager.

Achievement of the objectives requires the following tasks: to conduct a theoretical study of the aspects of project management and identify current trends in understanding its role in the digital transformation of businesses; to identify key issues of project management and the main directions of implementation of the digital transformation of business processes; to reveal the innovative potential of project management in the digital transformation of small and medium businesses by comparing the results of the study and the views of scientists.

Literature Review

The rapid development of transformation processes, constant changes in trends, and the importance of improving quality in all spheres of life and activities of people cause a high scientific interest in the topic under study. Strutynska (2020) devoted her Ph.D. thesis to the study of digital transformation as an imperative for the innovative development of business structures. The scientist defined the theoretical and applied foundations of digital transformation, its current state, problems, and prospects. The work focuses on the digital transformation of small and medium-sized businesses.

Garzoni et al., (2020) developed their own project to promote the digital transformation of small and medium-sized businesses. The project was created for the Italian region and funded by the Italian Ministry of Economic Development. The main goal of the project is to increase the interest of small and medium-sized businesses in digital transformation and to further highlight the most interested among them.

Ebert and Duarte (2018) foresee a rapid pace of digital transformation and its penetration into all areas of the economy, but the researchers acknowledge the many obstacles in its path, from which they conclude that digital transformation can both stimulate and hinder the development of businesses.

Many researchers recognize that digital transformation today is not just a process of adopting the latest technologies. In fact, the digital transformation of business operations must be combined with experienced management of this process by the management of organizations (Nadkarni & Prügl, 2021). Vial (2021) emphasizes that technology alone is not the main component of the digital transformation process. Its success must first and foremost be ensured through an effective strategy, organization, and company culture.

The reviewed studies are only a small part of the total volume of scientific work on the digital transformation of businesses. The active interest of scientists in digital transformation tends to increase further due to the rapid changes in the field of growth of its importance for the economy and business. This underscores the relevance of the topic of the article and stimulates further steps in its development from a scientific point of view.

Methodology

During the study, the following scientific methods were used: the method of analysis and synthesis in the study of theoretical aspects of the issue under study and current trends in its understanding, graphic methods to visualize and structure the results obtained, the method of establishing cause-effect relationships in the determination of relationships and dependence between the concepts under study.

The complex nature of the research requires its distribution into separate stages. At the first stage, a theoretical study of the aspects of project management was conducted and current trends in understanding its role in the digital transformation of business were considered. This stage substantiates the necessity of project management in the effective provision of the process of digital transformation of small and medium-sized businesses. The exceptional role of small and medium-sized businesses in the economic processes of the country was explained, and the criteria for their success compared to other business units in the implementation of digital transformation were defined. The definitions of the key concepts under study, in a particular project, project management, and digital transformation, are provided.

The second stage of the study establishes the main directions of digital transformation of small and medium-sized businesses, in particular outlines its scenario, and agrees on the key issues of project management arising in the course of digital transformation. In addition, the portrait of modern project management is characterized in terms of defining the skills it must possess in order to succeed in the process of digital transformation.

The final stage reveals the innovative potential of project management in the digital transformation of small and medium-sized businesses by comparing the results of the study and the views of scholars. In addition, ways to further expand and unlock the innovative potential of project management through the combination of its principles with the principles of sustainable development are identified.

Results and Discussion

A theoretical study of the aspects of project management. Current trends in understanding its role in the digital transformation of businesses

Project management is a relatively new method of management, but in the short period of its existence, it has already proved the effectiveness of its implementation in the general management system of organizations. Many modern businesses concentrate their activities around the execution and management of individual projects: building apartment complexes, developing software, writing, and publishing scientific or artistic works are all examples of projects that require experienced management.

Project management is widespread in virtually all areas of goods and services production, particularly in information technology (IT). Project manager in IT companies is an extremely in-demand profession because it is the experience, the ability to organize the process and its performers, leadership and personal qualities, and other skills of such specialists that determine the success of projects in general. It follows that project management, as an innovative method of management, often goes hand in hand with the digital transformation of businesses, the economy, and the state as a whole.

