ISSN (Online): 3033-0106

BUSINESS & MANAGEMENT COMPASS
Volume: 68 (2024), Issue: 3
DOI: 10.56065/98ewyz45, pp. 5-18

Issues since 2024: https://bi.ue-varna.bg/ojs/index.php/bmc
Previous issues: http://journal.ue-varna.bg/en/home

INFLUENCE OF TERRITORIAL DISTRIBUTION ON VERBAL-VISUAL ADVERTISEMENTS

Lyubomira SPASOVA[1]

[1] Department of Social Sciences and Business Language Training, Faculty of Economics, Trakia University, Stara Zagora, Bulgaria, lyubomira.spasova@trakia-uni.bg.

JEL: M37

Abstract

The purpose of this scientific paper is to investigate the similarities and differences in the dimension of verbal-visual cognitive styles between three targeted groups of advertising users according to the territorial distribution: users from European countries, from Asian countries and from Balkan countries. In literature review, different instruments for measuring cognitive styles are compared, and the author applies the Kirby et al. scale in the present study, because it is a universal scale that can be applied in various scientific fields. Data of this study were collected through a 60-item questionnaire from 450 respondents, and the questionnaire included two modules: 1) Kirby et al.'s VVQ to determine individuals' verbal-visual orientation, and 2) an authored questionnaire to determine the verbal-visual preferences of advertising consumers. The results of ANOVA show that high verbalizers are users from Asian countries, high visualizers are users from Balkan countries, and users from European countries have the highest mean values on the dreams subscale. Through Pearson's correlations between Verbal Subscale and Verbal structures - short information, moderately related positive correlations were found, and this processing of advertising information is achieved most successfully among users from Asian countries. Positive linear relationships were also found between Visual Subscale and Image of people, as well as Colour brightness in advertisement, with the strongest visualizers and dreamers being respectively users from the Balkan and European countries, it is assumed that they are influenced by colour brightness in advertisements (higher values of R were found between Visual Subscale and Colour brightness), which is established by Pearson's correlation. The novelty of the scientific study is that it is the first study to apply VVQ of Kirby et al. in advertising communication. An author's scale for measuring the verbal-visual components in an advertisement has also been proposed and checked for reliability and validity. The originality of the scientific research is expressed in that the susceptibility of advertising consumers to the Dream Subscale was tested in advertising. In the present study there are a number of limitations, because only three targeted groups were studied, distributed according to a common criterion - territorial distribution. Another limitation is that there are no measurements regarding users' levels of VVQ. Future research should categorize advertising consumers as high, medium or low verbalizers, visualizers and dreamers, looking for some causal relationships between individuals' level of verbalization and visualization on the VVQ, as well as their behavioural responses to being offered verbal and visual products in advertising.

Key words:

Cognitive styles, verbal-visual advertisements, VVQ.

Published by University of Economics – Varna

Citation: SPASOVA, L. (2024). Influence of territorial distribution on verbal-visual advertisements. *Business & Management Compass.* University of Economics Varna, 68 (3), pp. 5 - 18. DOI: 10.56065/98ewyz45

Received: 01.04.2024.
Revised: 18.07.2024.
Accepted: 22.07.2024.
Published: 30.09.2024.

1. Introduction

The present scientific work is aimed at clarifying the individual demographic characteristics of users, segmented according to the criterion of territorial distribution as part of the user evaluation of products and services offered in verbal-visual advertising. In the scientific literature, researchers offer theoretical and empirical evidence regarding the perception of verbalization and visualization in advertising by consumers segmented by gender and age, but there is not enough scientific research on the influence of the territorial distribution of consumers on verbal-visual advertising. At the basis of several studies is the idea of the cognitive belonging of individuals to the verbal or visual cognitive style, which can influence the processing of information, and also have a direct relationship to the understanding of verbal-visual components in advertising. Through various print media, a high achieved influence of verbalization represented by verbal anchors is found; on the other hand, visualization achieves success in electronic media (Phillips, 2000). In education, "learner characteristics" refer to the set of concepts including cognitive skills and strategies, demographics, and interest in cognitive styles (Peeck, 1993; Miron, Bryant & Zillmann, 2001). One style that is particularly important to media research is the relative predisposition of individuals to learn from visual material (the degree to which they are visualizers) and their predisposition to learn from verbal material (the degree to which they are verbalizers (Mendelson, & Thorson, 2004). Initially, scientists believed that individuals were divided into verbalizers and visualizers, that is, they stood at only one end of the continuum. This opinion has changed over the years because researchers have found that these are separate independent concepts, that is, individuals cannot be only visual or only verbal (Mendelson, & Thorson, 2004). The author also acknowledges the fact that there are variations in advertising consumers across countries regarding these two concepts. Examining the effects of verbalizer cognitive style, as well as spatial and object visualizer on students' algebraic thinking, that is, cognitive styles have three variations, other authors found that spatial visualizers have a more significant relationship with number sense and algebraic reasoning than verbalizers and the object visualizers (Khikmiyah, Siswono & Lukito, 2024). The results of the study by Khikmiyah, Siswono, and Lukito (2024) show that a three-dimensional cognitive style affects the components of algebraic thinking, especially in mathematical modelling (Khikmiyah, Siswono & Lukito, 2024), but the author believes that this cognitive style is not applicable in advertising. The application of the cognitive styles with three variations in advertising communication and in the media is not observed in modern studies, because the relevant authors are looking for the relationship between the logical thinking of students in mathematics and information sciences, which requires more attention and concentration to give an answer, while advertising visual-verbal components pass quickly through television or social platforms on the Internet. Therefore, this imposes some limitations in the present study: 1) individuals are not distributed in only one of the continua: only verbalizers, only visualizers, or only dreamers, because representatives of a mixed type are also observed, dividing into low, medium and high verbalizers, visualizers or dreamers; 2) the choice of demographic characteristics is important because the empirical scientific evidence presented shows differential influence; 3) the scope of the study may give a difference in the obtained results; 4) a strict boundary between achieved influence between verbal and visual components in advertising communication cannot be set.

