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Influence of gender and marital status on susceptibility of persuasion strategies in advertisement

Влияние на пола и семейния статус върху податливостта на убеждаващите стратегии в реклама

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Abstract

The study has two main objectives: to find out what is the susceptibility of individuals to the persuasion strategies of Cialdini's persuasive power according to gender and to determine some characteristics of users with different marital status in social influence. Cialdini's (2001-2021) persuasion strategies (principles), as well as Kepteyn's STPS (2009), were applied to measure the susceptibility to persuasion of individuals of both genders with different marital status. The results of an analysis of variance (ANOVA), measuring the influence of gender, showed that on the criterion of susceptibility to persuasion, males were more influenced by the following strategies: liking, reciprocity, authority, and social proof relative to females with the exception of the principle of commitment and consistency, and individuals who are divorced, separated and widowed responded positively to strategies such as social proof, scarcity and authority. Through regression analysis, social influence was found for unmarried users with respect to the reciprocity principle, as well as authority and scarcity when combining the latter strategies. Individuals who are cohabiting or married, as well as divorced, separated, and widowed, gave positive advertising responses to the scarcity principle, but cohabiting and married consumers exhibiting commitment and consistency under the influence of advertising. Hence, this study can serve organizations offering products and services through advertising, and its originality lies in the

Резюме

Изследването има две основни цели: да установи каква е податливостта на индивидите към убеждаващите стратегии на Чиалдини по критерия пол и да детерминира някои особености при потребители с различен семеен статус при оказване на социално влияние. Приложени са убеждаващите стратегии (принципи) на Чиалдини (2001-2021), както и скалата на Кептейн - STPS (2009) за измерване на податливостта към убеждаване на индивиди от двата пола с различен семеен статус. Резултатите от анализ на вариациите (ANOVA), измерващ влиянието на пола показват, че по критерия податливост на убеждаване мъжете са по-силно повлияни от следните стратегии: харесване, реципрочност, авторитет и социално доказателство спрямо жените с изключение на принципа на ангажираност и последователност, а индивиди, които са разведени, разделени и овдовели, реагират положително на стратегии като социално доказателство, недостиг и авторитет. Чрез регресионен анализ е установено социално влияние при несемейни потребители по отношение на принципа на реципрочност, както и на авторитет и недостиг при комбиниране на последните стратегии. Индивиди, които съжителстват или са женени, както и разведени, разделени и овдовели, дават положителен рекламен отговор на принципа на недостиг, а съжителстващите и женените потребители имат прояви на ангажираност и последователност под влияние на реклама. Следователно това проучване може да послужи

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findings of mixed consumer responses regarding gender and marital status.

Keywords: persuasive strategies, advertising response to persuasion, STPS.

Introduction

This article discusses some of the features of persuasion principles that can be applied in communication, marketing, political science, social psychology, journalism, advertising, and consumer psychology that use persuasion (Knowles & Linn, 2004). There are many reasons for the ongoing research on gender as well as other consumer psycho-demographics regarding the applicability of persuasive principles in advertising, but the main one is that gender is the first most commonly manipulated factor that is associated with marital status. Furthermore, by segmenting consumers by gender and marital status, and understanding the social influence achieved that alters consumer satisfaction and behaviour (Peterson & Wilson, 1992), successful advertising influence is achieved. To be able to interpret and effectively use persuasion principles in advertising, it is necessary to understand what defines them as well as know which variables or factors relate to them (Oyewole, Sankaran & Choudhury, 2008). Typically, socio-demographic factors are well known in the determinants of persuasive communication as they demonstrate significant effects on consumer behaviour, behavioural psychology, and the establishment of individual consumer differences in persuasion (Brug, Oenema & Campbell, 2003). Since there are a lot of empirical evidences regarding gender in the persuasion literature, but there is not enough research to date on whether marital status affects consumers' susceptibility to persuasive strategies in advertising, there is a need for new scientific research.

The paper is organized as follows: the first section reviews previous literature on the determinants of persuasive strategies, as well as some demographic characteristics of advertising consumers. Consistent with this review, hypotheses were formed regarding gender and marital status differences on achieving advertising effectiveness through the use of persuasive strategies. The following sections present the research methodology for measuring persuasive principles and respondents' susceptibility to persuasion, as well as some

на организации, предлагащи продукти и услуги чрез реклама, а неговата оригиналност се изразява в констатираните смесени потребителски реакции относно пол и семеен статус.

Ключови думи: убеждаващи стратегии, рекламен отговор към убеждаване, STPS.

gender and marital characteristics of consumers. The last section of the study comments on the results obtained, as well as generalizations about the social influence achieved through advertising among different groups of consumers, and recommendations for future research on persuasion principles in advertising.

