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## Graphic design as an indicator of social transformations

Maryna Kolosnichenko \*  
Oleksandra Kolisnyk \*\*  
Yevhen Gula \*\*\*  
Antonina Dubrivna \*\*\*\*  
Tetyana Nikolayeva \*\*\*\*\*

### ABSTRACT

**Objective:** The aim of the article involved the empirical study of the correlation between the use of graphic design and the perception of social transformations in society. **Methodology:** Survey, testing, socio-psychological adaptation diagnostics private semantic differentiations, EPA (Evaluation - Potency - Activity) Scale were used in the research. Statistical calculations were performed through factor analysis, Mann-Whitney U test and Pearson correlation coefficient. The expert group selected 5 social advertisement items out of 40 samples. According to experts, these samples meet the criteria of professional artistic performance and include strong emotional meanings. Samples selected by the expert group were used as stimulus material. **Results:** There is a division of provocative advertisement and non-provocative advertisement on the basis of artistic form and nature of the information message. The data obtained testify that the design of social advertisement is an indicator of social change in society. Graphic design is able to influence the mood and shape the worldview perception of the advertising product. Graphic design help to study the respondents' readiness for the introduction of a particular narrative into the discourse, that is for shaping public opinion.

**KEYWORDS:** Narrative, digital environment, social change, social advertisement.

\*Doctor of Technical Sciences, Professor, Dean of the Faculty of Design, Kyiv National University of Technology and Design, Kyiv, Ukraine. ORCID: <https://orcid.org/0000-0003-0020-3214>. E-mail: [kmar.design@gmail.com](mailto:kmar.design@gmail.com)

\*\*Doctor of Philosophical Sciences, Professor, Department of Fine Arts and Graphic Design, Faculty of Design, Kyiv National University of Technology and Design, Kyiv, Ukraine. ORCID: <https://orcid.org/0000-0002-4374-6043>. E-mail: [kolyisnik\\_ov@knutd.edu.ua](mailto:kolyisnik_ov@knutd.edu.ua)

\*\*\*Professor, Head of the Department of Fine Arts and Graphic Design, Faculty of Design, Kyiv National University of Technology and Design, Kyiv, Ukraine. ORCID: <https://orcid.org/0000-0002-3559-2179>. E-mail: [eivgeniy.gula@gmail.com](mailto:eivgeniy.gula@gmail.com)

\*\*\*\*PhD in Art Studies, Associate Professor of the Department of Fine Arts and Graphic Design, Faculty of Design, Kyiv National University of Technology and Design, Kyiv, Ukraine. ORCID: <https://orcid.org/0000-0001-8012-6946>. E-mail: [dybrivna.ap@gmail.com](mailto:dybrivna.ap@gmail.com)

\*\*\*\*\*PhD in Technical Sciences, Associate Professor of the Department of Ergonomics and Design, Kyiv National University of Technologies and Design, Kyiv, Ukraine. ORCID: <https://orcid.org/0000-0002-9353-9827>. E-mail: [nik.taniya@gmail.com](mailto:nik.taniya@gmail.com)

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## El diseño gráfico como indicador de las transformaciones sociales

### RESUMEN

**Objetivo:** El objetivo del artículo implicó el estudio empírico de la correlación entre el uso del diseño gráfico y la percepción de las transformaciones sociales en la sociedad. **Metodología:** En la investigación se utilizaron encuestas, pruebas, diagnósticos de adaptación sociopsicológica, diferenciaciones semánticas privadas, Escala EPA (Evaluación - Potencia - Actividad). Los cálculos estadísticos se realizaron mediante análisis factorial, prueba U de Mann-Whitney y coeficiente de correlación de Pearson. El grupo de expertos seleccionó 5 artículos de publicidad social de 40 muestras. Según los expertos, estas muestras cumplen con los criterios de desempeño artístico profesional e incluyen fuertes significados emocionales. Las muestras seleccionadas por el grupo de expertos se utilizaron como material de estímulo. **Resultados:** Hay una división de publicidad provocativa y publicidad no provocativa sobre la base de la forma artística y la naturaleza del mensaje de información. Los datos obtenidos atestiguan que el diseño de publicidad social es un indicador de cambio social en la sociedad. El diseño gráfico puede influir en el estado de ánimo y dar forma a la percepción de la cosmovisión del producto publicitario. El diseño gráfico ayuda a estudiar la preparación de los encuestados para la introducción de una narrativa particular en el discurso, es decir, para formar la opinión pública.