2. Literature Review

2.1. Cognitive styles in modern scientific research

In scientific research, several hypotheses are expressed regarding the belonging of individuals to a certain cognitive style, the distribution is made in the theory of education (Jonassen & Grabowski, 1993; Riding, Burton, Rees & Sharratt, 1995). One of these definitions is that the way individuals perceive, process, and place information is in a well-defined sequence. According to some authors, the idea of visual-verbal learning styles has a direct relationship with the verbal-visual literacy of the learner in a certain science (Barry, 1997; Scott, 1994; Williams, 1996). Other authors such as Desmond, R. (2018) do not view visual literacy as an ability of learning, but rather as an innate trait found in everyone based on brain structure (Desmond, 2018).

Some studies in the field of social psychology and sociology try to explain many individual personality traits of learners in order to draw conclusions about different segments of advertising consumers. Some researchers have established interdependencies between the role of cognitive styles, particularly visualizing and verbalizing, then examine key theoretical concepts from the educational and media literature that have been shown to influence text comprehension: the image presence effect, the relationship between pictures and texts in advertising, as well as consumers' interest in the topic of the text (Mendelson & Thorson, 2004). To establish some causal relationships, the views of Kogan (1971) are offered, who gives the most accurate definition of cognitive styles, because he defines them as individual variations in the way of perceiving, thinking, sorting information of the individual (Kogan, 1971). Other researchers complement this opinion and point out that individuals differ in the way they interact with the environment, "extract and perceive information from it, and reflect and organize the knowledge that we have acquired" (Jonassen & Grabowski, 1993, p. 363). In some studies of different types of media, scholars examine both cognitive styles and media perception styles, different patterns of consumer behaviour involving choices that somehow influence attention and learning from television (Miron, Bryant, & Zillmann, 2001; Mendelson & Thorson, 2004). There are also some media studies in the scientific literature that empirically demonstrate that news processing is aided by news images in print media, although some researchers reject this claim (Wanta & Roark 1994; Mendelson, 1999; Zillmann, Gibson, & Sargent, 1999; Mendelson, 2001; Mendelson & Thorson, 2003). The general view of visual and verbal cognitive style is the presence of two information processing systems, that is, it is a two-dimensional cognitive style that will be applied in the present study.

The present work aims to extend the theory of education beyond the learning processes and to establish how the verbal and visual components of an advertisement affect consumers with different cognitive affiliations because it leads to a more successful perception of an advertisement, reaction to a stimulus, and also the construction of user experience of a product or service. The first attempts to measure individual differences is a questionnaire containing 86 statements designed to measure the imaginative and verbal thinking habits and skills of the individual - Individual Differences Questionnaire (IDQ), (Paivio, 1971). It is related to dual coding theory, which attempts to give equal weight to verbal and nonverbal processing (Clark & Paivio, 1991), but the underlying idea is information processing. Paivio's (1971) scale as improved by Richardson (1977) has been much criticized for the conceptualization of the VVQ for placing the verbalizer and visualizer as opposite ends of a continuum, that is, researchers believe that one cannot place an individual on only one dimension because there is nuance to the degree of visualization and verbalization (Khikmiyah, Siswono, & Lukito, 2024). One of the most discussed questionnaires is Richardson's (1977) Verbalizer–Visualizer Questionnaire (VVQ), containing 15 statements (Richardson, 1977), but this scale is rejected by many researchers because the individual statements do not contrast the verbal approach with the visual one very clearly because some statements affect both components (Thomas & McKay, 2010). Richardson's (1977) scale was adapted and modified by Kirby, Moore and Schofield, (1988), that is Verbalizer - Visualizer Questionnaire (VVQ), which includes a set of three subscales, i.e. 30 statements: (Verbal dimension - verbal items, Visual dimension - visual items and Dream vividness dimension - dream items), (Kirby, Moore, & Schofield, 1988). Since some authors such as Mendelson and Thorson (2004) prove that the VVQ of Kirby, Moore and Schofield (1988) is applicable in a media environment, the author of the present scientific paper expects this scale to be adaptable for advertising communication as well (Mendelson & Thorson, 2004). Applying the VVQ in their study, Mendelson and Thorson (2004) found how individuals' belonging to one of the cognitive styles determined their preferences for pictures and texts in a newspaper article, empirically proving that individuals high in verbalization remembered more newspaper stories, than those with low verbalizer scores. In visually oriented individuals, no relationship was found between high cognitive style affiliation and pictures in print media, in some more recent studies (Khikmiyah, Siswono, & Lukito, 2024).

Other scales for measuring cognitive styles of personality are present in the scientific literature, which include an object-spatial image for self-assessment of individuals - Object-Spatial Imagery Questionnaire (OSIQ) (Blajenkova & Kozhevnikov, 2009), based on a test for the analysis of cognitive styles as part of verbal

images - Verbal Imagery Subtest of Cognitive Styles Analysis (VISCSA), (Riding & Cheema, 1991). The main goal of Blajenkova & Kozhevnikov (2009) is to assess differences in individual cognitive styles based on their perception of words, object images and spatial images (Blajenkova & Kozhevnikov, 2009). The authors empirically demonstrate that the Object-Spatial Imagery Questionnaire (OSIQ) has applicability in solving mathematical problems, with the OSIVQ demonstrating acceptable validity as well as internal reliability. Blajenkova & Kozhevnikov's (2009) three-dimensional model is a more modern theoretical model that provides insight into objective and subjective images of visualization, but does not explain the segmentation of audiences in terms of their rapid reactions as well as changes in image perception. When examining whether individuals belong to different cognitive styles, the circumstances of influence must also be considered, that is, how images and texts reach advertising consumers, what visual-verbal components they contain, which of them are predominant, and other factors such as demographic characteristics of individuals that may be important in establishing addictions. At a later stage, Blajenkova (2016) investigated the vividness of object and spatial imagery among 1111 students, developing the Vividness of Object and Spatial Imagery (VOSI) Questionnaire (Blajenkova, 2016). Changes in the conceptualization and measurement of the verbalizer-visualizer dimension are the reason for hypothesizing the claim that individuals perceive learning material best when the learning material matches their cognitive style. Another reason for Blajenkova (2016) to propose a more objectivity-focused measurement scale is that the spatial and visual object scale scores are in a negative correlation linear relationship. A major goal of much research is to accept or reject the distinction between spatial and visual styles of objects, as well as the specific correspondences with the skills of individuals belonging to one cognitive style or another. Other modern authors prove that the cognitive style of the spatial visualizer has a significant correlation with the cognitive style of the object visualizer, also looking for dependencies between the ability of spatial visualization and the ability of verbal-logical reasoning (Haciomeroglu & LaVenia, 2017). These scientific studies found no relationship between the cognitive style of the object visualizer and the individual's cognitive abilities. Such empirical evidence, that is, the relationship between cognitive style and cognitive skills, is found in authors such as Kirby, Moore and Schofield, (1988), whose scale finds wide application beyond the boundaries of educational theory (Kirby, Moore, & Schofield, 1988). The author of the present scientific study found that in the scientific literature, a unique measurement scale that would be applicable in many scientific disciplines cannot be proposed. This is one of the reasons for applying the scale of Kirby, Moore and Schofield, (1988), which is present in media environments and in recent years in advertising communication. Secondly, this scale, represented by three subscales, has a more generalizing, universal character and makes it possible to be proposed among individuals with different verbal-visual, objective-subjective characteristics. In addition, it can be said that the Verbalizer-Visualizer Questionnaire (VVQ) of Kirby, Moore, and Schofield, (1988) does not require prerequisites for algebraic thinking, functional thinking, or modelling languages (Khikmiyah, Siswono, & Lukito, 2024), which enables the search for linear relationships with verbal-visual components in advertising.

