Video and media technologies in the educational space as a form of mental representation of students of different cultures

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Abstract

The search for conditions to create a developing learning environment, methods and means of teaching is the main objective of psychological science. The relevance of the problem under study is due to the active development of intercultural communication processes, in which advertising plays an important role. This circumstance requires the inclusion of video and media technologies in the training of specialists in the field of advertising. The purpose of the paper is to describe the course and the results of the study of imaginal representations in advertising aimed at promoting goods in different cultures. The leading method in the study of this problem was the semantic differential which allows one to identify the difference in the semantic content of the commercial of a popular drink produced by an international company. Fifty students who are representatives of religious and non-religious cultures, aged between 18 and 30 participated in the study. The authors of the paper put forward the assumption that since social representations are formed and depicted in different cultures which are different from the social representations of other cultures, the content of the advertising text will be interpreted in different ways. This can affect people’s behavior of different cultures. The content of imaginal representations was studied in the process of perceiving the advertisement of a popular drink. The results of the study showed a significant difference in the content of imaginal representations of the experimental groups. However, the study showed that this difference did not influence

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consumers’ behavior. The materials of the paper may be useful for psychologists studying intercultural differences, as well as specialists in advertising psychology, when developing advertising texts for multicultural goods and services.

**Keywords:** video and media technologies, imaginal representations, advertisement, culture, types of cultures, behavior.

1. Introduction

The issue of the quality of vocational education is currently in the center of attention of the world community (Uzunboylu & Gundogdu, 2018). The shift to a distance learning system poses not only a serious problem for the entire academic community, but it also opens new opportunities (Gença & Uslu, 2020; Tezer, 2020; Garay-Argandona et al., 2021). The use of video and media technologies has some positive aspects that contribute to improving the quality of education. In particular, in the process of training advertising specialists, the use of video materials provides ample opportunities for acquaintance with the achievements of modern practice (Behehsti et al., 2018; Vezne, 2020).

However, there is an acute issue of full-fledged organization of students' work with video materials in practical classes. The management of students' cognitive activity implies the purposeful creation of such educational conditions under which the fulfillment of an educational task activates mental actions, the sequence of which forms a certain level of development (Akoul, Lotfi & Radi, 2021). A training experiment provides such opportunities.

Scientists of different scientific branches of psychology consider the modern possibilities of mass influence on the consciousness of people. The processes of social perception make it possible to determine the economic behavior of consumers. Advertising as a phenomenon of contemporary life takes a strong place in the picture of the world (Minakhmetova et al., 2017; Orekhovskaya et al., 2019; Yusupov, 2019; Rubio et al., 2020; Katsantonis, 2020). It exerts a large and ambiguous effect on the human consciousness, on the one hand it fixes, on the other hand organizes a social impact, reflects and influences the formation of stereotypes, ideals, forms of socially approved behavior (De Mooij, 2018). Advertising is of great interest for research among social psychologists. Advertising images are created with the aim of influencing the mass consciousness. Advertising immanently carries specific social meanings within itself that characterize social reality (De Mooij, 2015). The perception of an advertisement is a complicated, comprehensive process, resulting in the creation of an image of the desired lifestyle (Basaran & Sefika Berber, 2018). The strength and attractiveness of visual representation affects the formation of the motive for acquisition, the active action of changing one’s life.

The information that an advertisement conveys is extremely symbolic, since the symbol saves time and money. Symbols are extremely conditional and are not directly related to a specific object, are metaphorical in nature and replace the designated object in discourse. Symbols by their nature are highly conventional: people “agree” among themselves that a certain object or concept will be signified by this form. In advertising, the symbols are logos that are based on abstract visual images, as well as the so-called brand characters, which are the collective image of the brand in various advertising materials (Zvonova & Starostina, 2019; Levina et al., 2019; Drozdikova-Zaripova & Davlieva, 2019; Samancioglu, Baglibel & Erwin, 2020; Tugun et al., 2020).

The images of advertising in their meaning field must correspond to social representations which are the conditions for social communication and cognition of reality. Social representations make it possible to conventionalize objects, ideas, theories, events, and relationships, subjecting them to common sense. The meanings presented in the advertisement are embedded in already existing ideas about reality, due to which they form new images and stereotypes of behavior in the mind.
The reason for different perceptions by people of different countries of the same information is the cultural and national characteristics that have been formed historically (Diehl & Terlutter, 2006). At the same time, the conditions of social development of the contemporary world associated with the processes of integration and globalization have formed a tendency to level national, cultural and international borders, the process of exchanging customs and traditions between countries and cultures (Sego & Lee, 2012).