**PALABRAS CLAVE:** Narrativa, entorno digital, cambio social, publicidad social.

### Introduction

A distinctive feature of the modern world is its integration into innovative variable processes. The most important thing is its quality indicators and, above all, the exponential pace of development. Li (2021) proves that social transformation of the factors that determine the actual features of the development of modern human potential is an important scientific and practical task.

Social transformation is a process of structural social changes in society, which are characterized by their high efficiency, creativity, reconsideration of the importance of existing goals. This is a period when much of the change depends on the human factor, the level of consciousness of citizens, and their needs for new forms of sociality. Indicators of such changes in society are its various phenomena. In recent decades, there has been a tendency to reflect modern social transformations in the features of such a social phenomenon as graphic design (Scolere, 2019).

Graphic design as a design and artistic activity is aimed at creating or changing the visual communicative environment in accordance with certain tasks and requirements (Stewart & Kitchens, 2021). Graphic design differs from “subject” design because it is not related to the artistic design of material objects, but to the world of information. Graphic design is currently used in advertising, publishing and printing, cinema, television, computer and electronics, and other media. The information messages are prepared by graphic design methods with the help of graphic images. Ideas about any objects, phenomena or processes of the real world are produced on their basis (Hordiichuk, 2021).

A visual communications specialist needs to understand all the responsibility to society for the design product he creates. It is necessary to understand what social and cultural problems of society need to be covered, what psychological and ethical methods of manipulation can be used (Boyd & Holton, 2018).

From this perspective, the graphic designer performs a special mission, being a translator of the ideas of society, shaping the attitude of members of society to universal ethical values. In this context, the creation of methods for analysing graphic and computer design is of particular importance (Udris-Borodavko, 2018).

The successful functioning of the social policy system is of particular importance in the context of technological modernization in terms of market relations. A system of social indicators is needed for these purposes. Indicators are a partial reflection of reality. One of the characteristics of social indicators is that they do not have to be absolutely objective. This definition indicates that people’s social needs are diverse — they depend on many personal qualities (Pedwell, 2021).

Social transformation Indicators are based on life satisfaction; social optimism; financial situation. Graphic design can be one of the indirect indicators of social transformation of society. Changes in the social environment can be traced through the analysis of plots, colour palette, shapes, expositions and compositions of advertising poster design (Pavlovskaya, 2018).

We can conclude based on the analysis of modern scientific literature that graphic design as an indicator of social transformation is poorly studied. By analysing the plots, colour palette, shapes, exhibitions and compositions of the design of advertising posters, you can trace changes in the social environment (Margolin, 2019). The analysis of the relationship

between trends in graphic design and social transformations is poorly covered in the scientific literature, so this issue requires special studies.

The aim of the article was an empirical study of the correlation between the use of graphic design and the perception of social transformations in society.

The aim provided for the following research objectives:

1. Study the correlation between graphic design and public sentiment.
2. Explore the possibility of using graphic design in the analysis of social transformations as an indicator.

### 1. Literature review

Many researchers studied the problems of interpreting graphic and computer design. Chen and Wang (2015) explored the nature and essence of provocative design in their work. The authors pay considerable attention to the analysis of permissible manipulations in the design of advertising. The authors propose a division of manipulation methods into permissible and inadmissible. Boyd and Holton (2018) considered shock in advertising as a phenomenon. The authors pay attention to the psychological state of the consumer of graphic design products, depending on the artistic techniques used to evoke a particular emotional state. Dziobczenski et al. (2018) provided the classification of shock techniques in design. The authors classify artistic techniques of manipulation in graphic design. The author singles out such tools for evoking a particular emotional state of the viewer as colour, shape, light and shadow, saturation, acute-angled design elements. Katz (2018) studied the phenomenon of the influence of graphic design on the formation of the emotional background of the viewer of the graphic product. The author considered the concept according to which the viewer acts as a co-author of his/her own emotional state by consuming graphic design products. According to the author, the design itself is an indicator of the viewer's emotional state on the one hand, while being a catalyst for the formation of attitudes to the phenomenon depicted by artistic means on the other hand. Shramko (2021) studied scientific approaches to the evaluation of graphic design. The author developed a scientifically sound method of analysis of graphic design products and their impact on consumer consciousness.

