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Typology of Efficient TVC Elements with Neuromarketing Approach

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Abstract

Background and purpose: Today, the role of TVCs in encouraging consumers to buy and increase awareness of a product or service is more important than ever. Marketers and Ad designers are concerned about what dimensions and components are included in an effective TVC. The current research aims to typify the elements of efficient television advertisement with a neuromarketing approach.

Method: The research method with a qualitative approach is of an exploratory type. The factors related to the effectiveness of TVCs with the neuromarketing approach identified based on the research literature were applied to three Delphi stages. The Delphi panel contained 15 neuromarketing experts. Along with evaluating the research literature, the final model was designed after eliminating some factors and adding some categories based on the expert panel. All factors were validated by the Delphi method and the Kappa coefficient of agreement.

Findings: The results showed that an efficient television ad in the field of neuromarketing has seven main dimensions emotions, scenario, informing factors, demographics, artistic elements, structure, and innovation, which have related components. The dimensions and components were presented in the form of an effective TVC model.

Conclusion: To design an efficient TVC with a neuromarketing approach, it is necessary to pay attention to 7 types of innovation, ad structure, scenario, artistic elements, emotions, informing factors and demographic characteristics and elements related to each of the mentioned types. The use of humor, surrealistic images, and unexpected events, as well as the design of an ad of fewer than 60 seconds with the speaker's voice and written expression, can increase the impact of the ad on the audience..

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Keywords: Neuromarketing, TV Commercials, Delphi, Effective Advertising;

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1. Introduction

Nowadays, people are surrounded by commercials almost everywhere. The main purpose of advertisements is to encourage people to buy various goods and use various services (Tlidi 2020). Television Commercials play an important role in promoting consumers' willingness to buy and increasing awareness of a product or social message, even if a television advertisement is broadcast for a short period of time (Weibel et al. 2019; Shahu 2020). Therefore, advertisement designers and providers of health and social messages are concerned with how a TVC can influence the consumer's decision and the audience's behavior in a limited period of time. In order to solve this challenge, the evaluation of television advertisements has been carried out for years (Namura 2015). For most marketing experts, the main issue is communicating and effectively reaching the customers and influencing their purchase decisions, the main tool of which is commercial advertisements. Advertisements are still one of the main elements of any marketing campaign. (Wawrzyniak 2016). The character and form of a commercial play a vital role in understanding the message by potential customers. Preparing suitable advertising content significantly increases the probability of customers responding to it and arouses their interest. Marketing experts should evaluate the effectiveness of ads both before and after they are broadcast in the media (Kotler, P. & Keller 2016).

predicting the success of commercial advertisements is traditionally based on a self-report process and largely depends on the consumers' willingness and ability to describe the level of attention, feeling preference, or future purchase behavior in relation to the advertisements they have been exposed to. . The use of self-reports, including questionnaires and face-to-face or telephone interviews, may lead to invalid results due to limitations and biases inherent in conscious processes (Ford 2019). The most important function of the mind is "unconscious processes" which are faster than conscious investigations. Automatic processes take place without awareness or with a small amount of awareness (Mansor & Isa, 2020). The results of the studies indicate that understanding the information hidden in the subcortical regions of the human brain is much more important in the decision-making process rather than the information stored in the brain cortex (Li 2019). To access the subconscious processes in the brain of the TVCs audience, we need to go far beyond the traditional methods. The use of neuroscience methods in marketing has recently become widespread, through which the cortical activities of the brain are studied at different times, places, and frequencies (Rüschendorf, 2020). Using neuroscience knowledge in the field of marketing helps to better understand processes such as emotions, attention, memory, or making decisions. These are key concepts in the field of advertising and consumer behavior. By knowing the brain's reactions to different stimuli, the effect of the advertising message can be increased (Wawrzyniak 2016).