2.2. Territorial distribution of advertising consumers

Advertising consumers are segmented according to a number of criteria, which aim to establish a number of characteristics of individuals, how advertising is perceived, and some final reactions under the influence of advertising. This paper attempts to categorize users in verbalizers, visualizers and dreamers according to Kirby, Moore, and Schofield's (1988) scale, which determines whether users belong to one continuum or the other, or whether other variations exist, and the relationship between this belonging to territorial distribution (Kirby, Moore, & Schofield, 1988). Several scientific studies through content analysis show that this segmentation is essential in determining the achieved advertising impact. To achieve these goals, this study's respondents are divided into three main groups: European countries - England, France, Germany, Italy, Ireland; Asian countries - India, Japan, South Korea, China; Balkan countries - Bulgaria, Romania, Greece, Cyprus and Turkey. The author of the present paper does not aim to make a cultural difference between the mentioned countries, although they can be divided into individualistic and collectivistic cultures (Hofstede, 1991). Establishing

certain cultural norms and traditions shows that countries where the roles of men and women are similar do not feel the effect of gender, compared to societies where the female role is more focused on the family (Rojas-Méndez, Davies, & Madran, 2008). Cultural differences have been investigated in numerous cross-cultural advertising studies such as content analyses, and mostly between Eastern (Japan, China and Korea) and Western countries (mainly USA) (Hetsroni, 2000). According to some authors, cultural differences such as the values represented in advertisements are barriers to the adoption of a standardized strategy (Muller, 2004), but according to other authors, foreign media and readiness for standardized advertisements, as well as standardized presentation of products for specific target audiences, can facilitate faster acceptance of foreign norms and traditions (Nelson, & Paek, 2007). Therefore, the establishment of common components in the individual characteristics of consumers from separate groups will provide a richer insight into the perception, meaning and some reactions to verbal and visual advertising, by establishing the susceptibility of consumers to the Verbalizer-Visualizer Questionnaire (VVQ), which includes three Subscales, i.e. 30 statements (Kirby, Moore, & Schofield, 1988). The way in which individuals (in the present study, consumers of advertising) process the images of characters, colours in advertising, as well as short and detailed information as a result of their belonging to one of the cognitive styles is new in scientific circles. Although advertisers believe that images in advertising improve the process of understanding and making sense of the advertising message, in practice this effect is not always achieved. The author's explanation is that individuals differ greatly in their thought processes because the educational theory of visualization and verbalization suggests that the two indicators, specific to the individual, sometimes help deterrence but sometimes create obstacles. Along these lines, Mendelson and Thorson (2004) commented that high visualization scores do not improve recall of stories or pictures or even increase interest in the story (Mendelson & Thorson, 2004). In contrast, the same authors point out, high verbalizers find all stories more interesting and remember both the stories and the pictures better than low verbalizers. The results are discussed in terms of cognitive style theory and its role in how people process visual and verbal news information, but Mendelson and Thorson's (2004) empirical data relate to print media and reader processing modes. This research paper references an advertising message as well as advertising images to provide answers to the questions of user segmentation of advertising, as well as to present new horizons for the study of verbalizers and visualizers possessing different cognitive skills.

In addition, the presence of certain verbal and visual components would also lead to different perception and user reactions. A learned comment from a number of authors is that about 81% of British and French television advertisements contain the same character images for several advertisers (Whitelock & Rey, 1998), while advertisements in women's magazines in European and Asian countries show that this is more visual images such as photographs of models are likely to be standardized in certain regions (Harris, & Attour, 2003). Supporting the latter statement is the view that "the model can project a universal image of beauty" (Seitz, & Johar, 1993, p. 24), with research done on the global cosmetics brand Revlon. In general, recent studies have revealed that global approaches involve the portrayal of standard, often Western models, with other authors pointing out that the race of the models used in each culture does not reflect the racial mix of that country's population (Frith et al., 2004). There was a tendency for Western models to be depicted more often than Asians, and the choice of model may vary depending on the background of the wearer (Nelson, & Paek, 2007). Another study that compared Hindi and English women's magazines in India found that Indian models dominated both types of magazines (Karan, 2003). Therefore, many of these studies compare male and female images, but do not determine how the users' country affiliation affects the perception of the different verbal and visual components. The author of the present study should fill this gap by ascertaining the positive and negative advertising responses of consumers to brief and detailed information in the advertisement, as well as to the brightness of colours and images of people in the advertisements proposed for evaluation.

