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The third-person effects and susceptibility to persuasion principles in advertisement

Ефекти на третата персона и на податливостта към убеждаващите принципи в реклама

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Abstract

This investigation has several main objectives: 1) to determine whether the third-person effect (TRE) (Gunther & Thorson 1992; Youn, Faber, & Shah, 2000) can be achieved through advertising messages; 2) to identify which strategies for persuasive social influence from P. Cialdini (Cialdini, 2001-2021) help to enhance the thirdperson effect (TRE) among advertising consumers; 3) to find some causal relationships between susceptibility to persuasion on Kaptein's scale (Kaptein et al., 2012) or STPS and TRE among consumers of advertising. The results of the analysis of variance (ANOVA) showed that consumers aged 46 to 65 believed that positive the third-person effect (TRE) statements exert their influence on other age groups. When measuring the negative influence of the third-person effect (TRE), it was found that young adults aged 18 to 25 were most likely to assume that this influence was successful among other consumers, i.e. they overestimated the effects on others but not on themselves. Through regression analyses, it is found that persuasive strategies such as scarcity and social proof achieve their influence among youths, and scarcity and authority principles - among females and among other consumers (but not on themselves) when several negative strategies are combined. The research findings can serve social psychologists, behavioural psychologists, and those who protect the interests of business organizations.

Keywords: TRE, persuasive strategies in advertisement, STPS for Bulgarian costumers.

Резюме

Това изследване има няколко основни цели:1) да установи дали може да бъде постигнат ефектът на третата персона (TRE) (Gunther и Thorson 1992; Youn, Faber и Shah, 2000) чрез рекламни съобщения; 2) да констатира кои стратегии за убеждаващо социално влияние по Р. Чиалдини (Cialdini, 2001-2021) спомагат за засилване на ефекта на третата персона (TRE) сред потребители на реклама; 3) да констатира някои причинно-следствени връзки податливостта към убеждаване по скалата на Каптейн (Kaptein et al., 2012) или STPS и ефектът на третата персона (TRE) сред потребители на реклама. Резултатите от анализ на вариациите (ANOVA) показват, че потребители на възраст от 46 до 65 години смятат, че положителните твърдения на TRE оказват своето влияние върху останалите възрастови групи. При измерване на негативното влияние на TRE се установява, че младежи на възраст от 18 до 25 години в найголяма степен допускат, че това влияние е успешно сред останалите потребители, тоест те надценяват ефектите върху другите, но не и върху себе си. Чрез регресионни анализи се установява, че убеждаващите стратегии като недостиг и социално доказателство постигат своето влияние сред младежите, а принципите на недостиг и на авторитет - сред жените и сред други потребители (но не и върху тях самите) при комбинирано прилагане на няколко негативни стратегии. Получените научни резултати могат да послужат специалисти по социална психология, поведенческа психология и на такива, които защитават интересите на бизнес организации.

Ключови думи: TRE, убеждаващи стратегии в реклама, STPS за български потребители.

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Introduction

Persuasion has been the subject of human research for millennia and finds its application in various areas of social life such as: social psychology, behavioural psychology, mediated communication, product offering design, direct marketing and advertising. Research has embedded the idea that persuasion explains the perceived and preferred basis of attitudes (Kaptein, 2012), as well as a range of behavioural changes in the achieved influence of interactive systems and technologies (Oinas-Kukkonen et al., 2008; Ploug et al., 2010). Despite views of the future of persuasive technologies that find they will be more effective than their human counterparts because they can be more persistent and 'always on' (Fogg & Eckles, 2007), other effects are being sought to achieve persuasive social influence. This is the additional effect of perception that can mediate the impact on purchase intentions, and is referred to as third person effects (TPE) (Gunther & Thorson, 1992; Youn, Faber, & Shah, 2000; Eisend, 2008). Conveying greater relevance of the product or service is achieved through the consumer's perceived value, which is explained by researchers as the main driver of purchase intentions and behavior (Zeithaml, 1988; Baker et al., 2002). In addition, it can be argued that the consumer's perceived value or the third person effect (TRE), is enhanced by the application of persuasive strategies developed by R. Cialdini (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021) to achieve lasting persuasive social influence in advertising. It is assumed that consumer perceived value has different effects on different groups of consumers and in the way they believe other consumers perceive advertising messages. The perceptual difference (based on attitudes toward a particular advertising message) arises because people tend to overestimate the perceived influence on themselves relative to others for a particular message because they believe they are more resistant to persuasion than others (Eisend, 2008, p. 35). A similar effect is observed when there is a discrepancy between the perceived influence on the self and the actual achieved influence on the self. Therefore, the ways in which consumers perceive social influence on them, as well as the perceived influence on other consumers, can provide a clear picture of the influence achieved by applying persuasive strategies in advertising.