A commercial advertisement can be divided into television, radio, internet, environmental, SMS, and print types based on the media through which it reaches the audience. Among the types of media, television is known as the most popular media in Iran and the world. According to Iran's opinion polling center and Mashreq news site, 69 percent of people watch more than 3 hours of television every day. This makes television a very powerful medium for conveying commercial messages to the audience.

Marketers and television commercials creators in advertising agencies wonder about the dimensions and components of the most efficient TVCs. Deciding which scenario to use for the ad or what the visual and audio elements applied in the ad should be is considered an ambiguity in the design of a TVC. The duration of an efficient TVC as well as the appropriateness of innovative and emotional elements is also a matter of concern for TVC creators.

Factors related to the efficiency of commercial advertisements with the approach of neuromarketing have been the focus of researchers in recent years, but concerning the research in the field of neuromarketing as well as the research conducted in the field of the efficiency of commercial advertisements, there is not a comprehensive and practical model for efficient TVCs effective on the consumer's purchase decision. Considering the marketers and TVC creators concerned with creating a television commercial with maximum impact on the audience and also to reduce the costs caused by the trial and error in the evaluation of advertisements, it seems necessary to get the advantage of the factors related to efficient TVCs with the neuromarketing approach. Therefore, the need to present an efficient TVC model is quite evident. The present research aims to typify efficient TVC elements with a neuromarketing approach.

There are several factors in the research literature about commercial advertisements. In the current research, only the factors related to the efficiency of TV commercials have been discussed. All the above-mentioned factors need to have been investigated with the approach of neuromarketing. Then, using the Delphi method, the type of each factor has been determined.

2. Research literature

2-1. Measuring the effectiveness of Commercials

Marketers are hesitant to use only self-report measures to pretest ads because of their limitations in providing an effective measure of internal response to external stimuli. The impact experienced by consumers cannot be adequately measured by self-declarative verbal indicators due to its complexity (Davidson, 2004). Respondents tested using self-report measures are also more likely to give unreliable feedback (Bridet, 2005; Plassman & Canning, 2007; Ohme, 2007). Additionally, research shows that our consciousness gets activated 300-400 milliseconds after stimuli. This means that most of the events below this threshold that are recorded by our brain, cannot be reported verbally (Libet, 2004). However, there is convincing evidence that some psychological processes, especially those occurring beyond our awareness, can be understood by analyzing the response of the consumer's brain and body, which in turn leads to the use of various methods of neuroscience (Ambler et al., 2004; Damasio, 1994; Canning et al., 2007; Ovem, 2003; Warzink et al., 2016).

It should be noted that there are several approaches to measuring the efficiency of a commercial. For example, in the approach of two-dimensional models, we can use the sales effect approach (checking the increase in sales of a product or service after the advertisement) and the communication effect approach (including the method pre-test, post-test, self-report, visual self-report, and interview). In the approach of three-dimensional models, we can refer to two models, AIDA and Dagmar, which are based on determining a specific goal for the advertisement and measuring the degree of achievement of that goal after watching the advertisement (Rangebrian, 2018). The observational approach includes monitoring the purchase behavior of the consumer in different stages to investigate the purchase decision or change the attitude towards the brand and doing word-of-mouth advertising. However, considering the competitive environment, the lack of time and financial resources, and the market's high-risk level, using an automatic approach or a neuromarketing approach is far more accurate and cost-effective in the midterm (Li et al., 2016). In this approach, physiological parameters (heart rate, electrodermal activity, eye movements, and changes in brain waves) are measured after exposure to the TVC. As a great advantage, it is possible to examine the impact, especially the unconscious ones, of the commercial on the audience without any direct questioning (Ramsøy, 2015).

2-2. Neuromarketing

Neuromarketing is one of the emerging interdisciplinary studies. In other words, neuromarketing is the border between neuroscience, psychology, and marketing, which focuses on the emotional and cognitive reactions of consumers to marketing stimuli (Li 2019). Its goal is to better convey commercial messages to others and increase the probability of consumer purchase, which will reduce the cost of marketing and advertising (Mansor and Isa, 2020).