In addition to differences in the way images are presented in individual advertisements, a number of differences in verbal structures are also found (McQuarrie, & Phillips, 2005). In one of the earliest studies, Müller (2004) found that product name and packaging were most often standardized and body text was rarely standardized in German, American and Japanese advertisements (Müller, 2004). In other studies, it is clear

that some parts such as headlines and advertising slogans, that is, short verbal structures, probably use English (standard) language, while other texts in advertisements are often written in the local language. Therefore, the perception of headlines and body text as well as images and specific images in advertising is an important factor in segmenting consumers in verbalizers, visualizers and dreamers, which is studied by some researchers in other subject areas. The author of the present study expects to obtain mixed scientific results, that is, high verbalizers will not always process verbal information quickly and easily, and high visualizers - visual information, because according to some authors, an individual's interest in a given topic is "a relatively stable evaluative orientation towards certain domains" (Boscolo & Mason, 2003, p. 128) or content types (Boscolo & Mason, 2003, p. 128). Previous media research has shown that readers are more interested in "personalized" stories than stories about issues. On the other hand, several media studies have also investigated the effect of the presence of news photos on story learning information, demonstrating that news photos improved story comprehension and also topic free recall for small text passages compared to passages seen independently. Credit for this goes again to Mendelson and Thorson (2003), who in their research prove that the presence of pictures causes individuals to rate news stories with a picture as more interesting than those without a picture. Therefore, the main gaps in these studies are found in the fact that the studies cover media environments but do not specifically address advertising environments. Moreover, the segmentation of advertising consumers is not based only on the two components - visualizers and verbalizers, but dreamers should also be considered, because the brightness of sleep is also related to the perception of advertising components. It is necessary to examine how high VVQ levels of verbalization are linearly related to some verbal components in an advertisement, likewise how high VVQ visual levels are linearly related to some visual components in an advertisement. The results of these measurements would provide greater clarity about the course of cognitive processes in perceiving and understanding verbal-visual information from advertising.

Based on these prior studies, the researcher presents the following hypotheses:

Hypothesis 0: Consumers' territorial distribution does not determine their individual susceptibility to verbal-visual components in advertising.

Hypothesis 1: Consumers' territorial distribution determines their individual susceptibility to verbal-visual components in advertising.

In the present scientific study, a number of causal relationships between the territorial distribution of advertising users and their cognitive orientations are sought, as well as some factors determining the final reactions to the impact of advertising. The obtained results can be of service to a number of marketers, advertisers and researchers.

3. Methodology for testing VVQ in advertisement

The purpose of the present study is to classify advertising consumers into three main groups: verbalizers, visualizers and dreamers, by applying the Verbalizer-Visualizer Questionnaire (VVQ), developed by Richardson (1977) and improved by Kirby, Moore, and Schofield (1988). The adapted and modified version of the Verbalizer-Visualizer Questionnaire (VVQ) of Kirby et al. (1988) includes three subscales, that is, 30 statements, each subscale measuring a different cognitive style with 10 statements (Kirby, Moore, & Schofield, 1988; Mendelson, & Thorson, 2004): 10 items for verbal dimension - Verbal Subscale; 10 items for visual dimension - Visual Subscale and 10 items for dream dimension - Dream Subscale. This scale was developed by Kirby, Moore, Schofield (1988), with each scale tapping a different learning style with 10 statements that colour appropriately with measures of ability of individuals (Kirby, Moore & Schofield, 1988). In order to achieve these goals in the current study, the respondents are distributed into three main groups: European countries - England, France, Germany, Italy, Ireland; Asian countries - India, Japan, South Korea, China; Balkan countries - Bulgaria, Romania, Greece, Cyprus and Turkey. The reasons for this distribution are the expected differences in the individual societies inhabiting different areas in Europe and in Asia, as well as some cultural and national differences.

Another primary objective is to determine whether higher scores on the Verbalization subscale or the Visualization subscale correlate linearly with verbal components in an advertisement and visual components in an advertisement, respectively. To achieve this goal, the author proposed his statements for measuring the verbal-visual components, with the following subscales: 1) Verbal items in advertising: Verbal structures, describing short information - The short and accurate information in the Takeaway advertising makes me want to order takeaway food; The short title in Takeaway is the first thing I note in Internet advertising; Since there is an offer of a free service in the online fitness advertising, I will immediately remember the offer service; Short text helps me quickly understand the information in Nike sports shoes advertising with Cristiano Ronaldo; The short captions in the Vogue advertising make me quickly grasp the point of the advertising – Bacio; The short text in VERSACE EROS advertising helps me quickly grasp the meaning of the advertising; Short text helps remember VERSACE EROS advertising with Brian Shimansky and Lara Stone; Verbal structures, describing detailed information – The details are the first thing I remember from an advertising of Ariel; The accurate and detailed information in the Savex print ad helps me remember the information; Large text in different fonts is the first thing I perceive in a Vogue advertising; A variety of fonts helps make sense of the information in Vogue advertising with Justin and Hailye; The detailed text of the Allura advertising helps me perceive the clothes on offer; Kalapod's advertising can make me buy shoes from an online store because it shows detailed information; 2) Visual items in advertising: Images of people - Images of men and women make online fitness advertising easy to understand; Image of Cristiano Ronaldo wearing Nike sports shoes helps me understand the advertising quickly; The image of a dog in Keepingfinn's online advertising spurred me to buy the pet product; Images of Louis Vuitton bags with Kylie Jenner on Instagram helps to quickly understand the advertising; Image of Cristiano Ronaldo in a scholarship advertising makes me want to use a service; Image of the characters in the Vogue advertising - Gisele and LeBron, is the first thing I notice in the advertising; The presence of women in Vogue advertising - New Frontiers, helps me understand the idea of advertising quickly; Images of a man and a woman help remember the VERSACE EROS advertising; The visual metaphor of a Greek god in the VERSACE EROS advertising helps me quickly perceive the products offered; Image of a man - Brian Shimansky, behind the product helps remember the VERSACE EROS advertising; The image of the woman as a goddess - Lara Stone, helps me to perceive the offered product of the VERSACE advertisement; Colour brightness – The bright colours of the Takeaway ad help me make sense of the product information; The bright images and colours in the internet advertisement for online fitness is the first thing I perceive in the internet advertisement; The vivid product image in Savex's print advertising makes me want to buy the product; The bright colours in Vogue advertising help me remember the advertising; The bright colour in VERSACE EROS advertising helps me to understand this advertising; The bright colour in the Dolce & Gabana ad helps me quickly grasp the meaning of the advertising and the products offered. Therefore, the survey consists of 30 statements - Verbalizer-Visualizer Questionnaire (VVQ) and 30 statements measuring verbal-visual components in advertising.