Literature Review

Although persuasion achievement is available in advertising, a number of aspects of persuasive

communication are in the process of being understanding. One of these is the presence of a varying number of persuasive strategies in marketing, e-commerce, persuasive technology and in advertising. Fogg (2002) was one of the first to highlight the importance of findings (Fogg, 2002) for the design of interactive systems created with the intention of changing human attitudes or behavior. The same author started a field called persuasive technologies (Fogg, 2002), with the author's greatest contribution being the compilation of a behavior model for persuasive design (Fogg, 2009). While Fogg's work focuses on achieving persuasion through technology, Kellermann and Cole (1994) collected 64 taxonomies that describe different persuasion strategies and their operationalization (Kellermann & Cole, 1994). The main goal of their study is the integration of cross-taxonomies motivating human evaluation (Kellermann & Cole, 1994, p. 13) as a useful level of analysis that helps to group and distinguish specific influence tactics or implementations of different strategies (Kellermann & Cole, 1994; O'Keefe, 1994). In another subject area such as marketing, e-commerce and others, Cialdini (2001-2021) formed seven persuasion principles, based on research on some individual differences of consumers (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021). The researcher attempts to explain the nature of persuasion strategies and their broad applicability. On the other hand, Hoy and Smith (2007) proposed 10 persuasive strategies by showing their effectiveness in creating leadership qualities (Hoy & Smith, 2007). Consequently, persuasion is achieved through different ways among different individuals as an effective part of mass communication, business communication, as as advertising and interpersonal communication, and the intermediate level of these communication is third person effects (TPE) (Gunther & Thorson, 1992; Youn, Faber, & Shah, 2000; Eisend, 2008).

Since the persuasive principles developed over the years from Cialdini (2001-2021), as well as the impact of "third person effects" (TPE) (Eisend, 2008), are implemented through specific advertising messages and lead to a higher perceived sensitivity of others towards the self (Gunther & Thorson 1992; Youn, Faber, & Shah 2000), they will be a major part of this research study. The third-person effect states that when confronted with negative messages, people will overestimate the messages' effect on others relative to themselves (Youn, Faber & Shah



2000, p. 633). This is consistent with the persuasion knowledge model (PKM), which states that as people develop knowledge about the goals and tactics of persuasion agents, they will be less likely to perceive attempts at persuasion on themselves as effective (Friestad & Wright, 1994). Consequently, there is a disconnect between the effects of media advertising on others and on the self because this is due to underestimating others' awareness of external (situational) factors, and also thus overestimating others' susceptibility advertising content (Youn, Faber & Shah, 2000).

Advertising consumers' resistance to different messages is also explained by the fact that individuals perceive the message as having a greater influence on others to enhance their perception of personal invulnerability and control (Gunther, 1991). Another perspective of researchers is that users who consider an issue important (Mutz, 1989) perceive themselves as experts or are highly involved in the message (Perloff, 1993), which is associated with the authority principle. Susceptibility to this principle is achieved when a claim is presented by an authoritative person and supported by an authoritative argument. This finding does not imply that the persuasive strategy of authority will only achieve a positive effect among all consumers of an advertisement, because Milgram's (1974) famous experiment showed that one-third of participants did not comply with an authoritative argument (Milgram, 1974; Kaptein & Eckles, 2010). In addition, reliably influencing advertising consumers' attitudes and behaviors through persuasion (but not coercion) is a research problem that still needs to be investigated. Kaptein, Markopoulos, Ruyter and Aarts (2009) found that the target of a persuasion attempt must be receptive to the consumers of an advertisement, similarly the message must be delivered at a specific time to allow the consumer information (Kaptein, process the Markopoulos, Ruyter and Aarts, 2009). These aspects of persuasion are considered because there are many variations in the way the message query is formed. In order to evaluate the effects of the persuasive strategies proposed by Cialdini (2001-2021), as well as to elucidate other factors determining susceptibility to persuasion, the psychology of each principle must be explained. The creation of individual interventions in advertising messages to mimic person-to-person counselling (Brug, Oenema & Campbell, 2003) leads to the achievement of the third-person effect (Youn, Faber & Shah, 2000). Therefore, segmentation of target groups in advertising, as well as personalization based on psychological