The following researchers were engaged in the development of the method of expert evaluation of the design:

- in the field of social communications and social transformations — Hordiichuk (2021);
- in the field of linguistic assessment of the impact of design on social transformations (de Haas et al., 2020);
- in the field of psychology — Boyd and Holton (2018);
- in the field of sociology — Kent and Buechner (2021).

These authors note that design is of great importance in everyone's life. Covering almost all areas of life, design shapes the attitude of society to the spiritual values and traditions of society. Design dictates fashion, sets new trends, creates comfort. We can identify the following series of contradictions based on scientific literature reviewed on the topic:

- scientific and theoretical: between the need for theoretical studies of the problem of developing methods for analysing social transformations and poor theoretical background for the analysis of graphic design;
- scientific and methodological: between the recognition of the importance of the intensified use of graphic design and poorly studied methodological and technological aspects of such activities.

## 2. Methods

### 2.1. Research procedure

This research was conducted in three stages in order to study the opportunities that graphic design offers in the analysis of social transformations.

Stage I of the experiment (September 2020 - January 2021) — preparatory. Experimental work at this stage included:

- study of indicators of social transformation;
- analysis of factors that may distinguish the indicator among other indicators of social development;
- study the possibilities of graphic design to be an indicator of social transformations;
- preparation for the study.

Stage II (January - May 2021) — summative. The summative stage involved the experimental work:

- study of the perception of graphic design of social advertisement;

- conducting a survey to study the attitude to provocative graphic design;
- analysis and processing of the results obtained during the experiment;
- summarizing the results of the study.

## 2.2. Sampling

Residents of Kyiv region, citizens of Ukraine, men and women aged 18 to 45 (300 people) took part in the study of consumer attitudes to graphic design in provocative advertisement. Respondents were selected from among those willing to take part in the survey, which was announced on Facebook and Instagram. This sampling method ensures transparency and reliability of research results. Gender, age, social status of respondents roughly reflect the general population of consumers of advertising products in Kyiv region.

The study also involved a group of 30 experts — graphic designers from Kyiv aged 25 to 40 years. Experts were asked to choose from 40 samples of graphic design of social advertisement, which are presented in the ranking of the 40 strongest social posters on the website <https://uamodna.com/articles/40-naysyljnishyh-socialjnyh-posteriv-yaki-zmusyatj-tebe-spynytysya-y-pomirkuvaty/>. The experts were tasked to choose samples that, in their opinion, satisfy the criterion of professionalism and evoke strong emotions in the viewer.

The majority of respondents were women (75.6%), while the share of men surveyed was 24.4%. The analysis of the survey results revealed clear preconditions for the impact of gender factor on answers to some questions. Mostly people aged 18 to 24 answered the questions offered in the questionnaire. The age category of 36-45 was the least represented among the respondents. More than half of the respondents have higher education (61%). The least share of the respondents had general secondary education (2.4%), 19.5% of respondents had secondary special education, 17.1% had undergraduate degree. These statistics lead to a credible effect in assessing the answers by respondents, the level of education implies greater understanding of the topic. The vast majority of the respondents (51.2%) were employed. The respondents who work concur with studying rank second, their share is almost twice less.

All stages of the pedagogical experiment comply with the generally accepted academic ethical principles of research. All respondents were asked to respond honestly. Respondents gave their consent to the processing of personal data and the publication of research results in scientific papers. The article involves reliable research methods and data processing tools.



### 2.3. Implemented methods

The following methods were used in the study:

1. Diagnostics of socio-psychological adaptation (Carl Rogers, Rosalind Diamond (Petocz & Smith, 2007)). The questionnaire is designed to study the features of socio-psychological adaptation and related personality traits. The stimulus material is represented by 101 statements. The authors distinguish the following 6 integrated indicators:

- a) Adaptation;
- b) Acceptance of others;
- c) Internality;
- d) Self-perception;
- e) Emotional comfort;
- f) The desire to dominate.

2. Survey method. A questionnaire was developed as part of the sociological direction of the study in order to identify the attitude of consumers to provocative design in advertising (Appendix 1). This questionnaire provides an opportunity to establish the recognition of provocative social advertising design among respondents based on the results of the study (Gupta & Kapoor, 2020).