In addition, an exploratory factor analysis of the VVQ was conducted using principal component analysis (PCA), with data analysis after applying Varimax rotation (Ganeva, 2016). The number of subscales in the methodology of Kirby, Moore and Schofield, (1988) is three, as in the present study. The weight of the statements varies from 0.449 to 0.734, which means that these statements are acceptable to form a coefficient of each factor (Ganeva, 2016). The reliabilities of the statements measuring the different criteria were as follows: Verbalization subscale (Cronbach α =0.704), Visualizers subscale (Cronbach α =0.765), and Dreamers subscale (Cronbach α =0.689). The reliability of the scale measuring the verbal-visual components of advertising was also checked, as Verbal items in advertising (Cronbach α =0.686), and Visual items in advertising (Cronbach α =0.789). The validity of the whole questionnaire (Cronbach α 0.788) also shows good reliability of the scale for the study sample. Since most of the values exceed the minimum recommended value of α=0.600 (DeVellis, 2012), the internal consistency for the respective subscales is sufficiently high, i.e. the elements that compose them form a common scale. Respondents accept or reject a total of 66 statements on a five-point Likert-type scale, which includes ratings from 1 - Disagree to 5 - Agree.

4. Results and discussion

The research was conducted from the beginning of 2021 to the beginning of 2023, and the data was collected from a total sample of 450 respondents from European countries such as England, France, Germany, Italy, Ireland - 33.3% (150 people), Asian countries such as India, Japan, South Korea, China - 32% (144 people), Balkan countries - Bulgaria, Romania, Greece, Cyprus, Turkey - 34.7% (156 people). Respondents are randomly selected from the general population according to territorial affiliation, and one of the important criteria for participation in the survey is whether they have used products and services from the advertisements they are supposed to evaluate. The users of advertising are distributed on a territorial basis, and the distribution in the three targeted groups is done because a number of scientific studies have made a comparative analysis between users of advertising in Europe and in Asia, but similarities and differences with some Balkan countries, which are located between the two continents, is not done in some research works. The author's expectations are that the users from the Balkan countries will accept the features of both the European type countries and the Asian type.

Data were processed with the statistical analysis package SPSS 19.0. The following basic statistical analyses were used: One-way analysis of variance ANOVA to examine respondents' susceptibility to VVQ. Correlation analyses to establish linear relationships between subscales of the Visualizer Questionnaire (VVQ) and susceptibility to verbal and visual components present in advertising (Ganeva, 2016). The susceptibility to Verbalize-Visualizer Questionnaire (VVQ), (Kirby, Moore, & Schofield, 1988), which includes a set of three subscales, is presented in Table 1, taking into account the average values of the respondents divided by territorial distribution (Table 1).

Table 1

Influences of territorial distribution on susceptibility to VVQ (ANOVA)

Susceptibility to VVQ	Dependent variable	Means	F	p
Territorial distribution	Verbal Subscale	$x_{1\ (European\ countries)}$ =3.66 $x_{2\ (Asian\ countries)}$ = 3.80 $x_{3\ (Balkan\ countries)}$ = 3.61	F=15.3	p < 0.00
	Visual Subscale	$x_{1\ (European\ countries)}$ =3.14 $x_{2\ (Asian\ countries)}$ = 3.18 $x_{3\ (Balkan\ countries)}$ = 3.49	F=13.2	p < 0.01
	Dreamer Subscale	$x_{1\ (European\ countries)}$ =3.90 $x_{2\ (Asian\ countries)}$ = 3.89 $x_{3\ (Balkan\ countries)}$ = 3.88	F=7.14	p < 0.00

Source: Author's Compilation, 2024.

The results show that the division of users along the territorial distribution affects susceptibility to VVQ. A strong susceptibility was observed to the Verbal Subscale, where $F_{(3,447)}$ =15.3; p < 0.00, as the strongest susceptibility to this subscale is shown by consumers of advertising from Asian countries, respectively - $x_{2\ (Asian\ countries)}$ = 3.80, as well as to the Visual Subscale by consumers from Balkan countries, where $F_{(3,447)}$ =13.2; p < 0.01, $x_{3\ (Balkan\ countries)}$ = 3.49, relative to all other users, (Table 1). According to the subscale measuring dreamers, users from European countries show the greatest susceptibility - $x_{1\ (European\ countries)}$ = 3.90, where $F_{(3,447)}$ =7.14; p < 0.00, (Table 1). There is a body of scientific evidence that some individuals prefer visual information in advertising or products and services that emphasize visuals - this fact was also found among some consumers from the Balkan countries in our study, while others prefer written or verbal information such as Asian countries, i.e. they are high verbalizers. In our study, visual information as well as information constructed from dream luminance can determine the construction of some visual representations of

advertising consumers. According to Lang, Borse, Wise, and David (2002), visual information processing differs from verbal information processing because individual cognitive development affects image fixation duration (Lang, Borse, Wise, & David, 2002). According to our results, it is found that Asian-type consumers are more strongly oriented to the verbal information compared to consumers of all other countries, and Balkan-oriented consumers perceive information faster visually, making them stronger visualizers (Mendelson, & Thorson, 2004). Supporting this claim are previous studies that have found that users differ in remembering and processing details of verbal-visual information provided (Riding & Ashmore, 1980; Riding, Burton, Rees, & Sharratt, 1995). American and Indian magazine advertisings have the highest average scores on the language index, some authors found, and this is explained by the fact that English is the official language in the US and one of the official languages in India (Nelson, & Paek, 2007). Therefore, verbal elements in advertisements marketed to Asian-type consumers would achieve significant results. On the other hand, British and French television commercials, that is, commercials marketed to the European type of consumer, revealed that 81 percent of the commercials contained the same images (Khikmiyah, Siswono, & Lukito, 2024). The presence of more images and less text in European ads helps users from Eastern Europe and Turkey (Balkan countries) perceive the visual information from an ad more holistically. In contrast, Asian consumers would do better with text information in ads according to our findings. This scientific information also explains why European-type consumers are more likely to respond positively to visual advertising elements, with an important role played by dreams, which are related to the human imagination, compared to consumers of other groups. Empirically, other authors prove that Asian-type consumers process information from advertisements offered for evaluation twice as fast as European-type consumers (James, & Hill, 1991, Zhou, & Belk, 2004).

In order to establish cause-and-effect relationships between the territorial distribution of the users and their positive advertising responses, the analysis correlation or Pearson's correlation was carried out, and the data are presented in Table 2. Because in the analysis of covariance (ANOVA) high scores were found on the Verbal Scale, correlational dependencies are sought with verbal components in advertising. Correlation analysis data are reflected in Table 2:

Table 2

Correlations between Verbal Subscale and Verbal components in advertisement (Pearson's correlations)

VVQ / Verbal components	Verbal Subscale	Verbal structures – short information	Verbal structures – detailed information
Verbal Subscale	1	0.162**	0.022
Verbal structures - short information	0.162**	1	0.678*
Verbal structures - detailed information	0.022	0.678*	1

Source: Author's Compilation, 2024.