characteristics such as individuals' stages of change (Noar, Benac & Harris, 2007), should be applied by making adaptations to Cialdini's persuasive strategies to achieve social influence (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021). The implementation of mutual adaptation, that is, according to the specificities of persuasive principles as well as the specificities of advertising consumers, requires a awareness of specific individuals using specific advertising products and services, as well as of the different persuasive effects achieved.

This study conceptualizes the presumed social influence achieved among consumers of advertising, and the effects on higher perceived influence on other consumers relative to self. Consistent with third person effects (TPE) research, negative influence on others is perceived to be much stronger than positive influence (Gunther et al., 2006). Similarly, the third person effect has been found to occur when the goal recommended in the message is perceived as eliciting a negative effect (Youn, Faber & Shah, 2000). Therefore, in our study, some negative effects of persuasive principles be derived through which manifestation of third person effects (TPE) will be sought. On the other hand, researchers have pointed out that to whom a message is considered positive, individuals attribute a greater effect on themselves than on others because they have the skills to recognize its value (Cohen & Davis, 1991; Gunther & Thorson, 1992). Creating different perceptions can lead to analogous reactions from consumers when trying out products and services offered in advertising. In support of these views is the spiral of silence theory (Noelle-Neumann, 1974), which explains why individuals do not exhibit pre-expected behaviour because they see their perspective as different from the general public's view. Other authors in some initial studies failed to find third person effects (TPE), even when the negative effect was strengthened (Gunther, 1991). Therefore, several research questions are raised: 1) Does "third person effects" (TPE) exist as a negative or as a positive manifestation of human behavior? 2) Can this achieved effect be verified by persuasive advertising messages? 3) Through which principles of persuasive social influence can it be manifested?

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

Hypothesis 0: There is no "third person effect" (TPE) among users, which can be verified through persuasive advertising messages.

Hypothesis 1: There is "third person effect" (TPE) among users, which can be verified through persuasive advertising messages.

Hypothesis 2: Third person effects (TPE) can be achieved by applying certain persuasive social influence strategies.

In order to provide greater clarity into the process of persuasive communication achieved, this paper revisits the issue of the "third person effect" (TPE), (Youn, Faber & Shah, 2000) by individuals' susceptibility measuring persuasion using the STPS developed by Kaptein, M., Markopoulos, P., Ruyter, B., & Aarts, E. (2009), (Kaptein et al., 2009). There are several reasons for conducting the study: 1) there are conflicting opinions on the third person effect (TPE); 2) achieving persuasion through persuasive strategies is realized under certain conditions - eliciting positive and negative effects; 3) applying persuasive strategies in advertising may yield some mixed results on the presence or absence of the third person effect (TPE). The results of this study will benefit researchers and practitioners in the application of persuasive communication in advertising.

Methodology

To understand whether our study provides a means of measuring sensitivity to persuasion using Cialdini's various principles (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021), we conducted an exploratory factor analysis using principal components analysis (PCA), with data analyzed after applying the Varimax rotation. The number of subscales in the Kaptein, Ruyter, Markopoulos and Aarts (2012) methodology is also 7, and in our study there are reasons to adopt the 7-factor solution because the extracted communities range from 0.340 to 0.772 for the whole samples, which is perfectly satisfactory as a measure (Kaptein et al., 2012). The extracted factor loadings range from 0.772 to 0.481, which is acceptable to form a coefficient of each factor (Ganeva, 2016). Based on this exploratory analysis, a 7-factor solution is adopted, according to which the adapted and modified version of Kaptein et al. (2012) questionnaire or STPS questionnaire - Susceptibility to Persuasion Strategies Scale will be used in the present study to establish the susceptibility of individuals to persuasion (Kaptein et al., 2012). Cronbach's alpha was used to test the reliability of an adapted and modified version of the STPS questionnaire (Kaptein et al., 2012). The reliability of Liking

Scale is α =0.69, the reliability of Social Proof Scale is α =0.78, the reliability of Commitment and consistency Scale is α =0.69, the reliability of Scarcity Scale is α =0.84, the reliability of Reciprocity Scale is α =0.77, the reliability of Unity Scale is α =0.73, the reliability of Authority Scale is α =0.81. For the whole sample, the Cronbach's alpha coefficient is α =0.799. As the values exceed the minimum recommended value of α =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.