Literature Review

A number of research studies have found that gender as well as marital status are positively associated with individuals' physical and psychological well-being (Glenn, 1975; Williams, 1988), and gender differences in well-being between legally married and unmarried individuals can largely determine consumer behavior following the impact of advertising. Other researchers have pointed out that the assumption of certain social roles in life (Baber & Tucker, 2006), as well as the derivation of benefits from marriage (Williams, 1988), determines the ways in which information from an external source is perceived (Kaptein, Aarts, Ruyter & Markopoulos, 2009; Kaptein & Eckles, 2010a). On the other hand, Fogg and Eckles (2007) demonstrate that persuasive principles achieve reliable influence among diverse individuals, segmented by gender as well as other demographic characteristics when persuasion is delivered at the right time, in the right way, with the right message (Fogg & Eckles, 2007). These findings identify three important aspects of persuasive communication: 1) first, the transmission and reception of information must take place under appropriate conditions; 2) second, the advertising message must reach a group of consumers with specific characteristics: gender and marital status; 3) third, the susceptibility to persuasion, which has a direct relationship to the individual characteristics of consumers, can largely determine their final behavior. Although many researchers in the field of persuasive communication argue about the number of persuasive strategies and the conditions for conducting persuasion, as well as what determines the construction of persuasion - the

adaptation of the user's characteristics to the persuasion or vice versa, it is found to achieve an effect in all areas of public life. Furthermore, many researchers in different subject areas have attempted to apply persuasion strategies to achieve different outcomes. For example, Fogg develops a framework to support the design and evaluation of technological persuasion systems and proposes 40 strategies (Fogg, 2009); Kellermann and Cole (1994) collect 64 taxonomies that describe different persuasion strategies and their operationalization to achieve social influence (Kellermann & Cole, 1994); but there are also those researchers who have listed over 100 strategies for social influence (Rhoads, 2007) and then point out specific ones for use in practice. The reasons for these differences are the result of researchers' desire to be comprehensive or to emphasize different details. More importantly, influence strategies can be useful in research to ascertain the individual characteristics of consumers, as well as to draw conclusions about consumer behavior.

In this study, persuasion strategies (or persuasion principles) are applied to social influence R. Cialdini (2001-2021), with the main objective of identifying the effects of these persuasive principles among different advertising consumers (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021). Social psychologists are not only interested in the persuasion achieved, but also advocate for the outcomes of gender differences in the perception of well-being among legally married and their unmarried peers (Aneshensel, Frerichs, & Clark, 1981; Radloff, 1975; Glenn, 1975) when using products and services from online commerce. On the other hand, psychologists attempt to analyze adaptations of persuasive strategies in identifying individual differences of personality (Gerber et al., 2009; Ribeiro et al., 2011), and marketers are interested in adapting sales tactics to individuals with certain characteristics (McFarland et al., 2006). Among other things, there are empirical evidences that summarizes that with the advent of mass media and technology, mediated communication, as well as persuasion attempts have increased significantly. This is evidenced by the fact that conversion rates in physical stores are many times higher than those in e-commerce (Moe & Fader, 2004). The main contribution of this thesis to our understanding of human behavior is to provide a description of one of the antecedents of persuasive effectiveness in a way that facilitates large-scale application. To examine the achieved impact of persuasion, some individual differences of users by gender and marital status in responses to persuasive social

influence strategies are found. In another study of ours, the practical application of persuasive principles in advertising was shown to be directly related to gender and age characteristics of target groups (Spasova, 2022), and a number of causal relationships between persuasive principles and advertising recall were also found, where persuasion is carried out through a peripheral route (Petty & Wegener, 1999).

In a content analysis on persuasive strategies to achieve social influence among different advertising consumers, it is clear that some of the individual differences of respondents appear to be stable over time and also across contexts (Payan & McFarland, 2005). Therefore, improving understanding of advertising consumers' responses to persuasive strategies, and combining them to achieve more effective impact, is an important research question where the chances of success in advertising communication increase in some cases (Kaptein, Aarts, Ruyter, & Markopoulos, 2009). However, some theoretical and empirical evidence suggests that combining persuasive strategies in social influence does not always achieve success (Kaptein, et al., 2010b). This is the reason to look for explanations in another direction, i.e. whether advertising effectiveness is achieved when combining persuasive principles (also called persuasive strategies) against individual differences of a group of consumers (Kaptein & van Halteren, 2012a). In addition, there is a need to explain the achieved influence of certain demographic characteristics such as gender and marital status on the achieved social influence. The findings made by various researchers regarding the average behavior of groups of individuals in general towards repetitive behavior should not be ignored (Perloff, 2003), because the dynamics in repetitive behavior have a direct bearing on the adaptation of previous consumer responses (Payan & McFarland, 2005). Thus, human behavior appears to be highly variable with respect to individuals' characteristics, but consistent within the persuasion process through different strategies (Kaptein, Aarts, Ruyter, & Markopoulos, 2009). Consequently, if advertising and marketing professionals want to persuade on a large scale, and through actual impact achieved among a large number of individuals with common characteristics, they need to apply combinations of persuasive strategies that match personalization with well-defined goals. In order to establish inferred causal relationships in the influence of persuasive strategies in different communication processes, scientific theories need to be based on some new research on the

course of certain psychological processes in consumers (Noar, Benac & Harris, 2007).