The positive correlation found between the verbal cognitive style subscale of Kirby et al. (1988) and the subscale measuring verbal structures - short information in advertising is highly significant for the present study, where $R_{(450)} = 0.162$, $p<0.05$. Statistically significant linear correlations between variables ranged from weakly positive, $R_{(450)} = 0.162$, $p < 0.05$ to very strong $R_{(450)} = 0.678$, $p < 0.05$, with sample N= 450, (Table 2). The pattern of correlations obtained corresponds to the predictions in our study, as the verbal in advertising subscale and verbal cognitive style scores are moderately correlated, but only in cases where brief information is conveyed, that is, there are brief captions, messages, or advertising slogans in the advertisements (Krastev, 2000). Non-significant correlations indicate that processing detailed information requires more time, and consumers of advertising are not inclined to make additional efforts to achieve this goal. According to the results of ANOVA, consumers from Asian countries are able to deal with verbal information and this can lead to positive final reactions depending on the way of perceiving the verbal components present in the investigated advertisements.

Visualization in advertising was also measured with a scale proposed by the author, which includes 20 statements. Correlation analysis data between Visual Subscale and visual components are reflected in Table 3:

Table 3

Correlations between Visual Subscale and Visual components in advertisement (Pearson's correlations)

VVQ / Visual components	Verbal Subscale	Images of people	Colour brightness
Visual Subscale	1	0.154**	0.339**
Images of people	0.154**	1	0.634*
Colour brightness	0.339**	0.634*	1

Source: Author's Compilation, 2024.

Correlation analysis shows that the assumptions of normality, linearity and homogeneity were not violated. The linear correlations between the variables measured in the second correlation analysis ranged from weak positive, $R_{(450)} = 0.154$, $p < 0.05$ to strong positive correlations $R_{(450)} = 0.634$, $p < 0.000$, with sample N = 450, (Table 3). For the studied sample, the strongest positive correlations show the following: 1) More frequent presentation of Images of people in advertising is positively related to Colour brightness, which can improve the perception of visual components in advertising by the studied users ($R = 0.634$; $p < 0.000$); 2) Higher values on the Visual Subscale are positively related to Colour brightness, therefore, more visual consumers will more easily cope with the processing of colours in an advertisement ($R = 0.339$; $p < 0.05$); 3) Higher values on the Visual Subscale is weakly but positively related to Images of people, therefore more visual consumers will more easily perceive characters in an advertisement ($R = 0.154$; $p < 0.05$). Other studies have found the Visual Subscale to be weakly correlated with vividness ratings of mental imagery and not even moderately correlated with other measures of visuospatial ability (Alessandrini, 1981; Edwards & Wilkins, 1981; Green & Schroeder, 1990), for example, interest in these research works has not decreased in recent years. Therefore, the presence of different visual components can improve the perception of an advertisement for some consumers, but hinder other consumers, because not every image of an advertisement corresponds to the cultural and traditional understandings of a country. Content analysis of Asian advertisements shows that the presence of characters in advertisements does not correspond to the understandings of the population in these countries (Frith et al., 2004). On the other hand, Western models are depicted more often than Asians in the considered media, therefore in order to have a higher receptivity of Images of people in Asian advertisements, they should copy some European image standards (Karan, 2003; Nelson & Paek, 2006). These scientific results indicate that research should continue on both the verbal-visual content of advertisements and the individual characteristics of consumers.

The main results support the thesis that the individual cognitive differences of advertising consumers are significant in the study of advertising communication, with individuals' party affiliation determining their preferences for verbal or visual components. Interest in cognitive styles has grown in recent years, with the author of the present scientific work proposing new areas for their measurement, as well as cause-and-effect relationships between an individual's cognitive orientation and between verbal-visual presence in advertising. It is assumed that the higher degree of verbalization found in the users stimulates representatives from Asian countries, as these users quickly process the short information. On the other hand, the higher degree of visualization in the examined persons is a good prerequisite for users from Western Europe and Turkey, who cope with Images of people, and even faster - with Colour brightness. Consumers from Eastern Europe have the highest values on the subscale measuring dreams, and the author assumes that these consumers of advertising have a rich imagination and also deal quickly with visuals present in advertisements. The results of the study can enrich the existing research data on the application of the theory of education, while also discovering new scientific areas for the study of cognitive orientation. All this can become a successful way to the preparation of an effective advertisement, containing different verbal and visual components intended for different audiences in these countries. The applicability of the results of the scientific research is clearly visible because it covers advertising communications, discovering a new aspect of measuring knowledge from educational theory and updating the long-discussed cognitive-style issue.

The expressed research hypothesis that consumers' territorial distribution determines their individual

susceptibility to verbal-visual components in advertising is an important predictor in the present study, because the precisely determined territorial distribution shows the significant differences between consumers inhabiting Western Europe, Eastern Europe and Turkey, as well as Asia. It is assumed that a higher degree on the scale of Kirby et al. of one of the cognitive styles leads to a higher degree of perception of verbal-visual components in advertising. This means that advertisers, marketers, as well as some specialists in the field of social psychology could take into account this segmentation in order to offer the most appropriate verbal structures and visual representations with which to achieve success among consumers from the studied territorial areas. The needs of advertising can be provoked by other verbal-visual components in advertising, such as a combination of short and detailed texts for certain countries, as well as by combinations of images of people with colour brightness - for other countries. Therefore, advertisers in these areas should carefully discuss and adopt the best strategies in crafting their advertisements to improve advertising effectiveness that matches users' abilities, as well as their cognitive preferences and orientations.