Our further work applies the STPS questionnaire with 25 (seven subscales) statements (first module), an adapted and modified version of Kaptein et al. (2012), and in the next module (second module) of the survey, statements from advertisements are offered for respondents to evaluate, in order to ascertain individuals' susceptibility to Cialdini's persuasive principles (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021) with some negative statements with TRE. Different advertising images are used to conduct the experiment, supported by statements that measure each persuasive strategy containing manipulations of advertising messages, as statements provoke negative reactions because the purpose is to measure third-person effects: 1) Despite 10,000 likes on the Nike sports shoes advertisement, I would not buy the product because it limits my choice (social proof); An internet advertisement offering a 10% discount cannot make me order takeaway food because it is a product I am not interested in: (scarcity); A laundry detergent advertisement makes me participate in an online game, but I would not participate because the commitment is too great (commitment and consistency); The presence of a popular influencer in a bag advertisement does not make me try a product because that person is not important to me (unity); An online advertising expert recommends a product, but I would not try the product because I doubt the expert's opinion (authority); A laundry detergent advertisement makes me participate in an online game and brings a discount in the price of the product, but I would not participate because the discount is insignificant (reciprocity); A cosmetics advertisement with a beautiful woman does not stimulate me to try products (liking). To measure respondents' perceived sensitivity to influencing other consumers of advertising, questions manipulating TPE situations were asked (Gunther & Thorson, 1992). These are statements that elicit "third person effects" (TPE) (Youn, Faber & Shah, 2000): 1) Advertising affects my initial attitude by making it more



positive; 2) Advertising affects my initial attitude by making it more negative; 3) Advertising has a powerful effect on me; 4) Advertising affects the initial attitude of people around me by making it more positive; 5) Advertising affects the initial attitude of people around me by making it more negative; 6) Advertising has a powerful effect on men; 7) Advertising has a powerful effect on women; 8) Advertising has a powerful effect more on youth; 9) Advertising has a powerful effect more on adults. The value perception of advertising was measured with three 5-point Likert scales ranging from 1-Agree to 5-Disagree.

Results and Discussion

The study was conducted in the period from June 2021 to December 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. The total number of respondents is 300 people. According to these criteria, the total sample was 52% male (156 people) and 48% female (144 people) and by age group 41.7% (125 people) were aged 18 to 24 year, 36% (108

people) were aged 25 to 45 year, 22.3% (67 people) were aged 46 to 65 year. Data were processed using the statistical analysis package SPSS 19.0. The following used were basic statistical analyses: Descriptive analysis; Internal consistency of each of the subscales measuring the different persuasive strategies (Cronbch alpha α coefficient), and for the whole sample; One-way analysis of variance ANOVA to examine the influence of age on third person effects (TPE); Student-Fisher t-test for the statistical significance of differences between means between groups; Pearson's correlations to reveal the strength of the relationship between different persuasive strategies in advertising that make up the factors (formed scales and subscales); Regression analysis towards establishing the causal relationship between susceptibility to persuasion of influence principles and third person effects (TPE) (Youn, Faber & Shah, 2000; Ganeva, 2016).

One-way analysis of variance (ANOVA) was applied to determine the impact of TRE on different age groups of respondents. It was also hypothesized that the arithmetic means of the positive third person effects with respect to age were different, and the result of the one-factor analysis of variance (ANOVA) is presented in Table 1.

Table 1. Influence of age on the positive third person effects of adverting for other people (ANOVA)

Independent variable	Dependent variable	Mean	F, p	T-test
Age	the positive third person effects	x1 (18-24 years old) = 3.20 x2 (25-45 years old) = 3.31 x3 (46-65 years old) = 3.63	F=3.91 p=0.00	t1,2 = 2.98; p < 0.00 t1,3 = 3.22; p < 0.00 t2,3 = 3.97; p < 0.01

There was a statistically significant difference between the age groups studied, with the oldest age group, 46 to 65 years, having the highest mean score of the positive third person effects for other people, where F = 3.91; p = 0.00; x3(46-65 years old) = 3.63, compared to the other younger age groups: $t_{1.2} = 2.98$; p < 0.00 and $t_{1.3}$ = 3.22; p < 0.00, (Table 1). Many researchers share the view that third person effects (TRE) is a powerful persuasive tool for persuasion, with evidence of its manifestations being negated in situations of uncertainty (Cialdini, 2001). The results obtained show that consumers of advertising from 46 to 65 years old assume that advertisements have a positive effect on consumers around them, while for other age groups this effect decreases: F = 3.91; p = 0.00; x_1 (18-24 years old) = 3.20; x_2 (25-45 years old) = 3.31.