3. The EPA (Evaluation - Potency - Activity) scale assumes that by placing a stimulus object on the positive pole of the "Evaluation" factor, the subject expresses his/her satisfaction with this object; by placing it on the positive pole of the "Potency" factor, the subject experiences "tension", expresses a static effort associated with a representative object; by placing the object on the positive pole of the "Activity" factor, the subject experiences "excitement", that is he/she prepares for quick action when meeting a dynamic object (Petocz & Smith, 2007).

The tools of psychosemantic research includes conducting an associative experiment to form descriptors. Respondents were in turn offered social advertisements (Appendix B), where it was required to offer an associative series consisting of 10 associations for each advertisement.

Next, those pairs of descriptors that are most suitable for the study of goals, objectives and hypotheses of the study were selected from the available list of bipolar scales. Of these,



24 bipolar scales were compiled and used in the survey. The results are presented in Appendix C.

4. Private semantic differentials (SD). Additional or completely different from universal factors are introduced when building SD. Private factors differ from the universal dimension. There may be more than three factors in such differentials. As a rule, such differentials simply complement universal factors, detailing them while maintaining correlations (Fan, 2013).

5. Factor analysis. Factor analysis in the educational literature is interpreted as a section of multidimensional statistical analysis that combines methods for estimating the dimensionality of many observed variables by studying the structure of covariance or correlation matrices (Lewthwaite & Holmes, 2018).

6. Mann-Whitney U test is a non-parametric test that allows testing the hypothesis that the values of the two sets from which the compared independent samples are derived differ from each other. This method is used in the research to determine the statistical significance of differences in means.

7. Pearson correlation coefficient is used to study the relationship between two variables measured in metric scales for the same sample. It allows determining the proportionality of the variability of two variables.

### 3. Results

The expert group selected 5 social advertisements out of 40 samples. According to experts, these samples meet the criteria of professional artistic performance and contain strong emotional meanings. Selected samples were used as stimulant material for further study. The first sample — “Victims are people just like you and me” — was developed by Advico Y&R advertising agency, Zurich, Switzerland. The artistic image encourages reflection on the topical issue of violence. The emotional image motivates the viewer to see the victim of torture in every ordinary person. The second sample — Stop the Violence: Don't Drink and Drive — is developed by Terremoto Propaganda, Curitiba, Brazil and deals with road safety issues. The authors present a car smash in the form of a fist fight. The third sample of graphic design — Save Paper — Save the Planet — developed by the Danish agency Saatchi & Saatchi, attracts attention to the tragedy of modern consumer society. Every paper napkin used destroys the planet's forests. The fourth sample — “What we see when you smoke” —

developed by JWT, Atlanta, USA calls to quit smoking in a satirical and gloomy way. And the fifth sample of graphic design of social advertisement — “See how easy feeding the hungry can be” — was developed by the South African agency TBWA\Hunt\Lascaris. The authors of advertising design raise the issue of hunger. Through emotional manipulation, the product of graphic design makes you think that feeding a hungry child is easier than it seems.

The following results were obtained in the course of the research.

An analysis of significant differences was conducted in order to identify differences in the indicators of socio-psychological adaptation between respondents after stimulation with graphic samples. Using the Mann-Whitney U test, significant differences were found on the Rogers-Diamond socio-psychological adaptation scales (Table 1).

Table 1. Differences between respondents on the Rogers-Diamond socio-psychological adaptation scales

Indicator	U	p
Adaptation	488	0.018
Acceptance of others	444	0.005
Adaptability	476	0.013
Mendacity	439	0.004
Self-acceptance	508	0.032
Rejection of others	450	0.006

There is a level of high significance (0.001 - 0.01) according to the statistical criterion for determining the mathematical significance of Mann-Whitney differences between respondents. Scales such as: “Acceptance of others”, “Mendacity”, “Rejection of others” of the Rogers-Diamond socio-psychological adaptation method. And the medium significance level (0.01-0.05) according to the Mann-Whitney statistical criterion for determining the mathematical significance of differences included “Adaptation”, “Adaptability”, “Self-acceptance scales.