Taking into account that the Russian advertising market takes eighth place in the world in terms of growth rates, the image representation study of social representations in advertising is of great scientific and practical importance. Studying the image representation of social representations in advertising goods and services in many cultures will make it possible to comprehensively and scientifically substantiate the analysis of the advertising impact on representatives of different cultures and create products advertised in an effective way, influencing the target group.

2. Materials and Methods

The concept of “an image representation” is one of the most complex in psychological knowledge. The outstanding psychologist Piaget (1995) proposed to distinguish between types of representations which are formed according to the stages of development: sensorimotor, image, verbal. Payvio (1986) proposed the theory of double coding. All representations are divided into image (pictorial) and verbal ones (language-like).

Studying image representations is focused on mental images which have a number of similarities with perceptual images. However, perceptual and mental images are similar in functional and structural parameters, but not identical. Visual and verbal representations also do not coincide, since the question of the study of image representations touches upon the question of the integrity of the world model. Since each separately arising image is a product of a higher order phenomenon - a model (or an image) of the world. That is, a separate image that arises in our consciousness is an image representation, first of all, of the whole world, in which each phenomenon or object takes a certain place and arouses certain feelings. Thus, by studying a visual representation of a single subject (for example, the advertisement of a drink), we get the opportunity to consider it as a structural reflection of the whole world.

Images that stably arise when interacting with the same object fulfill a function in social practices through explanations, statements and concepts that are born in everyday life in the course of interpersonal communication. This phenomenon is studied in psychology as social representations. Moscovici (2000) insists that the study of social representations gives the most important material to understand the socio-psychological features of a social community: expressing the group’s attitude to a socially significant object, a collective representation.

The functioning of social representations leads to a social transformation, since this process is based on the inclusion of the current situation in an integral model of the world by the individual and groups of people and the work of collective memory, the functions of which are fully realized in creating the conditions of forming and functioning such a complex, personal and emotionally colored feeling as cultural identity. And although collective representations are created, supported by society, stable in time, dialogue as a condition for their emergence and development leads to the evolution of the meaning content and moral emphasis which is realized in various types of representations: hegemonic, polemical and innovative.

Social representations perform the function of stabilizing the emotional state of members of individual social groups in conditions of social instability generated by the transformation of society.
Different conditions of social practices allow social ideas to develop. For example, polemic and innovative social ideas provide the potential for social development and revolutionary shifts in science, art, economics, politics and other spheres. It seems obvious that the advertising as a communication with a huge number of potential buyers should operate with hegemonic ideas. But in the context of globalization of the economic space, it is necessary to search for means, signs and symbols that can evoke the necessary meaning connotations among representatives of different cultures and nations (Gruber & Bailey, 2021).

The original idea, simple and obvious, requiring no explanation and proof serves as the cultural, historical and ethnic foundations of image representations in advertising. An advertising image reflects the essence of not a specific advertised subject, but the whole, desired world, the entrance to which opens up the possession of the advertised product, the “themes” (Moscovici, 1993) of the concept content of “a dream”.

The opinions of marketing and advertising psychologists differ. Some believe that globalization has acquired such strong forms that cultural differences in the perception of information among consumers from different countries are erased and today it is possible to use one type of advertising for different countries (Le & Vo, 2017; Hudson, Hung & Padley, 2015). In modern conditions, there are more common features in the perception of beauty, naturality and harmony among representatives of different countries. One advertisement can be effective in different cultures, provided that it does not touch upon religious issues (Chun et. al., 2015; Ahmad, Noor, & Amat, 2018).

However, many researchers believe that cultural differences are still strong, and the advertising message needs to be adapted for potential consumers from different countries and cultures (Kotler & Keller, 2018; De Mooij, 2015). This research suggested that there were differences in the meaning content of an image representation of multicultural goods and services among people, representatives of secular culture, and representatives of religious, “traditional” cultures. Social representations that have developed in different cultures determine a different semantic interpretation of an advertisement (Nureni, 2020).