As we know, small and medium-sized businesses are the most flexible, mobile, adaptive, and innovative enterprises. Small and medium-sized businesses are important for the sustainable development of the economy and play a significant role in enhancing a country's innovation potential and export growth. In developed countries, the share of small and medium-sized enterprises is 95%, and they provide about 50% of GDP, most jobs, and 25% of exports. In the context of the digital transformation of the economy, small and medium-sized businesses must understand the opportunities and benefits of digitalization in their activities; be client-oriented; apply data effectively; adopt an innovative way of thinking; restructure their business models according to modern requirements; and make investments in specialists in order to maintain and increase competitiveness (Strutynska, 2020).

Given all of the above, it can be argued that the study of the role, essence, and potential of project management in relation to the digital transformation of small and medium-sized businesses, taking into account the possibility of achieving maximum efficiency in this area is an extremely timely and relevant issue.

The role of project management in the digital transformation of small and medium-sized businesses is a complex and multidimensional issue, therefore, the study of its essence should begin with the establishment of definitions of its individual components, as well as current trends in changing the trend of their understanding.

The definition of the project itself varies in its essential characteristics in the works of researchers. However, its most commonly used definitions most often contain the presence of quantitative and qualitative goals, a number of comprehensive measures to achieve these goals, as well as clearly defined boundaries of the beginning and end of the project (Tereso et al., 2019). Thus, a project can be defined as the creation of a particular unique product or service within a predetermined time frame and resources. Project management involves the use of processes, methods, skills, knowledge, and expertise to achieve certain project goals according to project eligibility criteria within agreed-upon parameters. Project management has outcomes that are limited by project time and budget (Murray-Webster & Dalcher, 2019).

In turn, digital transformation encompasses significant changes specific to society, the economy, and other industries through the use of digital technology (Vial, 2021). Digital transformation is the introduction of disruptive technologies to improve productivity, value creation of goods and services, and social well-being. Digital transformation is predicted to have a high growth rate and rapid penetration in industries, but there are also certain barriers to it, such as heterogeneous or inadequate structures and culture of companies, lack of well-defined strategies, shortage of skilled labor, lack of appropriate employee skills, inadequate consumer regulations, lack of funding, in particular for small and medium businesses (Ebert & Duarte, 2018). Thus, digital transformation, defined as the transformation with respect to the changes that modern digital technologies bring to companies' business models, products, and organizational structures, is one of the most common challenges for today's management of existing businesses. Digital capabilities must come together with skilled workers and organizational leaders to unleash their transformational power (Nadkarni & Prügl, 2021).

Recent research has led to a change in the understanding of certain aspects of digital transformation. In particular, regarding transformation through IT, it was found that technology is not the main aspect of the transition to an innovative way of doing business and maintaining competitiveness, but only part of this process. In addition to the technology itself, strategy, organizational and structural change, as well as organizational culture, play an important role (Vial, 2021). From this, we can conclude that the successful digital transformation of businesses, including small and medium-sized ones, is impossible without competent and experienced management, in particular project management, development of effective strategies, organization of the process and motivation of personnel, enhancement of corporate culture, etc.

Project managers are entrusted with many functions, fulfillment of which allows to carry out and complete projects in a quality manner in accordance with the set requirements and expectations of customers within the predetermined timeframe and budget. Therefore, the project manager must be proficient in the relevant knowledge and skills to use the methods and techniques that the project needs and manage, such as planning, budgeting, analytical skills, etc. However, the most important task of a project manager is the ability to organize and manage the interaction of project implementers (team) in order to achieve maximum efficiency in the project work (Henkel et al., 2019).

So, the project manager is responsible for time management, cost, quality, project integration, team members, communication, risks, and assets. Thus, the success of project execution and delivery depends primarily on the project manager (Gasemagha, & Kowang, 2021).