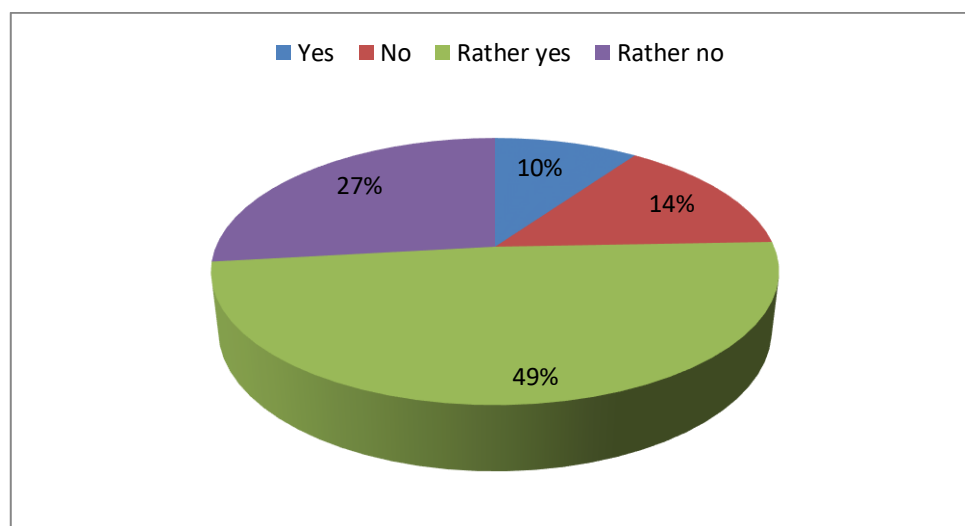
The level of significance (asymptotic significance (2-sided)) gives reason to believe that the results are statistically significant, and we can say that there are differences between

respondents before and after viewing the stimulus material. Indicators of scales “Adaptation”, “Acceptance of others”, “Adaptability”, “Self-acceptance” are higher among respondents after viewing the advertisement. Indicators of scales: “Mendacity”, “Rejection of others”, “Behavioural regulation” (BR), “Personal adaptive potential” and “Emotional excitability — balance” are higher among respondents before viewing advertisement.

Pearson’s correlation coefficient identified three correlations between the psychotic responses, adaptability, and dominance scale. Medium statistical significance ( $r=0.474$ ;  $p=0.005$ ). “Adaptability” — moderately positive correlation of high statistical significance ( $r=0.586$ ;  $p=0.000$ ). “Emotional comfort” — moderate positive correlation of high statistical significance ( $r=0.603$ ;  $p=0.000$ ).

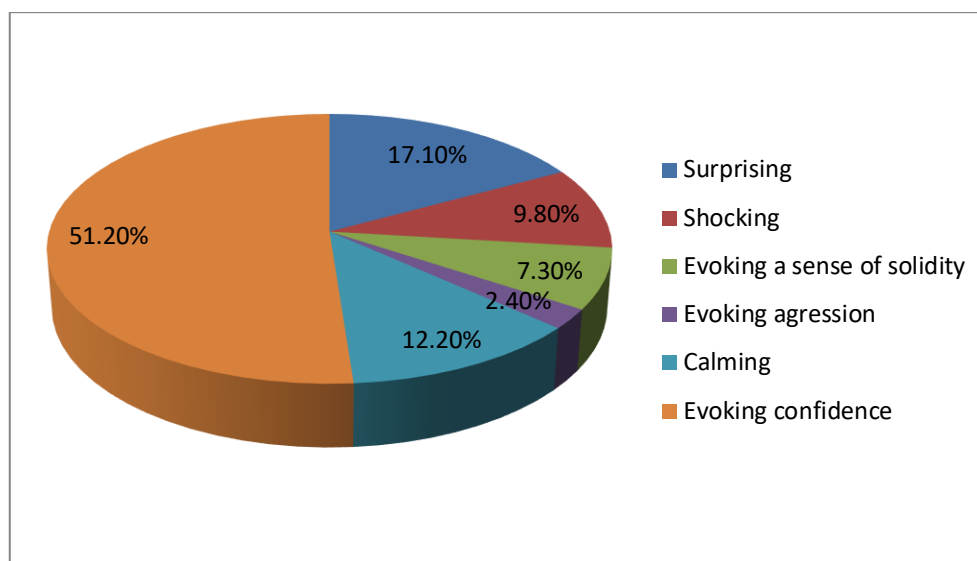
There were 48.8% of respondents say that the opinion of others is more important to them (Figure 1). But given the fact that this answer was introduced in order to soften the presentation of a probably unpleasant question to respondents, and give the respondent a choice, we should leave only two categories of answers to this question “YES” and “NO”, and consider options “RATHER YES” and “RATHER NO” only as positive and negative.