The ideas of the theory proposed by C. Pierce were the theoretical basis of our study, according to which the decoding of a conditional sign, symbol is based on the conventional, established “by agreement” connection of the signified (denotation) and signifier (designate). The image that arises in the human mind preserves the information load and the spatial-temporal relations of the object, however, the meaning content of the image is subjective and connected with culture. G. Hofstede (2011) identified the factors that influence the perception of information by people: individualism - collectivism; distance of power; masculinity - femininity; avoidance of uncertainty.

Fifty people aged 18 to 30 participated in our study. The participants were divided into 2 groups: group A - representatives of religious groups, traditional cultures and group B - representatives of secular culture.

This made it possible to identify specific representations among various groups arranged according to different category criteria, as well as with slightly expressed but having a fairly large representation in modern communities. To diagnose the individual system of values of the study participants, a comparative analysis (in the control and experimental groups) of the average indicators of the person’s vital spheres was carried out using the Morphological Test of Life Values (MTLV) technique (Sopov & Karpushina, 2001).
For statistical reliability, data processing methods were used with the help of Student’s t-test and K. Pearson’s t-test which allowed us to reveal significant indicators in comparison with the studied groups and find specific features of visual representations in advertising multicultural goods and services.

3. Results

The study showed that the participants in group B (secular culture) have the most expressed values of their own prestige (M = 8.32), achievement (M = 7.64) and the preservation of their own individuality (M = 7.56). The participants of group A (religious culture) have the most expressed values of their own prestige (M = 8.21), active social contacts (M = 7.92) and spiritual satisfaction (M = 7.58). The smallest values among the studied personal values in both groups are marked on the scale “Creativity”. Thus, the representatives of secular culture seek recognition, respect, approval from others to achieve specific and tangible results in different periods of life, strive for independence of other people. The representatives of traditional (religious) cultures also seek recognition, respect, approval from others, they have a marked desire to establish favorable relationships with other people, as well as to obtain moral satisfaction in all areas of life. Low values of creativity in both subgroups indicate a suppression of creative inclinations, stereotyped behavior.

The study showed that the subjects of group B (secular culture) give preference to the sphere of hobbies (M = 6.52), followed by the sphere of public life (M = 6.24), in third place the sphere of professional life (M = 6). In the subjects of group, A (religious culture), the first place is occupied by the sphere of family life (M = 6.38), followed by the sphere of education (M = 5.83), and third place is taken by the sphere of professional life (M = 5.54).

At the next stage of the empirical study a commercial of a multicultural product was demonstrated to investigate image representations of a participant in groups A and B in the advertising of multicultural goods and services. The Coca-Cola drink commercial was designed using the symbols of the month of Ramadan. A young Muslim woman experiences difficulties and discomfort during fasting, she is waiting for the sunset, she wants to eat and drink. She is also a victim of unfriendly looks and jokes from passers-by. A female athlete runs past, she stops and offers a bottle of Coca-Cola to a Muslim girl who politely refuses. The sportswoman patiently waits for the sunset. Both girls drink this beverage at dusk. The video ends with the text “What unites us is more than what separates us”.

After watching the commercial, the study participants answered questions of the Semantic differential technique. Table 1 contains mean values of ratings of the advertisement image.

<table>
<thead>
<tr>
<th>Pairs of adjectives</th>
<th>Group B (secular culture)</th>
<th>Group A (religious group)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>standard deviation</td>
</tr>
<tr>
<td>Condemning-Tolerant</td>
<td>1,84</td>
<td>1,4</td>
</tr>
<tr>
<td>Unpleasant-Heartfelt</td>
<td>0,16</td>
<td>1,31</td>
</tr>
<tr>
<td>Repulsive-Friendly</td>
<td>1,32</td>
<td>2,32</td>
</tr>
<tr>
<td>Indifferent-Controversial</td>
<td>-0,48</td>
<td>1,8</td>
</tr>
<tr>
<td>Restrained-Expressive</td>
<td>0,20</td>
<td>2,04</td>
</tr>
<tr>
<td>Cowardly-Bold</td>
<td>0,20</td>
<td>1,11</td>
</tr>
<tr>
<td>Diplomatic-Straightforward</td>
<td>0,28</td>
<td>1,24</td>
</tr>
<tr>
<td>Realistic-Dreamy</td>
<td>1</td>
<td>1,11</td>
</tr>
</tbody>
</table>
Graphically, the distribution of the subjects’ replies is as follows:

![Graph showing the distribution of replies]

**Note:** 1 - Condemning-Tolerant, 2 - Unpleasant-Heartfelt, 3 - Repulsive-Friendly, 4 - Indifferent-Controversial, 5 - Restraint-Expressive, 6 - Cowardly-Bold, 7 - Diplomatic-Straightforward, 8 - Realistic-Dreamy, 9 - Limited-Creative, 10 - Dogmatic-Innovative.