5. Conclusion

In the present research, measurements are made of consumers' verbal-visual affiliation with an advertisement, which is novelty in advertising research, as well as consumers' propensity to respond positively or negatively to the verbal-visual components of an advertisement. Finding the high verbalization of consumers from Asian countries on Verbal Subscale, as well as the high visualization of consumers from Balkan countries on Visual Subscale, proves the different way of perceiving advertising, as well as some tendencies to unify the content of advertisements in Asian and European countries. On Dreamer Subscale users from Western Europe have the highest indicators in contrast to users from countries in Eastern Europe and Turkey, as well as from Asian countries, indicating that dream vividness is manifested most strongly in these individuals. Explanations can be sought in a number of macro- and micro-factors such as: standard of living, satisfaction with the use of products and services offered in advertising, as well as well-being, which leads to freedom of human thinking. These and many other indicators can become the subject of further research.

The author adheres to the claims of other researchers that individuals' strong affiliation with a verbal or visual cognitive style determines their susceptibility to verbal or visual components. The studied users give more positive advertising reactions to the verbal structures - short information, but not to the detailed information in an advertisement. The assumption in our research is that consumers from Asian countries cope with short information in advertising, but this does not apply to consumers from Western and Eastern Europe. Unlike the verbal components of advertising, where detailed information is not an important factor for perception, the measured visual components - Images of people and Colour Brightness are positively related to the visual orientation of advertising users. The assumption based on the survey data in the present study is that this processing is most easily achieved with users from Eastern Europe and Turkey, with Colour Brightness being a more important factor for these target groups. It is possible that in future research, researchers will make a further segmentation of users from this group, called in our study Balkan countries, because there are some national, cultural, ethnic and traditional external factors to give explanations to questions about the degree of visualization of representatives from each country, as well as the ways of perceiving and processing visual information from advertising as a cognitive process. Some of the research findings in this study confirm the results of studies of advertising content in Asian countries that examine the presence of Western models or convergence in values across countries (Zhang & Shavitt, 2003; Khairullah & Khairullah, 2002; Paek et al., 2004; Alden et al., 1999). It is concluded that when advertising is offered to Asian-type consumers, the presentation of verbal components is important for the corresponding susceptibility of this type of consumer to verbalization. In contrast, European consumers - from Western and Eastern Europe, as well as from Turkey, process more fully visual information such as images of people with bright colours, to which they give positive advertising responses.

The main findings of this article are in the field of advertising studies, applying it to measure the cognitive styles of advertising consumers, and looking for linear relationships between cognitive orientation and verbal-

visual components in advertising. High verbalizers like Asian consumers and high visualizers like Balkan consumers gives advertisers, marketers and also social psychology researchers a clear idea of how to create their advertisements to achieve effective advertising impact. The results of the subscale measuring dreams show that European-type consumers have a richer imagination, which is a reason to assume that visual components are also influential among this target group. Therefore, individuals' cognitive orientation affects their ability to perceive and make sense of verbal and visual advertising components, and empirical scientific evidence can facilitate the work of marketers and advertisers in creating advertising for precisely defined consumers belonging to different countries.

The novelty of the scientific study is found in the fact that the cognitive styles of individuals are investigated in advertising communication and not in media communication. These features of the scientific work make the research more significant, because it gives new ideas about the cognitive orientation of individuals as a whole, and their distribution is made according to the criterion - territorial distribution or consumers from Asian, European and Balkan countries. Apart from everything else, different segmentations of advertising consumers are present in the research, but the present paper finds how the cognitive orientation of advertising consumers, that is, their distribution of verbalizers, visualizers, and dreamers, determines their positive and negative advertising responses to verbal and visual components in advertising. The main contributions of this scientific paper are the established linear relationship between verbal cognitive style and verbal structures in advertising, called short information, as well as between visual cognitive style and images of people and also colour brightness. All these findings provide new horizons for future scientific research, proving empirically that the cognitive orientation of individuals is significant for some behavioural changes of advertising users. In addition, the author's proposed scale for measuring the verbal-visual components in advertising, or the so-called verbalization and visualization in advertising, is the main contribution of the author, as one of the instruments of the current methodology. The originality of the scientific research is expressed in the fact that the susceptibility of advertising consumers to the Dream Scale was tested, which was not done for advertising communication.

Although the exploratory results reported here offer some scientific findings, they must be qualified with certain sampling limitations. The respondents in this study were selected from precisely defined countries grouped into three target groups. This necessitates some extensions of the research to be made in future studies, with advertising users being divided by other territorial features, for example users from Eastern and Western Europe. In future research, the author recommends establishing other demographic characteristics of the respondents, such as gender, age, marital status, education and others, which may be essential for advertising influence. In addition, the author's recommendations for other future studies are to categorize advertising users as high, medium, or low verbalizers, visualizers, and dreamers, looking for some causal relationships between individuals' level of verbalization and visualization on the VVQ, as well as their responses to the presentation of verbal and visual stimuli in advertising. Although the study reported here partially answers some research questions regarding territorial distribution, it succeeds in confirming the presence of individual differences in the cognitive orientation of advertising consumers, as well as providing new insight into the perception of verbal-visual components in advertising.

References

1. Barry, A. M. (1997). Visual intelligence: Perception, image, and manipulation in visual communication. Albany: State University of New York Press.

2. Blajenkova (2016). Vividness of Object and Spatial Imagery, *Perceptual and Motor Skills*, 122 (2), pp. 490-508. DOI: 10.1177/0031512516639431

3. Blazhenkova, O., & Kozhevnikov, M. (2009). The new object-spatial-verbal cognitive style model: Theory and measurement. Applied Cognitive Psychology. *Applied Cognitive Psychology, 23*(5), 638–663.

4. Boscolo, P., & Mason, L. (2003). Topic knowledge, text coherence, and interest: How they interact in learning from instructional texts. *Journal of Experimental Education, 71*(2), 126–148.

5. Clark, J. M. & Paivio, A. (1991). Dual coding theory and education. *Educational Psychology Review*, 3(3), 149-170.

6. Desmond, R. (2018). Media literacy in the home: Acquisition versus deficit models, In Kubey, R. Media Literacy in the Information Age, 2nd Edition, Routledge, ISBN 9781351292924.

7. DeVellis, R. (2012). Scale development: Theory and application. (3rd ed.) SAGE Publications.

8. Frith, K., Cheng, H. & Shaw, P. (2004), Race and Beauty: A Comparison of Asian and Western Models in Women's Magazine Advertisements, *Sex Roles*, 50(1):53-61.

9. Ganeva, Z., Let's reinvent statistics with IBM SPSS Statistics, Electra, ISBN 978-619- 7292-01-5, 2016.

10. Green, K. E., & Schroeder, D. H. (1990). Psychometric quality of the verbalizer-visualizer questionnaireas a measure of cognitive style. *Psychological Reports, 66*, 939–945.