2-3. Efficient TV Commercials

When it comes to the efficiency of commercials, they need to first attract the attention of consumers. Attention develops brand awareness, which can lead to brand recall and recognition. Awareness of commercials shapes attitudes toward them, which influence brand attitudes and purchase intentions (Chang and Chang, 2014). Emotional and logical appeals can have different effects on commercials' attraction, awareness, attitude, and purchase intention. There is no consensus in the research community on the question of which type of commercial appeal attracts the attention of consumers the most. According to Panda et al. (2013), emotional appeals are used more than rational appeals to attract consumers' attention. However, Sadeghi et al. (2015) argue that rational appeals are more relevant and provide product information. Therefore, we may conclude that both types of appeals draw attention in different ways.

2-4. Efficient TVCs with neuromarketing approach

One main indicator of success and efficiency is the level of achievement. In fact, the success of any TVC depends on the extent to which it achieves its desired goals. The most important goal of a TVC is to create a favorable effect on the audience so as to create a positive image of the brand in the memory, encouraging consumption and purchase of the desired product or service (Deepak and Jayakumar, 2019). In the neuromarketing approach, an efficient TVC needs to create emotional arousal in the audience, attract attention, and be recorded in memory. For this purpose, the TVC should lead to the activation of 1. brain areas related to reward and pleasure 2. Prefrontal and occipital regions 3. emotional processing and 4. memory activation (Hsu and Chen 2020).

It can be concluded that the distinction of the present research is employing neuromarketing research literature and the panel of experts who have specialized in the field of neuromarketing, cognitive neuroscience, and TVCs design.

2-5. Factors related to the efficiency of TVCs with neuromarketing approach

As an indicator for entering the Delphi stage and typology and model design, 37 factors related to the efficiency of TVCs were taken from the research literature. According to a systematic review study conducted by Amiri et al. (2022) in the field of factors related to the effectiveness of advertisements with a neuromarketing approach, the main factors related to the effectiveness of a television commercial are listed in Table 1. These factors were considered as the primary factors in the framework of this research:

Table 1. Primary main factors in the research framework (Amiri et al., 2022)

Factors related to the efficiency of TVCs			
1	Cognitive and conscious information	20	Product engagement
2	Social and cultural values	21	Excitement
3	Symbols of authenticity and background	22	Content and message relevancy
4	after-sales service	23	Innovation
5	Draw attention	24	Arousal
6	Simplicity	25	unpredictability
7	Simple scenario	26	Humor
8	Negative emotions	27	Brand or product display repetition
9	Desirability/ Pleasantness	28	the place of the logo
10	Memory	29	Timing
11	Unconscious decisions	30	Fear
12	Cognitive decision making	31	Surrealistic images
13	Shock	32	Use of text
14	Familiar and routine elements	33	Price
15	Age	34	Speaker's voice
16	Gender	35	Audio symbols
17	Socio-economic level	36	Music
18	Narration	37	Background music
19	Positive valence / positive emotions		

Emotions: Emotions refer to a relatively short period of the coordinated brain, physiological, and behavioral changes that facilitate a response to an important external or internal event (Rüschendorf 2020, Borawska et al., 2020). The efficiency of TVCs can generally be divided into two dimensions: valence (relative pleasantness/unpleasantness) and arousal (physiological and mental intensity) (Betiga 2020).

Social and cultural values: Consumers' purchase behavior, when exposed to an ad, is different depending on whether they are alone or in a group. The fulfillment of social goals has a significant impact on the efficiency of ads. For example, if people know that by buying or consuming what is being advertised, they can attract more attention or belong to their desired groups, they are more likely to react positively to the advertisement and change their attitude or take action. In luxury purchases, people make the purchase on the condition that it fulfills at least one of their social goals. Social and cultural values have a positive effect on the efficiency of commercials (Jiang et al. 2020).