Therefore, users in the oldest age group overestimate the achieved communication effects on other users, the explanation being that people have such biased perceptions for motivational reasons to maintain their own control and self-esteem (Gunther & Mundy, 1993). It can be assumed that they see themselves as less susceptible to third person effects (TRE), (Youn, Faber & Shah, 2000) because they underestimate others' awareness of externalities (Eisend, 2008). In addition, third person effects (TRE) based on commercial advertising messages typically result in higher perceived sensitivity of others to the self as they seek to dismiss the influence on the self (Gunther & Thorson, 1992; Youn, Faber & Shah, 2000).

It is hypothesized that the arithmetic means of the negative third person effects with respect to age are different, and the result of the one-factor analysis of variance (ANOVA) is presented in Table 2.

Table 2. *Influence of age on the negative third person effects of adverting for other people (ANOVA)*

Independent variable	Dependent variable	Mean	F, p	T-test
Age	the negative third person effects	x1 (18-24 years old) = 3.63 x2 (25-45 years old) = 3.38	F=2.74	$t_{1,2} = 3.36$; $p < 0.01$ $t_{1,3} = 3.18$; $p < 0.03$
		x3 (46-65 years old) = 3.49	p=0.00	$t_{2,3} = 2.99$; p < 0.00

When analyzing and comparing the results obtained from the one-factor analysis of variance (ANOVA) on the negative third person effects for other people, it was found that young people aged 18 to 25 years were most likely to assume that the negative effects for other people were achieved through the advertisements, because the mean values of this group were highest x₁ (18-24 $_{\text{vears old}}$ = 3. 63, where F = 2.74; p = 0.00 relative to other age groups: $t_{1,2} = 3.36$, p < 0.01 $t_{1,3} = 3.18$; p < 0.03 (Table 2). This indicates that young consumers of advertising are most likely to lower the perceived negative impact on themselves relative to other consumers. In this case, the result may be explained by the biased perception of young consumers, which again overestimates the achieved negative effect of advertising on other consumers but underestimates this effect on themselves (Davison, 1996). Consumers of advertising least likely to perceive that it has negative third-party effects for other people, are aged 25 to 45 - the middle age, where F = 2.74; p = $0.00 x_{2 (25-45 \text{ years old})}$ = 3.38 compared to the other age groups: $t_{1.2} = 3.36$, p < 0.01 $t_{2.3} = 2.99$; p < 0.00 (Table 2). Therefore, perceived sensitivity to the negative third person effects for other people has weak significance for this age group based on appeals from advertising. Consistent with TPE research, the negative influence on others is perceived to be much stronger than the positive influence (Gunther et al., 2006), implying that young consumers perceive the negative effects most strongly for other consumers. In addition, the researchers point out that these perceptions can lead to behavioral

responses despite the possible existence of a minor direct effect on others. The perceived effect on others alone is sufficient and may influence one's own behavior (Tsfati & Cohen, 2003).

In order to establish third person effects, various advertising claims that contain persuasive strategies and manipulate third person effects (Youn, Faber & Shah, 2000) were proposed as control variables for consumer evaluation. Because consumers have a choice to agree with or reject negative claims, their response depends on the perceived importance of an issue as well as the perceived threat to their freedom of choice (Brehm, 1966). Cronbach's alpha for statements measuring negative advertising was 0.780. Pearson's correlation coefficient was used to measure the linear relationship between ads containing statements from the subscales in the questionnaire. Pearson correlations positive statistically significant relationships between persuasive statements adjusted by TRE, with correlations ranging from 0.403 to 0.775. Therefore, the assumptions of normality, linearity, and homogeneity are not violated because the correlations are moderately positive r = 0.403, p < 0.000 to strong r = 0.775, p < 0.000, with the number of subjects being N =300.