Digital transformation of business processes: key issues of project management and the main directions of implementation

The key questions that an organization, particularly its project management, needs to answer are:

- How to adapt to new trends in digitalization;
- How to identify new opportunities and scenarios for business development;
- How to start the process of digital transformation;
- How to attract new talent from the market;
- How to start change management;
- How to convince stakeholders to support the idea;
- How to start funding and managing digital transformation projects;
- How to help employees and business partners integrate into the process through digital means (Maheshwari, 2019).

The answers to these questions depend on the specifics of the business, the scope of the business, the specific stakeholders and participants in the process. To effectively address these issues, a project manager should have, as mentioned above, confident communication and leadership skills, managerial and organizational skills, as well as sufficient knowledge of technology to understand customer requirements, user needs, goal setting for performers, effective process design, in general, Most often all the above skills are divided into so-called soft skills (soft skills) and hard skills (technical skills). Soft skills are super professional skills, i.e., such qualities which are not directly related to the profession but can play a decisive role in successful professional activities. They are the ability to find a common language with people, resolve conflicts, leadership qualities, etc. Figure 1 shows the key soft skills required for a project manager.

Fig. 1. Soft skills, necessary for the successful professional activities of a project manager (Zuo et al., 2018)

Hard skills, or technical skills, although according to many researchers do not play the main role in the project manager profession (Alvarenga et al., 2019), are also a prerequisite for their professional development. Specific technical skills required by a project manager depend on the business area, but in general, during the digital transformation of an organization's business processes, a specialist must navigate the following basic digital transformation engines (Fig. 2).

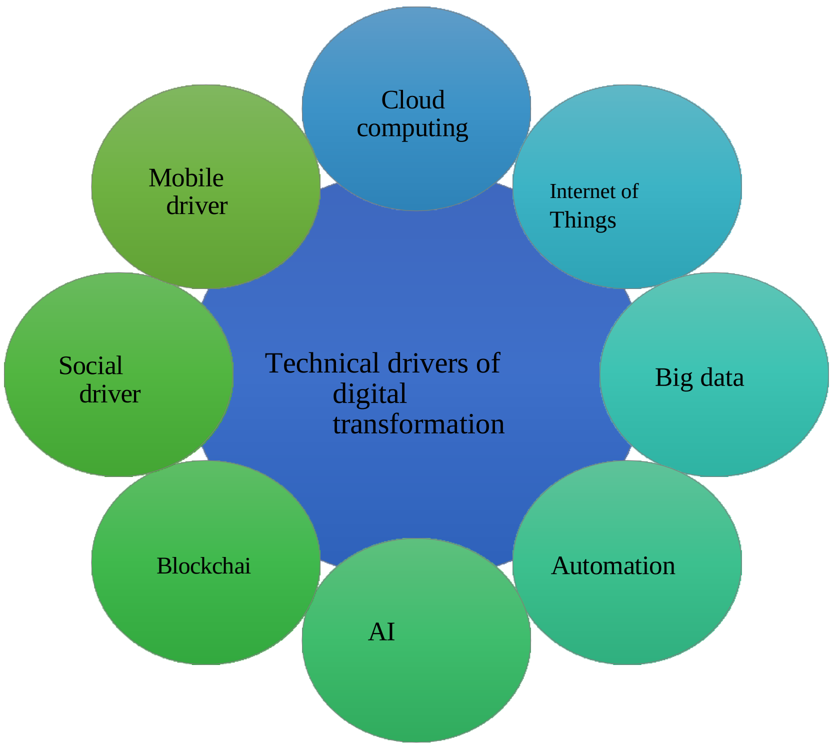

Fig. 2. Technical drivers of digital transformation (Maheshwari, 2019).

Cloud computing technologies offer flexibility and scalability at such a high level that they make them a prerequisite for all digital transformation strategies (Lambropoulos et al., 2021).

The structure of the Industrial Internet includes infrastructure, technologies, and programs that bridge the gap between the real industrial world and the virtual world (Borangiu et al., 2019).

By implementing extensive data, businesses can become data-driven organizations to update their marketing programs by collecting large amounts of structured and unstructured data (Miklosik & Evans, 2020).