This study hypothesizes that persuasion achieves greater effectiveness among consumers who are married in both genders relative to consumers of advertising who are not married or are divorced and widowed over time. This argument is consistent with some studies which have found that gender differences in the effect of marital status on consumer satisfaction may be due to different orientations and expectations that men and women bring to the use of advertised products and services (Vanfossen, 1981). Because women are more likely to connect with the more emotional content of products, they are also more sensitive to the emotional nuances of product consumption and have more intimate connections with others than male consumers would exhibit (Williams, 1988). In addition, it has been suggested that consumers' social roles, i.e. their gender identity, as well as certain manifested family traits, may determine their online shopping behavior (Williams, 1988; Baber & Tucker, 2006). Hence, the findings in this study on the achievement of persuasion among different groups of consumers through persuasive strategies in advertising may contribute to findings in other studies focusing on consumers' susceptibility to persuasion and its determinants as part of demographic variables (Oyewole, 2001; Ringle, Sarstedt & Zimmermann, 2011; Kim, Vogt & Knutson, 2015). They are important for existing advertising professionals, as well as for all researchers interested in persuasion processes.

According to these previous researches, the researcher puts forward the following hypotheses:

Hypothesis 0: There are no gender differences, as well as differences by marital status, in the effects of persuasive principles on consumers' overall persuasiveness;

Hypothesis 1: There are gender differences, as well as differences by marital status, in the effects of persuasive principles on consumers' general persuasiveness;

Hypothesis 2: There are gender differences, as well as differences by marital status, in the effects of persuasive principles relative to the effects of their combined social influence.

In view of previous research that has found a number of relationships between persuasive strategies and some individual characteristics of consumers, this paper seeks to examine the differential sensitivity of consumers to an

adapted and modified version of the scale proposed by Kaptein Ruyter, Markopoulos, and Aarts - Susceptibility to Persuasion Strategies Scale (STPS) (2009), as well as the application of some persuasive strategies in advertising (Kaptein Ruyter, Markopoulos & Aarts, 2009). The reason for conducting the study is that there are different perspectives on achieving advertising effectiveness among consumers with different demographic characteristics, when combining strategies, and the strength of impact achieved when applying one or more strategies. The results of this study attempt to clarify some problematic aspects in the persuasion process.

Methodology

The research methodology includes the general scientific principles for systematization and generalization of the research results on the achieved effects of advertising influence through persuasive social influence strategies. The purpose of this study is to determine the influence of gender and marital status on consumers' susceptibility to the offer of various persuasive claims in advertising, and the resulting positive and negative consumer advertising responses. An adapted and modified version of the STPS questionnaire or Susceptibility to Persuasion Strategies Scale, developed by Kaptein, Ruyter, Markopoulos and Aarts (Kaptein et al., 2009), is proposed to measure individual respondents' susceptibility to persuasion strategies. After establishing some features of the respondents' susceptibility to persuasion by gender and marital status, some individual reactions of the respondents to the persuasive principles of R. Cialdini (2001-2021) and their combined influence in advertising are sought (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021). In this study, a paper-based survey was implemented with the following modules: 1) first module - identifying respondents' individual susceptibility to persuasion principles using an adapted and modified version of the STPS questionnaire or Susceptibility to Persuasion Strategies Scale, developed by Kaptein, Ruyter, Markopoulos and Aarts (Kaptein, Ruyter, Markopoulos & Aarts, 2009). 2) second module - subjective-objective evaluation of consumers of advertisements containing persuasive strategies; 3) third module - demographic characteristics of respondents to identify some individual characteristics in the impact of advertising. The statements in the advertisements are constructed to match the persuasion strategies: 1) Statements containing only one persuasion strategy: Sports shoe advertisement featuring an authoritative personality (authority); Internet advertisement

offering a product for a short period (scarcity); Cosmetics advertisement featuring a discount (reciprocity); Cosmetics advertisement featuring a beautiful woman (liking); Cosmetics advertisement featuring an online game (commitment and consistency); 2) Statements containing two persuasive strategies: Handbag advertisement featuring a popular influencer and many likes (unity and social proof); Online advertising expert recommends a very rare product for a short period of time (authority and scarcity); Online food advertisement with many likes and making purchases (liking and social proof); Online advertisement featuring a celebrity and receiving a gift (authority and reciprocity). Respondents must accept or reject statements about advertisements with one or two persuasive strategies. The adapted and modified version of the STPS questionnaire or Susceptibility to Persuasion Strategies Scale, developed by Kaptein, Ruyter, Markopoulos, and Aarts (Kaptein et al., 2009), contains 35 items (5 items for one subscale): 26 statements from Kaptein and 9 author statements. The respondents answered a total of 35 questions on a five-point Likert-type scale, which includes grades from 1 - I do not agree, to 5 - I agree.