**Figure 2.** Average rating values for each of the pairs of adjectives for the control and experimental groups

The significant similarity of the ratings of groups A and B was found for pairs of adjectives: Condemning-Tolerant, Repulsive-Friendly, Realistic-Dreamy. At the same time, there are noticeable differences in the ratings of the adjective pairs: Unpleasant-Heartfelt, Indifferent-Controversial, Restraint-Expressive, Cowardly-Bold, Dogmatic-Innovative. For statistical analysis, Student’s t-test (SPSS program) was used to assess the differences between the two independent samples.

**Table 2.** The results of the statistical analysis of differences in the ratings of adjectives presented in the semantic differential technique
We observe a significant difference in the ratings of the adjective pair Indifferent-Controversial ($t = 2.468, p < 0.05$). This difference indicates that the representatives of secular culture are indifferent to the problem raised in the advertisement (the difficulties that people professing Islam face during the holy month of Ramadan).

We found a significant difference in the ratings of the pairs of adjectives Restrained-Expressive ($t = 2.194, p < 0.05$). This difference can be interpreted as follows: unlike the representatives of secular culture, the representatives of traditional, religious cultures, most of which profess Islam, consider this advertisement to be more expressive, which may reflect their emotional state during Ramadan.

We note a significant difference in the ratings of the pair of adjectives Cowardly-Bold ($t = 3.231, p < 0.01$). The representatives of religious cultures gave high ratings to the characteristic “Courageous” for the description of the advert.

We got a significant difference in the ratings of the pair of adjectives Dogmatic-Innovative ($t = 3.231, p < 0.01$). In our opinion, this is due to the fact that such a cultural-specific advertised product is new for the representatives of secular culture.

Next, we carried out a correlation analysis using the correlation coefficient of K. Pearson. The correlation analysis used data from the techniques of the Morphological test of life values and the Semantic differential separately for each of the subgroups. As a result, significant correlation was revealed among the representatives of group B (secular culture), presented in table 3.

### Table 3. Table of significant correlation relationships (group B)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean values</th>
<th>Value of t-criterion</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>Experimental</td>
<td></td>
</tr>
<tr>
<td>Indifferent-Controversial</td>
<td>-0.48</td>
<td>0.84</td>
<td>$t = 2.468$</td>
</tr>
<tr>
<td>Restrained-Expressive</td>
<td>0.2</td>
<td>1.36</td>
<td>$t = 2.194$</td>
</tr>
<tr>
<td>Cowardly-Bold</td>
<td>0.2</td>
<td>1.12</td>
<td>$t = 3.231$</td>
</tr>
<tr>
<td>Dogmatic-Innovative</td>
<td>1.96</td>
<td>1.12</td>
<td>$t = 2.022$</td>
</tr>
</tbody>
</table>

There is a significant correlation between the indicators of the value of spiritual satisfaction and the ratings of the pair of adjectives Unpleasant-Heartfelt ($r = 0.487, p < 0.05$). The presence of this correlation indicates that the representatives of secular culture, which is characterized by a desire to obtain moral satisfaction in all spheres of life, perceived the commercial shown to them as “Heartfelt”.

There is a significant negative correlation of indicators of the value of self-development and ratings of the pair of adjectives Restrained-Expressive ($r = -0.443, p < 0.05$). The presence of this correlation indicates that the representatives of secular culture, seeking to obtain objective information
about the peculiarities of their own character, abilities, perceived the commercial shown to them as “Restrained”.

**Table 4.** Table of significant correlation relationships (group A, religious culture)

<table>
<thead>
<tr>
<th></th>
<th>Achievement</th>
<th>Self-development</th>
<th>Spiritual satisfaction</th>
<th>High financial well-being</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condemning-Tolerant</td>
<td>r = -0.434*</td>
<td>P = 0.030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unpleasant-Heartfelt</td>
<td>r = 0.437*</td>
<td>P = 0.029</td>
<td></td>
<td>r = -0.484*</td>
</tr>
<tr>
<td>Cowardly-Bold</td>
<td>r = -0.484*</td>
<td>P = 0.028</td>
<td>r = -0.426*</td>
<td>P = 0.034</td>
</tr>
</tbody>
</table>

Note: * The correlation is significant at the level of 0.05 (double-sided).