Automation consists of transferring manual and repetitive tasks from humans to robots (programs) (Maheshwari, 2019).

Artificial intelligence refers to a machine's ability to learn from experience, adapt to new input data, and perform human tasks (Kitsios, & Kamariotou, 2021).

Blockchain technology offers the following benefits: increased security, fast transactions, decentralization, immutability, transparency, and trust (Merkaš et al., 2020). Simply put, a blockchain is a distributed ledger that provides a way for a community to record and share information, in which each participant maintains his or her own copy of the information, and all participants must check for updates. Information refers to transactions, contracts, assets, identities, etc. (Grech & Camilleri, 2017).

The social driver contains the transformation of relationship building and information discovery within and outside the enterprise. The mobile driver consists of transforming how people interact, use information and services, and collaborate (Maheshwari, 2019).

The transition to a digital way of doing things cannot be realized immediately, it is a gradual process in which it must be adapted to the specific business environment as well as appropriately perceived by the organization's employees. For this purpose, project management must provide an effective and realistic scenario for the digital transformation of businesses, including small and medium-sized ones (Fig. 3).

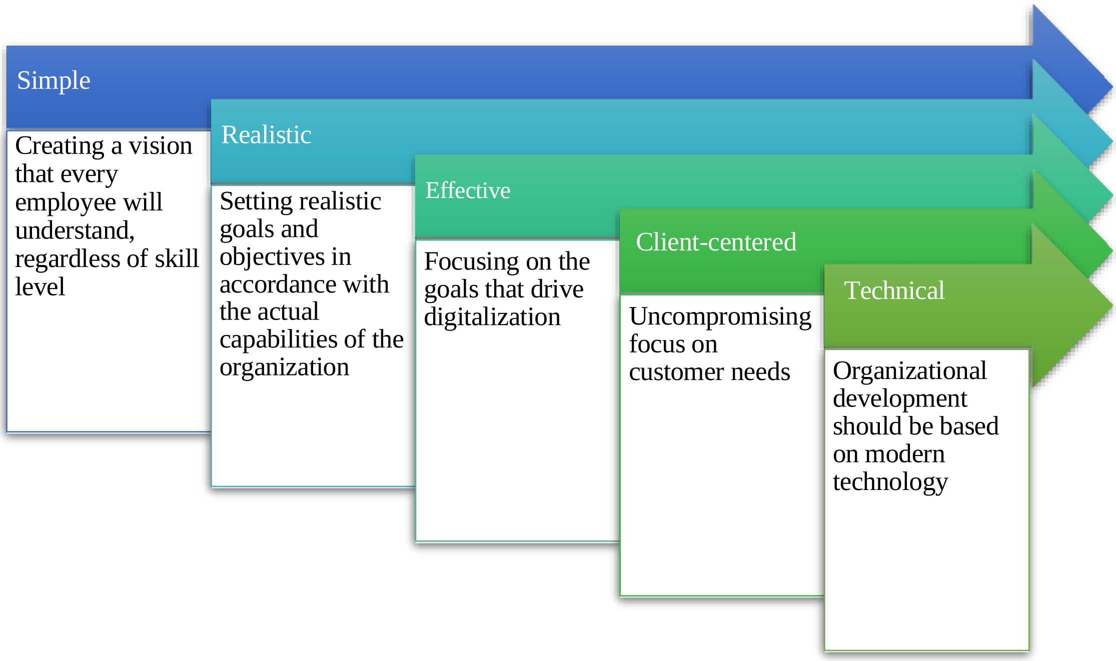

Fig. 3. Scenario of digital development of small and medium-sized businesses (Strutynska, 2020)

The analysis of Figure 3 confirms the view developed in the previous section that digital transformation is not only about introducing innovative technologies but also about organizing such a process, developing plans, scenarios, strategies, team coordination - that is, the very tasks that project managers are charged with. In addition, during the combination of business processes with digital transformation, other actors are involved, including internal and external stakeholders, customers, technical director, process management managers, etc. (Stjepić et al., 2020), which requires project managers to have high diplomatic skills, the ability to collaborate and reach a mutual agreement with all participants in the process.