Figure 1. Distribution of respondents by propensity to be influenced by public opinion



The following answers were received to the question of which advertisement usually attracts your attention (Figure 2).

Figure 2. Distribution of responses according to the choice of advertisement that attracts attention



To the question “Which design of social advertisement is provocative for you?” most respondents answered that it is advertisement that affects the subconscious by shocking, causing negative emotion (61.1%). And it is also advertisement that encourages or forces to buy goods/use the service (19.5%). There is a negative assessment of provocative advertisement in people’s minds. The essence of provocative advertisement for respondents is expressed in shock and manipulation.

The following answers were obtained to the question: “How does provocative advertisement differ from ordinary advertisement that does not contain provocation?” (Figure 3).

The answer options were distributed almost evenly. Respondents noted immorality (29.3%) and call for action (26.8%) as the predominant distinctive features of provocative advertisement. According to respondents, provocation in advertisement is expressed in the following (Figure 4):

The most popular answer — advertisement contains harsh statements, insults. Answer options: “the advertisement has a sexual connotation” and “the advertisement contains foul language or its consonance” rank second. “Advertisement uses sarcasm, ridicule” ranks third.

Figure 3. Distribution of answers by distinctive features of provocative advertisement

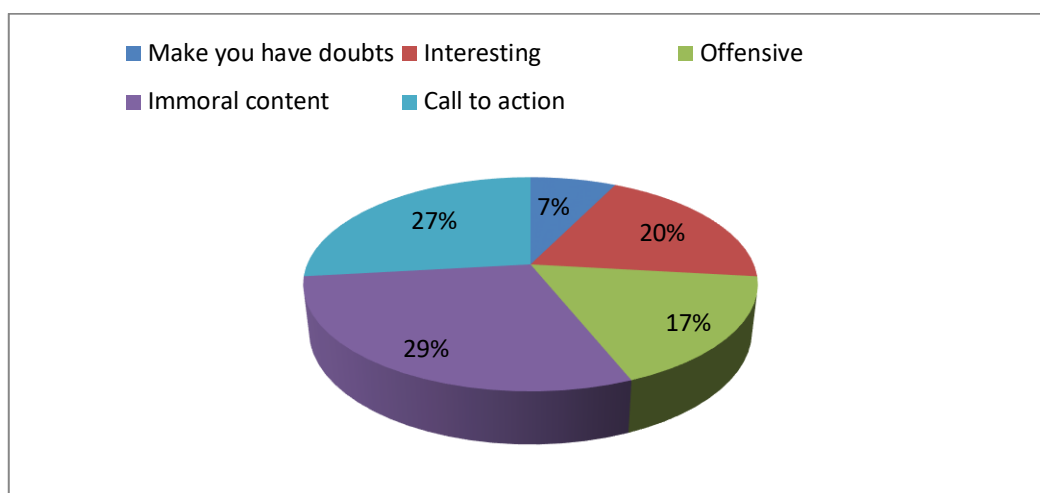
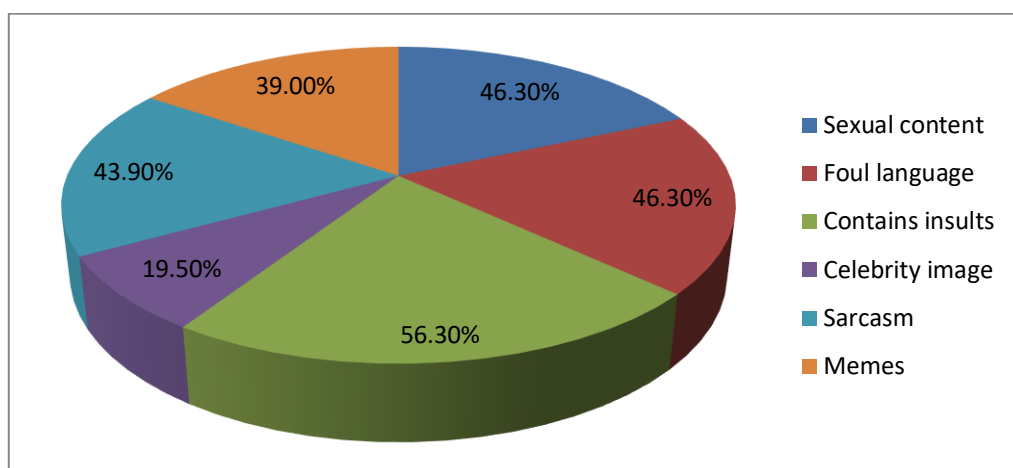