There is a significant negative correlation between the expressiveness of the achievement value among the representatives of group A and the ratings of the pair of adjectives Condemning-Tolerant (r = -0.434, p <0.05). The representatives of religious culture with a pronounced desire to achieve concrete and tangible results in different periods of life perceived the commercial shown to them as “Condemning”.

Significant negative correlation between the value of self-development and ratings of the pair of adjectives Unpleasant-Heartfelt (r = 0.437, p <0.05). This correlation indicates that the subjects of group A, seeking to know their individual characteristics, the constant development of their abilities and other personal characteristics, have high ratings of the characteristic of “Heartfelt” in the commercial.

There are also negative correlation between ratings of the pair of adjectives “Cowardly-Bold” and scales of the technique of values “Spiritual satisfaction” (r = -0.484, p < 0.05), underdevelopment of parental feelings (r = -0.412, p < 0.05) and “High financial position” (r = 0.426, p < 0.05). These correlations indicate that representatives of religious culture are characterized by a predominance of spiritual needs over material ones, but at the same time they highly value the factor of material well-being, perceiving the demonstrated commercial as “Cowardly”.

At the end of the study, a survey was conducted. The survey consisted of one question: “Are you ready to buy this product?” The results of our survey showed that all participants in the study are ready to buy the advertised product.

### 4. Discussions and Conclusion

Thus, the data obtained in the course of empirical research confirm the hypothesis that there are differences in meaning interpretation of the image representation in the advertising of multicultural goods among the representatives of secular culture and religious culture (Zhao & Ji, 2019). A special vision of the world and cultural traditions influence not only the formation of the national style, which is manifested in interiors and national costumes, but first of all, on the mentality of the people, their moral features, cultural identity, which, as a result, affect their perception of information (Tukaiev et al., 2019; Tukaiev et al., 2020; Adnan et al., 2021). The question remains is how to explore and take into account how to draw a line between universal values and values dictated by national identity.

An image representation is a non-verbal form of mental representation - the representation of objects of various nature in the consciousness of the subject. In modern science, two approaches to the
image representation study are actively developing. The first approach considers representation as the content of mental reflection, which allows the analysis of symbols representing, mediating an object or phenomenon (Eysenck, 1994). Researchers and practitioners of the second approach view representations as a special format for mental reflection. Followers of J.-F. Le Ny (1979) assert that in opinion of some people representations have a unitary format for all types of knowledge, and they build models on this basis (network or feature) to find out exactly how the essentially identical “reflection” units build different in nature and volume concepts. According to others, there are multiple models of representation and there are several different from each other information storage formats that explain the diversity of our knowledge.

However, the use of texts aimed at broad understanding people from different cultures allows us to choose empirical methods for studying visual representations. In this case, the question of the external, formal presentation is removed (since advertising is essentially oriented towards a clear understanding), on the other hand, the method of semantic differential helps to reveal the meaning content. It is interesting that in such a case, visual representation allows not only to reveal the content of an attitude to this particular example but allows one to explore the world image among the representatives of different social groups and cultures.

Recommendations

The use of video and media technologies allows students, future advertising specialists, in conditions of an experiment to establish that representatives of different cultures demonstrate different content of mental representation. The conditions of social development of the modern world associated with the processes of integration and globalization have formed a tendency to level national, cultural and international borders, activating the exchange of information, goods, services and traditions between countries and cultures. The study of image representations among representatives of different cultures will allow specialists in the field of multicultural goods to develop advertising in such a way that there is no cross-cultural conflict, since advertising should not violate traditions and insult feelings. Only in this case, the advertising fulfills its main function of promoting goods and services.

On the other hand, the study of perceiving and understanding advertising texts allows one to learn more about large social groups, since the specific features of visual representations in advertising largely depend on the socio-cultural experience of the community, on the values that have developed in it, the system of shared representations, stereotypes, ratings and interpretations of reality, from ethnic prejudices and other components of the inner world of peoples.

References


Samancioglu, M., Baglibel, M., & Erwin, B.J. (2020). Effects of Distributed Leadership on Teachers' Job Satisfaction, Organizational Commitment and Organizational Citizenship. *Pedagogical Research, 5*(2), em0052. [https://doi.org/10.29333/pr/6439](https://doi.org/10.29333/pr/6439)