Informing factors: Any factor consciously providing information about the brand, product, or social message to the audience can be considered as one of the efficiency factors of the commercials. Providing information and emphasizing after-sales services (Zhao et al. 2018), related advertising elements and content with the message it intends to convey (Gordon 2017), the use of written and oral expression at the same time (Hsieh 2018), and also Price strategies which change the consumers' perception of the brand and product (Jiang, 2020) make the commercial more efficient.

Demographic characteristics: Demographic information of a society includes age, gender, and socio-economic level. Considering the social values of the target community in making a TVC can lead to an increase in efficiency. For example, in many situations, the purchase behavior in social situations is different compared to the isolation (Jiang et al. 2020 and Zhang 2019). Also, age and gender differences can play an important role in the audience's interpretation and perception of a brand, which leads to an increase in the efficiency of the commercial only if the TVC fits the target group (Kaklauskas et al. 2019).

Commercial structure: A commercial can be analyzed from the point of view of complexity and simplicity. The analysis of the results shows that the lowest level of complexity in advertising plans leads to less brain processing and a higher possibility of being recorded in memory, as well as a more positive attitude towards the brand (Pileliene et al. 2016). The structure of a commercial can be divided into short (less than 60 seconds) / long with music / without music in terms of timing and audio elements. Short rhythmic commercials can have a greater impact on the audience (Levrini et al., 2019 and G.Wolf et al., 2019).

Storytelling: The presence of a narrative structure in the ad leads to higher theta wave power in the left frontal region of the brain. Having a narrative or story aspect affects the audience's preference, and verbal narratives lead to an impact on the audience's emotions. Studies have shown that having a story-based structure increases the positive efficiency of the TVC (Vallejo et al. 2019).

Innovation: Innovation plays an important role in many aspects of our lives: it is essential in education, art, science, and of course in the design and development of successful advertising campaigns (Rüschendorf 2020, Buck et al., 2016). There are two major dimensions of innovative commercials that most researchers agree on: divergence and relevance (Rüschendorf, 2020; Mostafa, 2020; Chen et al., 2016). It should be noted that divergence here is what distinguishes innovative commercials from other usual ones (Zhou et al., 2018). Innovation is an evolutionary process of adopting any changes related to new tools, systems, policies, or services in an organization. Therefore, innovation can be considered as an organizational capability, for it uses resources with new capabilities to create value. The importance of innovation has led researchers to identify different drivers of innovation (Sahoo, 2019). Moreover, the fundamental role of innovation in increasing the competitiveness of a company is widely recognized. (De Martino & Magnotti 2018).

According to the research literature in the field of marketing, especially neuromarketing, as well as the research conducted in the field of the efficiency of commercials, there is no comprehensive model for an efficient television commercial based on the findings of research in the field of neuromarketing. Most research has only investigated the efficiency of commercials with no model for an efficient commercial. In addition, the models presented in the background of the research have also pointed to limited aspects of commercials. Therefore, there is no available leading model for TVCs designers for identifying efficient types of commercials and applying their dimensions and components.

3. Research method

The present research was conducted with a qualitative approach of an exploratory type with the aim of typology of factors related to the efficiency of TVCs with a neuromarketing approach using the Delphi method. The implementation of the research is inductive with a qualitative strategy. The Delphi method requires that information be received and analyzed from experts. To select the expert panel, the purposeful snowball sampling method was used until theoretical saturation. The selection criteria of experts are theoretical mastery, practical experience, willingness, accessibility, and ability to participate in research. The number of participating experts in the reviewed research is usually between 14-30 (Ramesh et al., 2010). The statistical population of this research consists of experts in neuromarketing, and cognitive neuroscience, as well as designers of TVCs in the year 2022. 15 experts were selected based on their job background and field of activity and other criteria. Occupational and educational statistics of the panel experts included: 33% doctoral level, 53% master's degrees, 14% bachelor's degrees, 46% business management, 20% graphics, 13% psychology, 6% neurosciences, 6% management, and 6% computer software. In terms of job position experts were classified as 20% as university faculty, 20% as graphic designers, 6% as head of advertising agency, 13% as advertising managers, 6% as media analysts, 20% as sales managers, 6% sales and finance manager, 6% creative manager and 6% animation content production managers.