Cronbach's alpha was used to test the reliability of an adapted and modified version of the STPS questionnaire (Kaptein et al., 2009). The reliability of Liking Scale is $\alpha=0.77$, the reliability of Social Scale is $\alpha=0.82$, the reliability of Commitment and Consistency Scale is $\alpha=0.79$, the reliability of Scarcity Scale is $\alpha=0.95$, the reliability of Reciprocity Scale is

$\alpha=0.92$, the reliability of Unity Scale is $\alpha=0.85$, the reliability of Authority Scale is $\alpha=0.78$. For the whole sample, the Cronbach's alpha coefficient is $\alpha=0.803$. As the values exceed the minimum recommended value of $\alpha=0.70$ (DeVellis, 2012), the internal consistency for the respective subscales is sufficiently high, i.e. the items that make them up form a common scale (Ganeva, 2016).

Results and Discussion

The study was conducted in the period from early 2021 to early 2022. Self-reported data were collected from a total sample of 300 respondents distributed across six age groups, ensuring a 95% representative size (being $e = \pm 5\%$; $p = q = 0.50$). Each case from the general population was equally likely to be included in the study. All respondents filled in the questionnaire on paper because this ensures the correctness of the answers. According to these criteria, the total sample was 52% male (156 people) and 48% female (144 people), и според семейния статус – 62,7 % (188 people) – single, 25,7 % (77 people) – cohabiting or married, 11,7 % (35 people) – divorced, separated or widowed. To determine the influence of persuasion principles on different groups of respondents formed by gender, a one-way analysis of variance (ANOVA) was applied. The hypothesis that the arithmetic means of the persuasive principles were different with respect to gender was also tested, and the results of the one-factor analysis of variance (ANOVA) are presented in Table 1.

Table 1.
Influence of gender on susceptibility to persuasion principles (ANOVA)

Susceptibility to persuasion principles	F	p	Mean (Male)	Mean (Female)
Principle of liking	3.24	0.04	3.43	3.19
Principle of reciprocity	2.28	0.02	3.59	3.47
Principle of authority	2.39	0.00	3.57	3.51
Principle of commitment and consistency	2.24	0.00	3.56	3.61
Principle of social proof	4.91	0.00	3.53	3.33
General susceptibility	17.09	0.00	3.38	3.25

A statistically significant difference was found between study groups by gender for each of the subscales measuring Kaptein's persuasive principles - STPS (Kaptein et al., 2009). The effect size, which ranged from $\eta = 0.39$ to $\eta = 0.58$ and was calculated using the eta coefficient, was seen to be large or larger than typical according to the interpretation made by Cohen (Cohen, 1988). There is a stronger effect for

males relative to females because the means for males are higher except for the principle of commitment and consistency, where $F_{(1,299)} = 2.24$; $p < 0.00$; $\text{Mean}_{(\text{male})} = 3.56$ and $\text{Mean}_{(\text{female})} = 3.61$, (Table 1). The highest values of principle of reciprocity were found in males compared to females where $F_{(1,299)} = 2.28$; $p < 0.02$; $\text{Mean}_{(\text{male})} = 3.59$ and $\text{Mean}_{(\text{female})} = 3.47$, also the principle of authority for males versus females,

where $F_{(1,299)} = 2.39$; $p < 0.00$; $Mean_{(male)} = 3.57$ and $Mean_{(female)} = 3.51$ and the principle of social proof where $F_{(1,299)} = 4.91$; $p < 0.00$; $Mean_{(male)} = 3.53$ and $Mean_{(female)} = 3.33$. The implementations of five of the persuasion strategies were compared and statistically significant results were found for respondents of different genders. The achievement of positive social influence through the principles of reciprocity, of authority and of social proof is explained by the content value of these strategies. This process occurs when individuals are convinced of the rationality of a proposition (Komorita *et al.*, 1991), and this proposition is confirmed by an authority figure (Hazen, Weinstein & Park, 2003). Furthermore, these strategies can also be effective through complex application on individuals because some levels of responsibility and submission to

authority are essential for the existence of any social community (Cialdini, 2001). Consequently, people not only tend to return the favor - reciprocity, but also to conform to authoritative opinions as well as follow the behavior of multiple others who exhibit similar persuasions (Goldstein, Cialdini & Griskevicius, 2008; Zhu & Zhang, 2010).

To determine the influence of persuasion principles on different groups of respondents formed by marital status, a one-way analysis of variance (ANOVA) was applied. The hypothesis that the arithmetic means of persuasion principles by marital status are different was tested and the results of the one-factor analysis of variance (ANOVA) are presented in Table 2.

Table 2.