Figure 4. Distribution of answers by elements of provocation



The factor analysis revealed the following results of the correlation between the presented advertisements. The correlation between advertisement design is expressed through two factors, that is two different categories. Advertisement is distributed by the respondent on a certain peculiar feature: f1 — Advertisement 1 correlates with Advertisements 2, 5 (advertisements that do not contain provocations, have one artistic and visual form, have a positive information message); f2 — Advertisement 2 with Advertisements 3, 5, (advertisements containing provocation, having one artistic and visual form, having negative (rough) nature of the information message).

So, there is a division of provocative and non-provocative advertisement on the grounds of visual form and nature of the information message. Advertisement 2 is directly correlated with Advertisement 3.

Thus, the correlation between advertisements is caused by the same style and design, the general idea of opposition and provoking nature of the message. In this case, there is a clear division between the factors and the advertisements included in them, in other words, a markedly clear division of provocative and non-provocative advertisements. The correlation between Advertisement 1 and Advertisement 5 is negative (the stark contrast between Child-Adult/Skinny-Fat/Small-Big). Advertisement 3 correlates with Advertisements 2, 5 (the same semantic load - obesity). Advertisements 1 and 4 are negatively correlated (bipolar relationship: skinny/fat, small/big, athletic/unsporting).

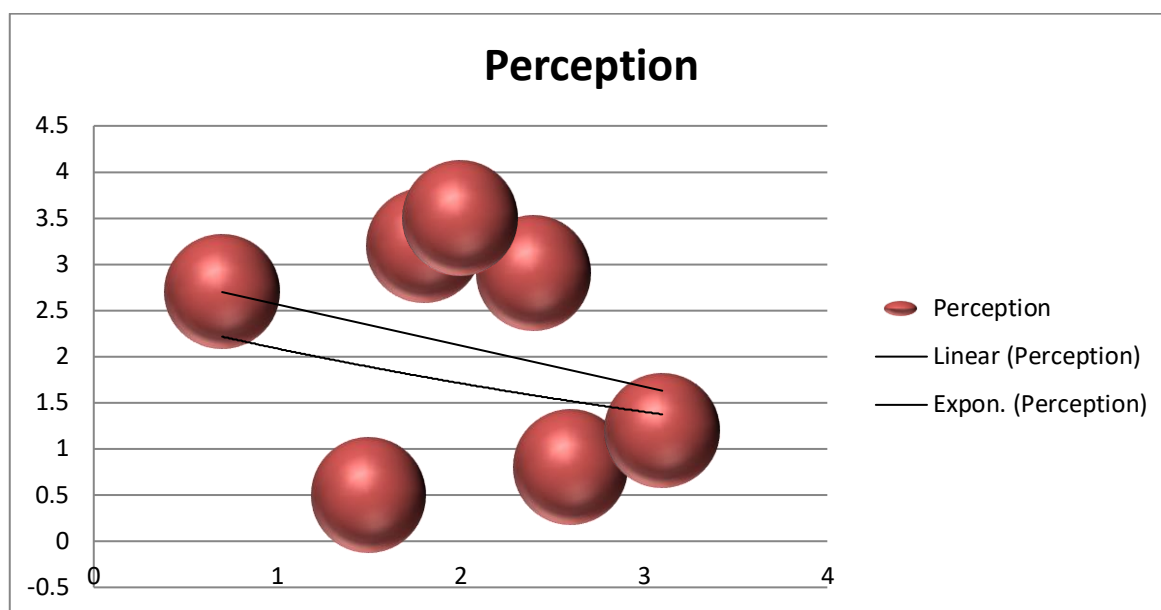
The correlation between advertisements is most pronounced because of two factors: f1 — Advertisement 1 correlates with Advertisement 4, (the same semantic load - slimness); f2 — Advertisement 3 correlates with Advertisements 2, 5 (the same semantic load — obesity). Advertisement 4 correlates with Advertisements 1, 5 (f1 — non-provocative advertisement with the same message “I am resting/I will become /I was able to”); f2 — Advertisements 5 and 4 (the general message of progression from the concept of “thick” to the concept of “slim”). As a result, the respondents clearly distinguished provocative and non-provocative advertisements.