To establish the linear relationship between third person effects (TRE) and persuasive principles in advertising, a linear regression analysis was conducted (Table 3).



Table 3. Influence of third person effects on the perception of advertising with persuasion principles, regression analysis (β, p)

Regression model	Dependen	it variables				
Persuasion principles/	TRE (negative items) Advertising effect on young people		TRE (negative items) Advertising effect on other people		TRE (negative items) Advertising effect on woman	
TRE	$ m R^2 Adj$	Stand. Coeff. Beta	R^2 Adj	Stand. Coeff. Beta	$R^2{\rm Adj}$	Stand. Coeff. Beta
Social proof Scarcity	0.318*	0.314 0.256	0.110	0.261 0.181	0.145	0.293 0.242
Authority Scarcity Scarcity	0.223	0.226 0.198 0.188	0.360*	0.118 0.104 0.061	0.326*	0.281 0.156 0.340
Commitment Authority	0.109	-0.012 0.163	0.112	0.016 0.002	0.191	0.301 0.162

^{*}Other principles are excluded from the models as statistically insignificant.

The assumptions for linear regression analysis were met as statements measuring persuasive strategies could statistically significantly predict the influence of the third person effects (TRE) scale (Youn, Faber & Shah, 2000), where F (2,298) = 7.49, p < 0.001 indicates results for third person effects (TRE). Susceptibility to persuasion in advertisements with social proof and scarcity principles determines third person effects (TRE) (negative items) when the advertisement influences young people (β = 0.318; p < 0.00), (Table 3). The combined social influence of these persuasion principles in advertising with negative third person effects was found. The scarcity principle as well as the social proof principle, which provoke consumers of advertising to use products and services for a short period of time, create a feeling of uncertainty and this causes people's reactance resistance (Brehm, 1966; Clee & Wicklund, 1980) and also cognitive dissonance (Festinger, 1957). The value of the adjusted coefficient of determination is R2 = 0.31, i.e. that 31% of the variance for the impact of TRE on young people can be explained by the regression model presented, which according to Cohen (1988) is a moderate effect size, (Cohen, 1988).

The achieved social influence of the scarcity principle as well as the authority principle can predict the influence of TRE (negative items) Youn, Faber & Shah, 2000) when consumers perceive the value of the advertisement as significant to other consumers ($\beta = 0.360$; p < 0.00), (Table 3). The implications of the negative influence of these two principles, which yield mixed effects on consumers of advertising, both positive and negative, are documented by other

authors. Fuegen and Brehm (2004) use reactance theory to explain how authority endorsements can lead to negative effects when people's perception of freedom of choice is threatened (Fuegen & Brehm, 2004; Kaptein & Eckles, 2010). Therefore, these principles with negative advertising appeal may have some negative effects on individuals' attitudes and behaviors, study and our supports the view underestimating the impact of advertising on the self while overestimating it on other people (Davison, 1996).

It has been found and achieved influence on women, through the scarcity principles, and the principle of authority can predict the influence of TRE (negative items) Youn, Faber & Shah, 2000), the value of the adjusted coefficient of determination is R2 = 0.326, i.e. that 32% of the variance for the impact of TRE on woman can be explained by the regression model presented, which according to Cohen (1988) is a moderate effect size (Cohen, 1988). This result can be explained by the higher sensitivity of females, who have more emotional behavior and as it is clear, are influenced by negative appeals in advertising, the values of the scarcity principle are $\beta = 0.156$; p < 0.00, and for authority are $\beta =$ 0.281; p < 0.00. Hence, in advertising, authority arguments whose influence is enhanced by TRE (negative items) (Youn, Faber & Shah, 2000) indicate rejection or questioning of the authoritative opinion that would lead to lack. In addition, it can be commented that both social proof and authority can be powerful tools of persuasion because individuals in situations of uncertainty follow other people's behavior and

may make rash decisions (Cialdini, 2001; Latané & Nida, 1981).