Influence of marital status on susceptibility to persuasion principles (ANOVA)

Susceptibility to persuasion principles	F	p	Mean (Single)	Mean (Cohabiting/ Married)	Mean (Divorced/Separated/Widowed)
Principle of unity	3.06	0.00	3.36	3.19	3.19
Principle of reciprocity	3.49	0.01	3.56	3.45	3.54
Principle of authority	3.56	0.05	3.55	3.43	3.67
Principle of social proof	4.89	0.00	3.50	3.30	3.62
Principle of scarcity	3.69	0.00	3.48	3.34	3.51
General susceptibility	15.49	0.00	3.50	3.45	3.58

When comparing the means of the respondents by marital status, statistically significant results were found for the following persuasive strategies: unity ($F_{(1,299)} = 3.06$; $p < 0.00$), reciprocity, ($F_{(1,299)} = 3.49$; $p < 0.01$), authority ($F_{(1,299)} = 3.56$; $p < 0.05$), social proof ($F_{(1,299)} = 4.89$; $p < 0.00$), and scarcity ($F_{(1,299)} = 3.69$; $p < 0.00$). Hence, marital status influences the achievement of social influence through persuasion, and the mean values of the reciprocity groups are as follows: $Mean_{(first\ group)} = 3.56$, then $Mean_{(second\ group)} = 3.45$ and $Mean_{(third\ group)} = 3.54$, that is, individuals who are not married or with other family status are the most susceptible to persuasion. This means that individuals who have family are least likely to return the favor (Cialdini, 2004). Other authors report that this social influence strategy, when applied correctly and is extremely powerful, even when it is really unfavorable to the persuaded (Kaptein & Eckles, 2010a).

The significance level for the social proof principle is $p < 0.00$, where $F_{(1,299)} = 4.89$, indicating that significant statistical differences exist between the means of the groups considered. Tukey's HDS post hoc test was used,

which showed that the arithmetic mean for the divorced, separated and widowed people group is $Mean_{(third\ group)} = 3.62$ and is statistically significantly different from the means of the other groups: $Mean_{(first\ group)} = 3.50$ and $Mean_{(second\ group)} = 3.30$. Hence, divorced, separated and widowed people are most affected by the social proof effect, and this is most often achieved in social networks and in advertisements by displaying other consumers' positive evaluations of a product (Goldstein, Cialdini & Griskevicius, 2008).

Social influence was also found by the scarcity principle, where $F_{(1,299)} = 3.69$; $p < 0.00$. Tukey's HDS post hoc test was used and showed that the arithmetic mean for the divorced, separated and widowed people group was $Mean_{(third\ group)} = 3.51$ and was statistically significantly different from the means of the other groups: $Mean_{(first\ group)} = 3.48$ and $Mean_{(second\ group)} = 3.34$. Hence, divorced, separated and widowed people are most affected by the scarcity effect, as perceived scarcity increases the perceived value of products and opportunities (Cialdini, 2001). Another study found that the reason married people, as well as unmarried people, are stricter in

consuming online products under the influence of advertising, is because they have more pressure in their lives and work, as well as in their families. Stress and pressure from children and spouses can adversely affect their online shopping, for example, rushing the time to shop and making quick decisions due to their work responsibilities related to taking care of the home (Nguyen & Homolka, 2021). On the other hand, there is much evidence that identifying a product or service as scarce will favorably influence consumer attitudes and increase the chance of purchase (Eisend, 2008), but our study finds that this is achieved under certain circumstances.

The importance of the authority principle is also inferred in the present results where $F_{(1,299)} = 3.56$; $p < 0.05$. Tukey's HDS post hoc test was used and showed that the arithmetic mean for the divorced, separated and widowed people group was $\text{Mean}_{(\text{third group})} = 3.67$ and was statistically significantly different from the means of the other groups: $\text{Mean}_{(\text{first group})} = 3.55$ and for the second group $\text{Mean}_{(\text{second group})} = 3.47$. What may enhance the influence of authority, a number of scholars have pointed out, is endorsement of products by authorities as "expert reviews"

(Hazen, Weinstein & Park, 2003). In addition, it has also been found that some levels of responsibility and subordination fall away when the opinion of authority figures is adopted (Cialdini, 2001), whereby cognitive dissonance in the purchase decision is reduced (Festinger, 1957).

By measuring users' sensitivity to particular influence strategies and adapting strategy choice accordingly, the effectiveness of persuasion systems is likely to increase. However, STPS should be considered as a starting point, not an end point, in the process of personalizing persuasion attempts (Kaptein et al., 2009). Table 3 presents the results of the STPS (Kaptein et al., 2009) regression with the determinants of persuasion principles based on gender and on the marital status of the users. Panel A presents the determinants of SPTS for the group of single users who have never been legally married. Panel B presents similar results for the group of cohabiting and married who are currently legally married, and Panel C shows the regression results for the group of divorced, separated and widowed, (Table 3).

Table 3.