11. Haciomeroglu E. S., & LaVenia, M. (2017). Object-Spatial Imagery and Verbal Cognitive Styles in High School Students, *Perceptual and Motor Skills, 124 (3)*, 1-29.

12. Harris, G. & Attour, S. (2003) The international advertising practices of multinational companies: A content analysis study, *European Journal of Marketing*, 37(1/2): 14-168.

13. Hetsroni (2000). The relationship between values and appeals in Israeli advertising: a smallest space analysis, Journal of Advertising, 29(3):55-68.

14. Hofstede G. (1991). Cultures and Organizations: Software of the Mind. London: McGraw-Hill.

15. James, & Hill (1991). On the derivation of first integrals for similarity solutions, *Journal of Engineering Mathematics, 25,* 287-299.

16. Jonassen, D. H. & Grabowski, B. L. (1993). *Handbook of individual differences, learning and instruction*. Hillsdale, NJ: Lawrence Erlbaum Associates.

17. Karan, K. (2003), Advertising and the visual portrayal of the modern Indian 'stereotypes', paper presented at the International Communication Association Annual Conference.

18. Khairullah D. Z. & Khairullah, Z. Y. (2013). Cultural Value in Indian Television Advertising, *Journal of Promotion Management, 19 (2),* 265-281.

19. Khikmiyah, Siswono, Lukito. (2024). The Effect of Verbalizer, Spatial and Object Visualizer Cognitive Styleto Students' Algebraic Thinking: Insights from Empirical Study Focusing on Middle School Students, International Conference on Lesson StudyUniversitas Muhammadiyah Gresik.

20. Kirby, J. R., Moore, P. J., & Schofield, N. J. (1988). Verbal and visual learning styles. *Contemporary Educational Psychology, 13*, 169–184.

21. Kogan, N. (1971). Educational implications of cognitive styles. In G. S. Lesser (Ed.), *Psychology and educational practice*. Glenview, IL: Scott, Foreman, 242-292.

22. Krastev, S. (2000). Advertising - concepts, rules, examples, Sofia: SIELA.

23. Lang, A., Borse, J., Wise, K., David, P. (2002). Captured by the World Wide Web: orienting to structural and content features of computer-presented information. *Communication Research* 29 (3), 215-245.

24. McQuarrie, E.F., Phillips, B.J. (2005). Indirect persuasion in advertising. How consumers process metaphors presented in pictures and words. *Journal of Advertising*, 34 (2), 7-20.

25. Mendelson, A. L. (1999). The effect of photos on the attribution of homelessness. In E. Min (Ed.), *Reading the homeless: The media's image of homeless culture.* Westport, CT: Praeger, 175–196.

26. Mendelson, A. L. (2001). Effects of novelty in news photographs on attention and memory. *Media Psychology*, 3, 119–157.

27. Mendelson, A. L., & Thorson, E. L. (2003). The impact of news stories and photos on the processing of information about Hillary Rodham Clinton. *New Jersey Journal of Communication*, 11(2), 135–148.

28. Mendelson, A. L., & Thorson, E. (2004). How Verbalizers and Visualizers Processthe Newspaper Environment, *Journal of Communication*, September 2004, International Communication Association.

29. Miron, D., Bryant, J., & Zillmann, D. (2001). Creating vigilance for learning from television. In D. G. Singer & J. L. Singer (Eds.), Handbook of children and the media (pp. 153–181). Thousand Oaks, CA: Sage.

30. Müller, B. (2004), Dynamics of International Advertising: Theoretical and Practical Perspectives, Peter Lang, New York, NY.

31. Nelson & Paek, (2007). A content analysis of advertising in a global magazine across seven countries (Implications for global advertising strategies), International Marketing Review, 24 (1), 64-86.

32. Paivio, A. (1971). Imagery and verbal processes. New York: Holt, Rinehart, & Winston.

33. Peeck, J. (1993). Increasing picture effects in learning from illustrated text. *Learning and Instruction,3,* 227–238.

34. Richardson, A. (1977). Verbalizer-visualizer: A cognitive style dimension. *Journal of Mental Imagery, 1,* 109–126.

35. Riding, R. J., & Ashmore, J. (1980). Verbaliser imager learning style and children's recall of information presented in pictorial versus written form. *Educational Studies*, *6,* 141–145.

36. Riding, R. J., Burton, D., Rees, G., & Sharratt, M. (1995). Cognitive style and personality in 12-year-old children. *British Journal of Educational Psychology, 65,* 113–124.

37. Riding, R., & Cheema, I. (1991). Cognitive styles: An overview and integration. Educational Psychology, 11, 193–21.

38. Rojas-Méndez, Davies & Madran (2008). Universal differences in advertising avoidance behaviour: A cross-cultural study, *Journal of Business Research* 62 (2009), 947–954.

39. Scott, L. M. (1994). Images in advertising: The need for a theory of visual rhetoric. *Journal of Consumer Research, 21,* 252–272.

40. Seitz, V. & Johar, J. (1993). Advertising Practices for Self-Image Projective Products in the New Europe: A Print Advertising Content Analysis, *Journal of Consumer Marketing,* 10(4), 15-26.

41. Thomas & McKay, (2010). Cognitive styles and instructional design in university learning, *Learning and Individual Differences,* 20, 197-202.

42. Wanta, W., & Roark, V. (1994). Responses to photographs. *Visual Communication Quarterly, 1*(2), 12–13.

43. Whitelock, J. and Rey, C. (1998), Cross-cultural advertising in Europe, *International Marketing Review*, Vol. 15, 257-76.

44. Williams, R. (1996). *Beyond visual literacy: Omniphasism: A theory of cognitive balance*. Paper presented to the annual conference of the International Communication Association, Chicago, IL.

45. Zhang & Shavitt (2003). Cultural values in advertisements to the Chinese X-generation – Promoting modernity and individualism, *Journal of Advertising,* 32, 23-33.

46. Zhou, & Belk, (2004). Chinese consumer readings of global and local advertising appeals, *Journal of Advertising,* 33(3), 63-76.

47. Zillmann, D., Gibson, R., & Sargent, S. L. (1999). Effects of photographs in news-magazine reports on issue perception. *Media Psychology*, 1, 207–228.