Conclusions

A number of research studies have indicated that reliably influencing advertising consumers' attitudes and behaviors through persuasion is achieved in a variety of ways, with the success of each influence dependent on many factors. In the present research study, an attempt was made to measure the influence of TRE (Youn, Faber & Shah, 2000) by manipulating advertising messages with negative statements. It should not be underestimated that the target of the persuasion attempt must be receptive to the consumers of the advertisement, as well as the message must be delivered at a specific time to allow the consumer to process the information (Kaptein, 2012). This is the reason to look for the perceived value of the consumer or the third person effect whose impact is enhanced in a negative aspect by applying the persuasive strategies developed by R. Cialdini (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021) as seen in our results. In a situation of applying third person effects (TRE) among users of different ages, it is found that users aged 46 to 65 believe that positive statements have a strong influence on other younger age groups. Consequently, this overestimated the achieved communication effects on other users, the explanation being that people have such biased perceptions for motivational reasons to maintain their own control and self-esteem (Gunther & Mundy, 1993). When measuring the negative influence of the negative effects for other people (TRE), it is seen that young people aged 18 to 25 years are the most likely to assume that TRE is achieved through advertisements. This result is explained by overestimating the effect achieved on other people but not on themselves (Davison, 1996).

Manipulated negative statements, containing persuasive strategies in advertising, yield some results in young people, the influence exerted on other consumers and the influence on women. These are the three groups of advertising consumers among whom advertising effectiveness is achieved by (TRE) (negative items). The persuasive strategies that enhance third person effects (TRE) (Youn, Faber & Shah, 2000) are the principles of scarcity and social proof for young people, the principles of authority and scarcity for other people and for women. Explanations are found in reactance theory, which holds that consumers' freedom of choice is threatened (Fuegen & Brehm, 2004; Kaptein & Eckles, 2010). These results may reverse the effect for consumers themselves, who believe they are less influenced by advertising. Previous research suggests that with respect to socially desirable issues, this type of perception may disappear so that people do not significantly overestimate the influence on others compared to the perceived influence on themselves (Eisend, 2008). Future research should find other causal relationships between Cialdini's (2001-2021) persuasive principles and third person effects (TPE) (Youn, Faber & Shah, 2000), and identify new factors for achieving persuasive influence.

Bibliographic references

- Baker, J., Parasuraman, A., Grewal, D., & Voss, G. B (2002). The Influence of Multiple Store Environment Cues on Perceived Merchandise Value and Patronage Intentions, Journal of Marketing, 66(April), 120-41.
- Brehm, J. W. (1966). A Theory of Psychological Reactance, 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.
- Cialdini, R. (2001). Influence, Science and Practice. Boston: Allyn & Bacon, https://www.influenceatwork.com/wp-content/uploads/2012/02/Influence SP.pdf
- 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.
- Clee, M. A., & Wicklund, R. A. (1980). Consumer Behavior and Psychological Reactance. Journal of Consumer Research, 6(4), 389-405.
- Cohen, J., & Davis, R. G. (1991). Third-person effects and the differential impact in negative political advertising. Journalism Quarterly, 68(4), 680-688.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Lawrence Erlbaum Associates.
 - https://www.utstat.toronto.edu/~brunner/old class/378f16/readings/CohenPower.pdf
- Davison, W. Ph. (1996). The Third Person Effect Revisited, International Journal of Public Opinion Research, 8(2), 113-19.
- DeVellis, R. (2012). Scale development: Theory and application. (3rd ed.) SAGE Publications.
- 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. DOI: https://doi.org/10.2753/JOA0091-3367370303
- 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. Mobile Persuasion, pages 1–166. Stanford Captology Media.
- Fogg, B. J. (2002). Persuasive Technology: Using Computers to Change What We Think and Do. Morgan Kaufmann. https://dl.acm.org/doi/pdf/10.1145/764008.7 63957
- Fogg, B. J. (2009). A Behavior Model for Persuasive Design. Proceedings of the 4th International Conference on Persuasive Technology Persuasive 09, April 26-29, Claremont, California, USA.
- Friestad, M., & Wright, P. (1994). The persuasion knowledge: How people cope with persuasion attempts. Journal of Consumer Research, 21, 1-31.
- Fuegen, K., & Brehm, J. W. (2004). The intensity of affect and resistance to social influence. Lawrence Erlbaum Associates Publishers, pages 39-63
- Ganeva, Z. (2016). Let's reinvent statistics with IBM SPSS Statistics, Elestra. ISBN 978-619-7292-01-5.
- Gunther, A. C., & Mundy, P. (1993). Biased Optimism and the Third-Person Effect, Journalism Quarterly, 70(1), 58-67. https://doi.org/10.1177/10776990930700010
- Gunther, A. C., & Thorson, E. (1992). Perceived Persuasive Effects of Product Commercials and Public-Service Announcements: Third-Person Effects in New Domains, Communication Research, 19(5), 574-96.
- Gunther, A. C. (1991). What we think others think: Cause and consequence in the third-person effect. Communication Research, 18(3), 355-372 https://doi.org/10.1177/00936509101800300
- Gunther, A., Bolt, D., Borzekowski, D., Liebhart, J., & Dillard, J. (2006). Presumed Influence on Peer Norms: How Mass Media Indirectly Affect Adolescent Smoking, Journal of Communication, 56 (1), 52-68.
- Hoy, W. K., & Smith, P. (2007). Influence: A key to successful leadership. International Journal of Educational Management, 21(2), 158-167. doi:
- https://doi.org/10.1108/09513540710729944 Kaptein, M. (2012). Personalized Persuasion in Ambient Intelligence. Eindhoven University