In order to check the indicators, the questionnaire tool in the 5-option Likert scale was used. To measure the validity, the face validity method was used. If the questions that target the subject of the research are approved by the experts, the validity of the research is confirmed, which was achieved in this research. To measure the reliability, Cohen's kappa method was used in Spss software. In this method, the minimum acceptable value of the kappa coefficient is more than 0.6 (Gwet, 2014), and in this research, the value of the kappa coefficient was 0.70.

The objectives of this research include determining the most important dimensions and components of an efficient TVC with a neuromarketing approach. In the first stage, based on the research conducted by Amiri et al. (2022), 37 factors related to the efficiency of TVCs with neuromarketing approach in the form of 5 main dimensions and their

components were presented to the panel of experts. In the first round of Delphi, among the factors of the research literature, 2 factors were not confirmed and the other factors were integrated and confirmed in 5 dimensions and 19 components. At the end of each round, the experts were asked to validate the listed factors and announce their suggestions. In response to the open question at the end of the first round of Delphi, 14 new components were proposed by the experts, of which 4 components were rejected due to lack of relevance to the content of the research, and 10 other components entered the second round of Delphi. At the end of the second round, 6 components of the proposed factors were rejected and 4 components were approved. In response to the open question at the end of the second round, 2 dimensions were proposed by the experts and entered the third round of Delphi. At the end of the third round of Delphi, 7 dimensions and 24 components were finally approved and presented in the form of a model.

4. Research findings

Based on the checklist prepared based on the theoretical basis and research literature, among the factors related to efficient TVCs with a neuromarketing approach, 37 factors were identified as influential factors. A score checklist based on a 5-option Likert scale was provided to the experts of the panel. If 70% of the experts give an index a very high (5) or high (4) importance level, it shows experts' agreement, based on which factors were removed or confirmed. The results of the first round of Delphi are shown in the following table:

Table 2. results of the first round of Delphi

Indicator	Average	standard deviation	The number of 4(much) or 5 (very much) answers	confirmed
1	4.0	1.07	12	✓
2	3.9	0.64	12	✓
3	4.5	0.64	14	✓
4	4.5	0.74	13	✓
5	4.2	0.77	12	✓
6	4.3	0.72	13	✓
7	4.3	0.7	13	✓
8	4.2	1.01	14	✓
9	4.3	0.59	14	✓
10	4.1	0.74	12	✓
11	4.6	0.63	14	✓
12	4.2	0.68	14	✓
13	4.3	0.72	13	✓
14	4.5	0.64	14	✓
15	3.8	0.77	9	
16	4.0	0.93	8	
17	4.3	0.8	14	✓
18	4.4	0.83	12	✓
19	4.9	1.3	12	✓
20	4.1	0.74	12	✓
21	4.3	0.82	12	✓
22	4.2	0.68	13	✓
23	4.1	0.88	13	✓
24	4.0	0.65	12	✓
25	3.9	0.88	13	✓
26	4.1	0.99	13	✓
27	4.1	0.83	12	✓
28	4.0	0.85	12	✓
29	4.1	1.06	13	✓
30	3.9	0.74	13	✓
31	4.1	1.13	12	✓
32	4.3	0.72	13	✓
33	4.1	0.64	14	✓
34	4.2	0.86	13	✓
35	4.3	0.7	12	✓
36	4.1	0.74	12	✓
37	4.3	0.9	13	✓

Based on the information in the table from the first round of Delphi, it was determined that out of the 37 identified factors, age and gender were not confirmed. Other factors were approved by experts. In addition, due to the similarity or ability to integrate the factors, a classification was suggested by the experts, which was presented in the following figure:

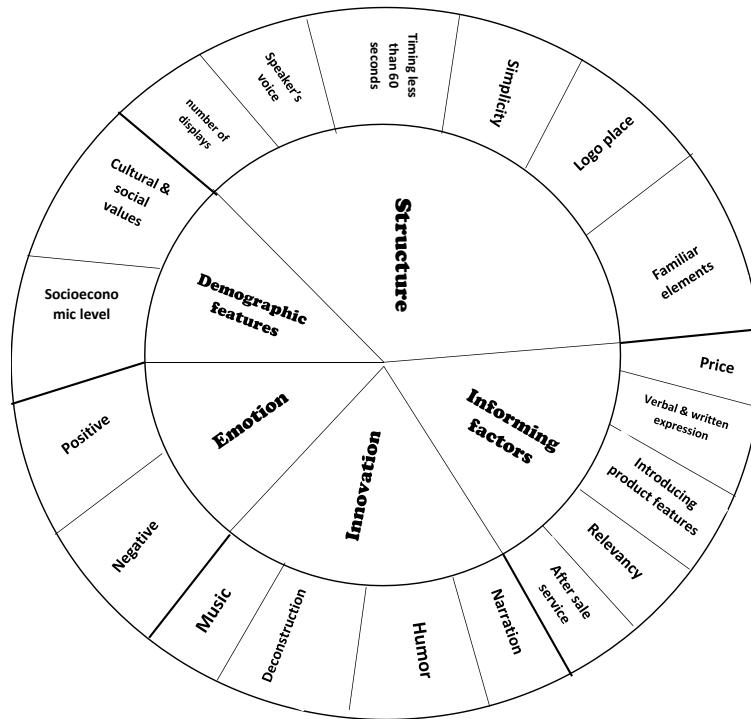


Fig1. The first round of Delphi figure

In response to the open question at the end of the first round of Delphi, some factors were suggested by the experts, including (using child figures in advertisements, nostalgia, unexpectedness, pleasure, amphibology, exaggeration, product life cycle, brand age, accent and dialect of the speaker, animated video, buyer's role, environmental advertising, and purchase pain). Eventually, due to the focus of the research on video advertisements (television commercials), the factors of the product life cycle, buyer's role, purchase pain, and environmental advertising were not accepted, but other proposed factors entered the second round of Delphi.

Table 3. The results of the second round of Delphi

Indicator	Average	standard deviation	The number of 4(much) or 5 (very much) answers	confirmed
38	4.4	0.63	14	✓
39	4.4	0.74	13	✓
40	4.1	0.8	10	
41	3.8	1.15	9	
42	4.1	0.74	12	✓
43	3.7	0.98	12	✓
44	4.3	0.62	14	✓
45	3.9	0.74	10	
46	3.6	0.91	7	

Based on the results of the second round, the criteria of using a child figure in the TVC, nostalgia, the brand age, accent and dialect of the speaker, and the animated video were not confirmed. The criteria of pleasure, amphibology, exaggeration, and unexpectedness were confirmed. In response to the open question at the end of the second round of Delphi, the experts suggested adding the dimensions of "scenario" and "artistic elements" as well as the integration of some components. To reach the final consensus, the third round was also conducted and the final results were obtained.

Based on the results of the third round of Delphi, all factors were confirmed. Finally, during the Delphi process, the factors numbered 15, 16, 40, 41, 45, and 46, respectively, age, gender, using child figure, nostalgia, brand age, accent and dialect of the speaker, and animated video were eliminated. Factors numbered 38, 39, 42, 43, and 44 respectively representing pleasure, amphibology, exaggeration and unexpectedness were confirmed. According to the factors suggested and confirmed in the above steps as well as the suggestions made by the panel of experts, the types and components of an efficient TVC are presented in the form of the final research model in the following figure:

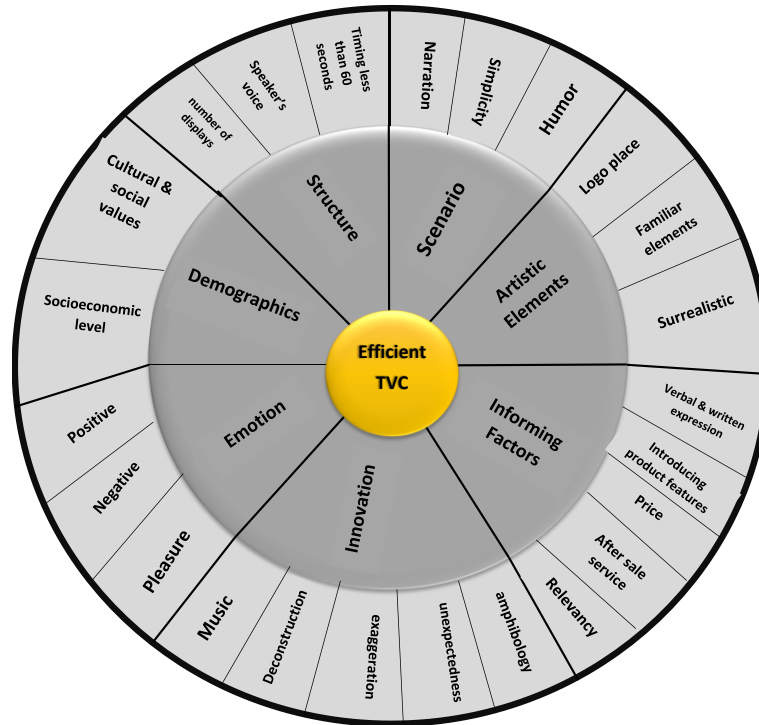


Figure 2. Efficient TVC model with neuromarketing approach

4-1. Discussion and review

Regarding the results of the research done by Amiri et al (2022) based on the review of the research literature in the field of measuring the effectiveness of advertisements with a neuromarketing approach, as well as obtaining the opinions of experts panel in the neuromarketing field, the dimensions and components of an efficient TVC in the form of 7 dimensions and 24 components were obtained and presented in Figure 2 as an efficient TVC model. In the Delphi process, two dimensions of scenario and artistic elements were added with the opinion of experts as new dimensions in the efficiency of a commercial. Lidol et al. (2010) and Najm et al. (2015) referring to the types of artistic elements used in the design of a TVC, concluded that the use of different visual elements can influence the attention of the audience. In the current research model, the dimension of artistic elements including the components of using surrealistic images, the number of times showing the product, and also the place of the logo, is consistent with the aforementioned research. Zhan et al. (2015) studied the impact of different scenarios of a TVC on the audience. They concluded that although it is necessary to match the scenario used with the product and the message of the ad, among the 7 scenarios that can be used in the design of an ad, the comedy, emotional and informative scenarios were the most efficient. In the scenario dimension, in the current research model, there are three components: simple scenario, narrative and humorous, which are in line with the mentioned research.

Based on the obtained results in comparison with the results of other researches in the field of neuromarketing, Pilelienè (2019), Levrini (2019), Golnarnik (2019), and Mostafa (2020) in the analysis of their research about the efficiency of TVCs with neuromarketing approach, they concluded that the factors related to the structure of the commercial play a significant role in increasing the efficiency of the TVCs. Rüschenndorf (2020), Mustafa (2020), and Zhou (2018) showed in their research that the features related to innovation lead to greater ad effectiveness by

increasing the level of initial attention and increasing the probability of being recorded in memory. Mateusz (2020) and Kaklauskas (2019) pointed out that if the content of the commercial is designed according to the demographic information of the target community, it will lead to greater efficiency and a higher probability of changing the attitude towards the brand. Jiang et al. (2019) and Zhou (2018) each separately emphasized the important role of informative factors as a competitive advantage in a commercial. These factors lead to a change in the consumer's attitude by increasing awareness and cognitive processing of the brain along with other factors that affect unconscious processing, which means that the TVC was efficient. In other research, Li (2019) analyzed that the emotional factors used in TVCs lead to the consumer's decision by raising the level of attention and activating the areas related to emotional processes in the brain. The use of the emotional factor following the content of the message and the audience leads to an increase in the efficiency of the commercial. The main factors of the efficient TVC model were extracted from the research literature with the neuromarketing approach, which was presented in Table 1.