To summarize the above, a successful digital transformation of small and medium-sized businesses largely depends on successful project management, whose tasks should be: organizing the transformation process, ensuring effective communication between the participants in the process, and managing technical changes (Fig. 4).

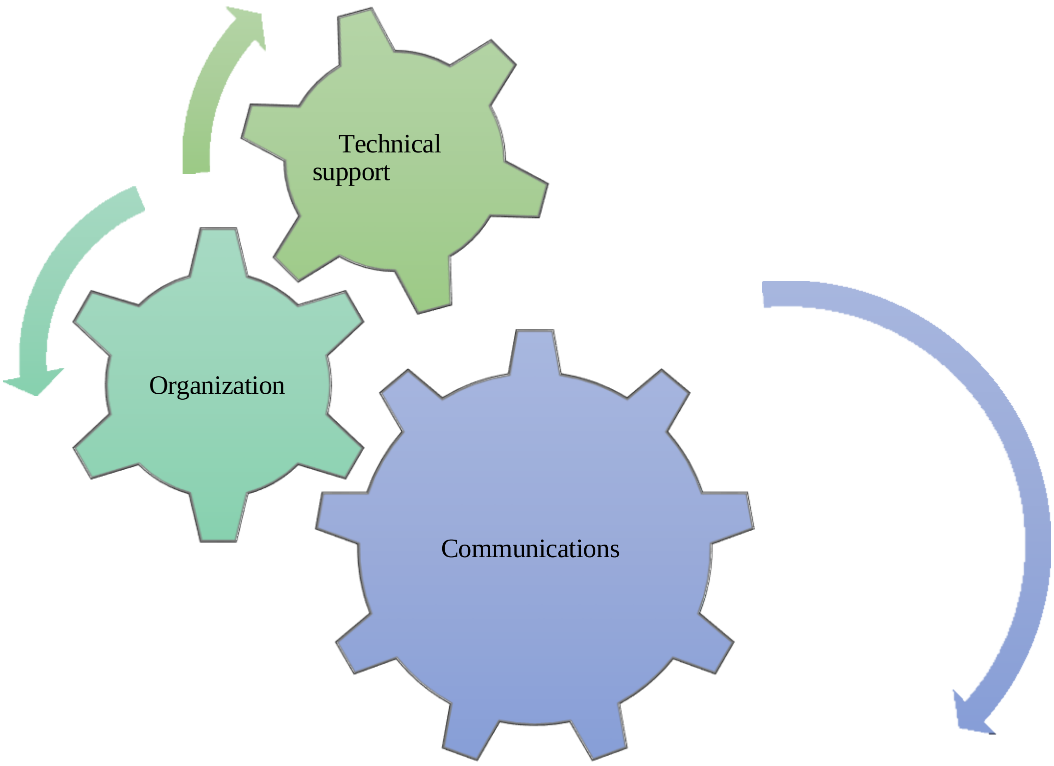

Fig. 4. The main directions of project management in the course of digital transformation of small and medium-sized businesses.

Thus, project management in the process of digital business transformation is a specific mechanism that provides this process in three interrelated areas.

The innovative potential of project management in the digital transformation of small and medium-sized businesses: a comparison of the results of the study and the views of scientists

The study identified the role, key issues, and main directions of project management in the digital transformation of small and medium-sized businesses and described the scenario of such transformation. It was found that digital transformation is a gradual process, requiring a breakdown into stages. The views of most researchers agree with this approach, but some of them are of the opinion that in order to unlock the innovative potential of project management in the digital transformation of businesses to the full, before the digitalization proper, it is advisable to implement projects which, first, will increase the interest of small and medium businesses in digitalization, and second, will highlight from all organizations involved in the project those that are most interested and have the highest potential. Such projects concern, first of all, the state support of digital transformation, because they should be implemented at the initiative of the national government. For example, Garzoni et al. (2020) have developed their own four-level approach called Smart District 4.0, which promotes the digital transformation of small and medium-sized businesses with different levels of involvement and impact of transformation (the object of the study was the Puglia region in Italy; the project was funded by the Italian Ministry of Economic Development). The four levels highlighted by the researchers promote the interest of small and medium-sized businesses in the digital transformation and identify the most interested among them and are as follows:

1. Digital Awareness: builds on SMBs' awareness of digital transformation opportunities. Provides information about the project and collecting subscriptions through calls and live meetings.
2. Digital inquiries: at this level, technology solutions are presented in terms of functionality and opportunities to attract the attention of small and medium-sized businesses (means: working sessions, workshops, focus groups, etc.).
3. Digital collaboration: based on their interests, companies participate in research on the potential benefits of digitalization in their business processes and strategies.
4. Digital Transformation: This is the level of the highest attraction that a limited number of interested small and medium-sized businesses see. At this level, they have a strong interest in the digitization process, and this can be the core set of the project (Garzoni, et al., 2020).

Although the project was developed for a particular region, its main ideas can be used and successfully implemented, in particular through effective project management, in virtually any country.

Ukraine is also taking steps to implement and state support for digital transformation. The government has approved the Order № 67-r "On Approval of the Concept of development of the Digital Economy and Society of Ukraine for 2018-2020 and the Approval of the Action Plan for its Implementation" (2018), as well as the digital government portal Action (Diya, 2022), which pays special attention to supporting the creation and running of small and medium businesses. Thus, in order to unlock their innovative potential and take advantage of all the opportunities of government support for businesses, project managers beyond the other must be aware of the latest legislative changes, trends in government policy, and understand the legal aspects of the issue.

However, the innovative potential of project management in the digital transformation of business does not stop there. In particular, researchers are now inclined to consider project management and its role in the digitalization process from the perspective of sustainability, the key objective of which is not only to ensure the growth of company value or high revenues but also to balance economic efficiency, social impact, and ecology. This fact has led to the emergence of the concept of sustainable project management, operating from the following principles: reflecting all perspectives of sustainability rather than company enrichment; considering the entire project cycle and results from a sustainability perspective; involving stakeholders in management; promoting sustainability for both the organization and society (Stanitsas et al., 2021).

With all of the above in mind, it can be summarized that the digital transformation of small and medium-sized businesses is a gradual, complex, multi-step process, the leading role in the success of which is played by successful project management. The effectiveness of project management depends on a number of factors, in particular, the project manager should have developed communication skills (including leadership qualities, the ability to establish team relations, the ability to resolve conflicts, etc.), organizational skills, strong technical skills, as well as decisions, developments in the world and the economy The full innovative potential of project management can be unlocked by applying the principles of sustainable development in accordance with the latest trends in the world.

Conclusions

As a result of the study, the theoretical aspects of project management in the process of digital transformation of small and medium-sized businesses were defined. In particular, the concept of the project, project management, and digital transformation were clarified, and the own role of project management in the process of digital transformation was defined.

Aspects of the digital transformation of business processes were established: the issues of project management in the process of transformation, its scenario, the key skills of project managers necessary for the successful implementation of the transformation. It is established that a project manager should have soft skills, which can include communication skills, in particular leadership qualities, the ability to build teamwork, communicate with stakeholders and customers, resolve conflicts and other skills, organizational skills, consisting ineffective process management, as well as deep technical knowledge.

In addition, the project manager must be aware of the latest trends in politics and economics in order to effectively leverage government support for the digital transformation of businesses. In addition, the innovative potential of project management can be expanded by its focus on the principles of sustainable development, which includes the inclusion of not only the tasks to increase the market value of the company but also socially significant tasks and tasks of care for the environment in the activities of the project manager.

Prospects for further research are the definition of tasks and main directions of activity of sustainable project management itself, as well as, taking into account modern conditions of economic management, the definition of new challenges for project managers in the process of digital transformation in conditions of escalating military conflicts.

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