- of Technology Library, Netherlands, ISBN: 978-90-386-3106-6.
- Kaptein, M. C., & Eckles, D. (2010). Selecting Effective Means to Any End: Futures and Ethics of Persuasion Profiling. In Ploug, T., Hasle, P., and Oinas-Kukkonen, H., editors, Persuasive Technology, pp. 82-93. Springer Berlin / Heidelberg.
- Kaptein, M., De Ruyter, B., Markopoulos, P., & Aarts, E. (2012). Adaptive persuasive systems: A study of tailored persuasive text messages to reduce snacking. ACM Trans. Interact. Intell. Syst. 2, pp. 10-25. DOI: 10.1145/2209310.2209313
- Kaptein, M., Markopoulos, P., Ruyter, B., & Aarts, E. (2009). Can you be persuaded? Individual differences in susceptibility to persuasion, IFIP Conference on Human-Computer Interaction, LNCS, 5726, pp.115-118. https://link.springer.com/chapter/10.1007/97
- Kellermann, K., & Cole, T. (1994). Classifying Compliance Gaining Mes- sages: Taxonomic Disorder and Strategic Confusion. Communication Theory, 4(1), 3-60. https://doi.org/10.1111/j.1468-2885.1994.tb00081.x

8-3-642-03655-2_13

- Latané, B., & Nida, S. (1981). Ten years of research on group size and helping. Psychological Bulletin, 89(2), 308–324.
- Milgram, S. (1974). Obedience to Authority. London: Tavistock.
- Mutz, D. (1989). The influence of perception of media influence: Third person effects and the public expectation of opinions, Intrnational Journal of Public Opinion Research, 1(1), pp. 3-23 https://doi.org/10.1093/ijpor/1.1.3
- 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.
- Noelle-Neumann, E. (1974). The Spiral of Silence a Theory of Public Opinion, Journal of Communication, 24(2), 43-51.DOI: https://doi.org/10.1111/j.1460-2466.1974.tb00367.x
- O'Keefe, D. J. (1994). From Strategy-Based to Feature-Based Analyses of Compliance Gaining Message Classification and Production. Communication Theory, 4(1), 61–69.
- Oinas-Kukkonen, H., Hasle, P. F. V., Harjumaa, M., Segerstaahl, K., & Ohrstrom, P. (2008). Persuasive Technology, Third International Conference, PERSUASIVE 2008, Oulu, Finland, June 4-6, 2008. Proceedings, volume 5033 of



- Lecture Notes in Computer Science. Springer.
- Perloff, R. M. (1993). Third-Person Effect Research 1983-1992: A Review and Synthesis, International Journal of Public Opinion Research, 5(2), 167-84. https://doi.org/10.1093/ijpor/5.2.167
- Ploug, T., Hasle, P., & Oinas-Kukkonen, H., (2010). Persuasive Technology, volume 6137 of Lecture Notes in Computer Science. Springer Berlin Heidelberg, Berlin, Heidelberg.
- Tsfati, Y., & Cohen, J. (2003). The Influence of Presumed Media Influence on Democratic

- Legitimacy: The Case of Gaza Settlers, Communication Research, 32(6), 794-821.
- Youn, S., Faber, R., & Shah, D. (2000).
 Restricting Gambling Advertising and the Third-Person Effect, Psychology & Marketing, 17(7), 633-49.
 https://dshah.journalism.wisc.edu/files/2017/01/PAM2000.pdf
- Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence, Journal of Marketing, 52(July), 2-22. https://www.jstor.org/stable/1251446