It is necessary to explain that among the conducted research, several indicators have been presented for the efficiency of a commercial. These indicators can be examined, integrated, and categorized from different angles and points of view. For instance, different scenarios can be used in the design of a TVC, and various artistic elements can also be applied. Furthermore, in dimensions such as innovation, demographic characteristics, and emotions, there are various influential indicators. In the classification of the current research, according to the neuromarketing literature and experts, after going through the Delphi steps, 7 types were identified, each of which has some components. The types and components mentioned in the research model are considered necessary factors for the efficiency of a TVC.

5. Conclusion and suggestions

As mentioned, the purpose of the present research is to typify the elements of efficient TVCs with the neuromarketing approach. Factors related to the efficiency of TVCs with the neuromarketing approach based on the literature and research background include demographic characteristics, informing factors, emotions, structure, and innovation. Scenario and artistic elements used in the visual design of TVCs are considered as two other key factors in the efficiency according to the expert panel.

The emotional elements used in an efficient TVC cause emotional arousal, and along with the cognitive features, they can lead to attracting the attention of the consumers. The use of innovative stimuli such as exaggeration or deconstruction, humorous scenarios, storytelling, as well as artistic elements, and the components of cultural values make a TVC memorable. Activating the memory leads to a change in attitude towards the advertised product or service and is associated with a favorable change in consumer behavior.

Considering the importance of TVCs as high-impact business stimuli in neuromarketing and the necessity to save the costs of designing and making commercials, TVC designers need to know the types and components of an efficient TVC and apply them to the advertising stimuli. Based on the findings of the research, to increase the efficiency of a TVC on the audience, the following suggestions are offered to all the marketers, TVC designers as well as all neuromarketing experts and researchers:

5-1. Practical suggestions:

In order to design an efficient TVC, advertising and marketing experts should select the intended components from the 7 types identified in this research and include them in the commercial. To increase efficiency, it is necessary to take the following seven main factors into account:

- One of the components of a simple scenario, humor, or narration of a story should be used in the design of the TVC scenario.
- The designed TVC should include one or more innovative aspects such as amphibology, unexpectedness, exaggeration, deconstruction, and music with a different rhythm.
- According to the type of TVC, positive emotions, negative emotions, or pleasure should be included. Negative emotions are often used for social and health advertisements.
- The designed TVC should match the demographic characteristics of the audience in terms of socio-economic class and cultural values.
- In the dimension of structure, the speaker's voice should be used and the duration of the video should be less than 60 seconds. The image of the intended product or brand should also be displayed many times.
- Artistic elements such as surrealistic images or familiar and routine elements should be embedded.

- The TVC should have one of the characteristics of written expression, expression of product features, reference to after-sales service, and price as the components of informing factors.
 - It is suggested that the TVC be simple (low complexity level), short (less than 45 seconds), and rhythmic.
 - Using humor, surrealistic images, and other unexpected events can increase innovation so that the TVC would be recalled as a different and memorable one.

5-2. Suggestions for future research:

- In future research, with the neuromarketing approach, the components of the current research model can be measured by using an electroencephalogram (EEG) and electrodermal activities (EDA).
- The present research model can be measured by the method of structural equations. It is also possible to level the components with the method of interpretive structural modeling. In this regard, the impact and impression of the components can also be identified with the Dematel method.
- It is also suggested that the efficiency of the model presented in the current research should be checked with other approaches to measuring the effectiveness of ads.

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