Influence of marital status on susceptibility to persuasion principles in advertising (β , p)

Dependent: SPTS in Advertising	Panel A: Single		Panel B: Cohabiting/ Married		Panel C: Others (Divorced/Separated/ Widowed)	
	Coefficient	t (p-value)	Coefficient	t (p-value)	Coefficient	t (p-value)
Authority Advertisement (β_1)	0.2844**	4.16 (0.000)	0.1577*	1.81 (0.072)	0.0346	0.34 (0.733)
Scarcity Advertisement (β_2)	-0.038	-0.61 (0.525)	0.260*	1.56 (0.05)	0.122*	2.35 (0.00)
Commitment/ consistency Advertisement (β_3)	-0.280	0.80 (0.68)	0.350**	3.11 (0.00)	0.034	0.371 (0.711)
Reciprocity Advertisement (β_4)	0.470*	2.56 (0.05)	0.088	0.690 (0.490)	-0.011	-2.15 (0.653)
Authority/Scarcit y Advertisement (β_5)	0.570**	3.16 (0.00)	0.034	0.37 (0.720)	-0.034	2.15 (0.342)
Unity/Social proof Advertisement (β_6)	-0.560	1.56 (0.344)	0.044	0.38 (0.152)	-0.012	-3.15 (0.652)
Constant (β_0)	2.235**	6.78 (0.00)	2.243*	4.35 (0.05)	2.089*	3.29 (0.05)
Observations	188		77		35	
Adjusted R Square	0.282		0.288		0.327	

From the regression analysis, it is found that for single consumers of advertising, there are two factors that affect the susceptibility of respondents: the principle of reciprocity and the combined application of authority and scarcity simultaneously (Coefficient = 0.470; $t = 2.56$; $p < 0.05$); (Coefficient = 0.570; $t = 3.16$; $p < 0.00$). Consequently, non-family consumers are more likely than other consumer groups to respond positively to advertisements offering services or benefits, and to respond positively to authoritative appeals or those indicating that the product is scarce, (Table 3). On the other hand, cohabiting and married consumers were influenced by advertisements that contained statements, describing scarcity as well as commitment and consistency (Coefficient = 0.260; $t = 1.56$; $p < 0.05$); (Coefficient = 0.350; $t = 3.11$; $p < 0.00$). The principle of commitment and consistency explains the strength of commitment that people make because they become consistent and strive to fulfill a commitment (Cialdini, 2001).

All cohabiting and married users have made a commitment through marriage or commitment in their lives and treat the commitments made responsibly. In addition, perceived scarcity increases the perceived value of products and opportunities (Cialdini, 2001), so advertisers and marketers often use phrases that create this sense of uniqueness (Knowles & Linn, 2004). The strength of this principle is also found in the final group of advertising consumers, divorced, separated and widowed people, who responded positively only to the scarcity principle (Coefficient = 0.122; $t = 2.35$; $p < 0.00$). There is much empirical evidence that identifying a product or service as scarce will favorably influence consumer attitudes and increase the chance of purchase (Eisend, 2008). Hence, many psychological processes take place through advertising that can explain the effects of different persuasive strategies. From the results obtained in our study, it is clear that for the consumer groups studied, advertisements that contain only one persuasion strategy achieve greater effectiveness than advertisements with two persuasion strategies.

Conclusions

This study aims to investigate whether there are differences in persuasion susceptibility among different groups of advertising consumers based on their gender and marital status. Different evidence was found regarding the influence achieved through advertising, firstly identifying respondents' individual susceptibility to

persuasion in general. A statistically significant difference was found between the study groups by gender for each of the subscales measuring Kaptein's persuasion principles - STPS (Kaptein et al., 2009), with greater influence observed for males for following principles: liking, reciprocity, authority and social proof relative to females, with the exception of the principle of commitment and consistency. Our results reconfirm some empirical evidence regarding the power of achieving social influence through the principles of reciprocity, of authority and of social proof, which was explained by the substantive value of these strategies. These processes take place when individuals are convinced of the rationality of a proposition (Komorita et al., 1991), and this proposition is confirmed by an authority figure (Hazen, Weinstein & Park, 2003).

When comparing and analyzing the three groups of respondents who have their own specific traits regarding their involvement with other people, that is, these are group one-single, group two-cohabiting, married and group three-divorced, separated and widowed, it can be seen that marital status influences the outcomes of social influence achieved. The main persuasive principles through which effects are observed among these groups are the following: unity, reciprocity, authority, social proof and scarcity, with individuals belonging to the third group - divorced, separated and widowed people giving the most positive responses to the principles of social proof, scarcity and authority, i.e. the application of self-influence from these persuasive strategies could achieve its success among consumers with the relevant demographic characteristics.

Finally, our study found differences in the susceptibility of advertising consumers to one or to the combined use of two strategies. In the case of single advertising consumers, there are two factors that influence respondents' susceptibility: the principle of reciprocity and the combined application of authority and scarcity simultaneously, while cohabiting and married consumers, respectively, are influenced by advertising that contains statements, describing scarcity as well as commitment and consistency. Hence, the powerful force of scarcity is inferred, through which advertising effectiveness is achieved, influencing alone or in combination with another strategy. This is also explained by the commodity theory (Brock, 1968), which states that people desire scarce products more because the possession of such products creates

feelings of personal distinctiveness or uniqueness.

The power of commitment that consumers are willing to make, both in their use of products and services when influenced by advertising and in their lives, has also been demonstrated. This conclusion is drawn on the results of the combined influence achieved by advertisements containing persuasive strategies to which cohabiting and married consumers responded most positively. Hence, our results contribute to clarifying some problematic issues regarding persuasion processes in advertising, as well as to studies investigating advertising effectiveness.

Bibliographic references

- Aneshensel, C. S., Frerichs, R. R., & Clark, V. A. (1981). Family roles and sex differences in depression. *Journal of Health and Social Behavior*, 379–393. DOI: 10.2307/2136679
- Arbeláez-Campillo, D. F., Villasmil Espinoza, J. J., & Rojas-Bahamón, M. J. (2021). Inteligencia artificial y condición humana: ¿Entidades contrapuestas o fuerzas complementarias? . *Revista De Ciencias Sociales*, 27(2), 502–513. <https://doi.org/10.31876/rcs.v27i2.35937>
- Baber, K. M., & Tucker, C. J. (2006). Sex Role, 54, 459–467. DOI 10.1007/s11199-006-9018.
- Brock, T. C. (1968). Implications of Commodity Theory for Value Change. In Greenwald, A. G., Brock, T. C., & Ostrom, T. M., editors, *Psychological Foundations of Attitudes*, pages 243–275. New York: Academic Press.
- Brug, J., Oenema, A., & Campbell, M. (2003). Past, present, and future of computer-tailored nutrition education. *American Journal of Clinical Nutrition*, 77, 1028–1034. DOI: 10.1093/ajcn/77.4.1028S
- Cialdini, R. (2001). *Influence, Science and Practice*. Allyn & Bacon, Boston. https://www.influenceatwork.com/wp-content/uploads/2012/02/Influence_SP.pdf
- Cialdini, R. (2004). The science of persuasion. *Scientific American Mind*, 284, 76–84.
- Cialdini, R.B. (2016). *Pre-suasion. A revolutionary way to influence and persuade*. New York: Simon and Schuster.
- Cialdini, R.B. (2021), *Influence, New and Expanded: The Psychology of Persuasion*, New York: Harper Business.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Lawrence Erlbaum
- DeVellis, R. (2012). *Scale development: Theory and application*. (3rd ed.) SAGE Publications [https://www.scirp.org/\(S\(351jmbntvnsjt1aadkposzje\)\)/reference/referencespapers.aspx?referenceid=1954253](https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/referencespapers.aspx?referenceid=1954253)
- Eisend, M. (2008) Explaining the Impact of Scarcity Appeals in Advertising, The Mediating Role of Perceptions of Susceptibility. *Journal of Advertising*, 37(3), 33–40.
- Festinger, L. (1957). *A theory of cognitive dissonance*, Evanston. IL: Row, Peterson
- Fogg, B. J., & Eckles, D. (2007). Mobile Persuasion: 20 Perspectives on the Future of Behavior Change. In Fogg, B. J. and Eckles, D., editors, *Mobile Persuasion*, pages 1–166. Stanford Captology Media.
- Fogg, B. J. (2009). *Creating Persuasive Technologies: An Eight-Step Design Process*. Technology. <https://doi.org/10.1145/1541948.1542005>
- Ganeva, Z. (2016). *Let's reinvent statistics with IBM SPSS Statistics*, Elestra, ISBN 978-619-7292-01-5.
- Gerber, B. S., Stolley, M. R., Thompson, A. L., Sharp, L. K., & Fitzgibbon, M. L. (2009). Mobile phone text messaging to promote healthy behaviors and weight loss maintenance: a feasibility study. *Health Informatics Journal*, 15(1), 17–25.
- Glenn, N. D. (1975). The contribution of marriage to the psychological well-being of males and females. *Journal of Marriage and the Family*, 594–600. DOI: 10.2307/350523
- Glenn, N. D. (1975). The contribution of marriage to the psychological well-being of males and females. *Journal of Marriage and the Family*, 594–600. DOI: 10.2307/350523
- Goldstein, N. J., Cialdini, R. B., & Griskevicius, V. (2008). A Room with a Viewpoint: Using Social Norms to Motivate Environmental Conservation in Hotels. *Journal of Consumer Research*, 35(3), 472–482.
- Hazen, T. J., Weinstein, E., & Park, A. (2003). Towards robust person recognition on handheld devices using face and speaker identification technologies. *Proceedings of the 5th international conference on Multimodal interfaces ICMI 03*, page 289.
- Kaptein, M. C., & Eckles, D. (2010a). Selecting Effective Means to Any End: Futures and Ethics of Persuasion Profiling. In Ploug, T., Hasle, P., Spring, Berlin/ Heidelberg, pp. 82–93.
- Kaptein, M. C., & van Halteren, A. (2012a). Adaptive Persuasive Messaging to Increase Service Retention. *Journal of Personal and Ubiquitous Computing*, IN PRESS.
- Kaptein, M. C., Markopoulos, P., Ruyter, B., & Aarts, E. (2010b). Two acts of social intelligence: the effects of mimicry and social

- praise on the evaluation of an artificial agent. *AI & SOCIETY*, 26(3), 261–273. DOI 10.1007/s00146-010-0304-4
- Kaptein, M., Aarts, E., Ruyter, B., & Markopoulos, P. (2009). Persuasion in ambient intelligence. *Journal of Ambient Intelligence and Humanized Computing* 1, 43–56.
- Kellermann, K., & Cole, T. (1994). Classifying Compliance Gaining Messages: Taxonomic Disorder and Strategic Confusion. *Communication Theory*, 4(1), 3–60.
- Kim, M., Vogt, C. A., & Knutson, B. J. (2015). Relationships among customer satisfaction, delight, and loyalty in the hospitality industry. *Journal of Hospitality & Tourism Research*, 39(2), 170–197.
- Knowles, E. S., & Linn, J. A. (2004). *Resistance and Persuasion*. Lawrence Erlbaum Associates. New Jersey London: Publishers Mahwah.
- Komorita, S. S., Hilty, J. A., & Parks, C. D. (1991). Reciprocity and Cooperation in Social Dilemmas. *Journal of Conflict Resolution*, 35(3), 494–518.
- McFarland, R. G., Challagalla, G. N., & Shervani, T. (2006). Influence Tactics for Effective Adaptive Selling. *Journal of Marketing*, 70(4), 103–117.
- Moe, W. W., & Fader, P. S. (2004). Dynamic Conversion Behavior at E-Commerce Sites. *Management Science*, 50(3), 326–335.
- Nguyen, T., & Homolka, L. (2021). Marital Status and Satisfaction of Online Shoppers in the Beauty and Cosmetic Sector in Vietnam. *Journal of Asian Finance, Economics and Business*, 8(2), 1005–1015.
- Noar, S. M., Benac, C. N., & Harris, M. S. (2007). Does tailoring matter? Meta-analytic review of tailored print health behavior change interventions. *Psychological Bulletin*, 133(4), 673–693.
- Oyewole, P. (2001). Social costs of environmental justice associated with the practice of green marketing. *Journal of Business Ethics*, 29(3), 239–251.
- Oyewole, P., Sankaran, M., & Choudhury, P. (2008). Information communication technology and the marketing of airline services in Malaysia: A survey of market participants in the airline industry. *Services Marketing Quarterly*, 29(4), 85–103.
- Payan, J. M., & McFarland, R. G. (2005). Decomposing Influence Strategies: Argument Structure and Dependence as Determinants of the Effectiveness of Influence Strategies in Gaining Channel Member Compliance. *Journal of Marketing*, 69(3), 66–79.
- Perloff, R. M. (2003). *The Dynamics of Persuasion: Communication and Attitudes in the 21st Century*. Routledge. ISBN 9780367185794
- Peterson, R. A., & Wilson, W. R. (1992). Measuring customer satisfaction: fact and artifact. *Journal of the Academy of Marketing Science*, 20(1), 61–71.
- Petty, R. E., & Wegener, D. T. (1999). The elaboration likelihood model: Current status and controversies. In Chaiken, S. and Trope, Y., editors, *Dual-process theories in social psychology*, page 41–72. Guilford Press, New York.
- Radloff, L. (1975). Sex differences in depression. *Sex Roles*, 1(3), 249–265. DOI: 10.1007/BF00287373
- Rhoads, K. (2007). How Many Influence, Persuasion, Compliance Tactics & Strategies Are There? <http://www.workingpsychology.com/number-tactics.html>.
- Ribeiro, C., Mehrotra, G., Vey, G., Alhothali, A., & Dimarco, C. (2011). *Improving Health Care with a Virtual Human Sleep Coach*. Technical Report CS-2011-10.
- Ringle, C. M., Sarstedt, M., & Zimmermann, L. (2011). Customer satisfaction with commercial airlines: The role of perceived safety and purpose of travel. *Journal of Marketing Theory and Practice*, 19(4), 459–472.
- Spasova, L. (2022). Impact of Gender and Age on Susceptibility to Persuasion Principles in Advertisement, Economics & Sociology, 15(3), 89–107.
- Vanfossen, B. E. (1981). Sex differences in the mental health effects of spouse support and equity. *Journal of Health and Social Behavior*, 130–143. DOI: 10.2307/2136289
- Williams, N. (1988). Role making among married Mexican American women: Issues of class and ethnicity. *The Journal of Applied Behavioral Science*, 24(2), 203–217.
- Zhu, F., & Zhang, X. M. (2010). Impact of Online Consumer Reviews on Sales: The Moderating Role of Product and Consumer Characteristics. *Journal of Marketing*, 74(2), 133–144.