The semantic differential structures the perception of advertisement by respondents in three areas:

- evaluation, that is the attitude of respondents to a particular advertisement;
- potency, which implies the degree of influence of social advertisement on respondents, its inspiring ability, the power of the message;
- activity, which implies the nature of interaction and perception of advertising by respondents, that is, motivating in the interaction with the advertisement sample.

The ideal model in the perception of advertisement is the location of the object (by evaluation — potency and evaluation — activity factors) in the upper right corner of the chart. That is, a positive attitude to advertising, a positive perception of the message of advertisement and a high inspiring power and message of advertisement, as well as the motivating ability of advertisement to change consumer consciousness (Figure 5).

Figure 5. Semantic space of advertisement perception



According to the given semantic space, we can conclude that there is a positive perception of A2, which is not expressed by descriptors, in the first quarter. A2 is in the fourth quarter, which is not expressed by descriptors, and P3, P5, P8, which are expressed by descriptor D2 (memorable). The second quarter contains positively perceived advertisement A1, A4, A6 and A7, while advertisements A4, A6 and A7 can be described by descriptors D18 (health), D7 (relaxing), D19 (pleasant), D22 (involving). A1 advertisement is not expressed by descriptors. According to the analysis of the general semantic space, we can say that respondents consider advertisements A3, A5, A8 memorable and advertisements A4, A6 — involving.

#### 4. Discussion

This study was necessitated by the contradictory nature, influence on society and poorly studied graphic design as an indicator of social transformation. Relying on the opinion of the authors Larsson and Teigland (2020) and Kreitzberg et al. (2019), we can conclude that the role of graphic design in tracking the transformation of social welfare indicators is huge. A comprehensive empirical study of provocative graphic design of social advertisement using sociological and psychological methods was carried out based on the specifics of the impact on the psyche and psycho-emotional state. The results of the study, which aimed to identify consumer attitudes to provocative graphic design, showed that its image is



associated with negative emotions, immorality, shock. Kolisnyk and Lukianenko (2019) and Kent and Buechner (2021) also cite this influence of provocative graphic design in their research. The authors note that design plays two important roles. On the one hand, it encourages certain actions, on the other — is an indicator of social conditions. At the same time, respondents note the effectiveness of provocative graphic design and ability to make people interested.

The impact of provocative advertising on people is unquestionable, as is the connection between graphic design itself and socially important transformations of society. But there are works that present the opposite opinion. Marchenko (2021) and Reichart (2015) conclude that graphic design is unrelated to qualitative social transformations. The phenomenon of provocative advertisement is a serious threat to moral and socio-cultural norms. While its perception and effectiveness can be assessed now, the consequences of provocative advertising and its impact on society, unfortunately, can be seen only decades later. Rooted in public consciousness today it will bear fruit in the form of lack of morality and distorted values in the future. At the same time, the provocative design of social advertising serves as an indicator of society's readiness to tolerate negative factors of everyday life. Thomas-Trout (2018) and Bhandari and Handeyside (2019) mention this in their articles.

As a result, there is an urgent need to control and regulate the negative impact caused by provocative advertising. Unfortunately, the legislation on advertising is only evolving in this area. There are gaps, expressed in the absence of clear criteria, according to which it is possible to unambiguously identify the advertisement design as unfair, unethical, incorrect.

An important point is the development of the expert institute in the field of advertising design evaluation at the state level, which will lead to a more effective solution of ambiguous situations. Those measures must be taken immediately based on the growing urgency of the problem of provocative advertisement and its impact on society. The studies reviewed in this research show that the influence of provocative design on a person really exists, and such advertisement has a negative impact on the psycho-emotional state of a person. Ambrose et al. (2019) and Brigden and Hallett (2021) also state this in their works. Nevertheless, the research confirmed the effectiveness of provocative advertisement, which may serve to further increase the trend of analysis of provocative advertisement for sociological purposes.

## Conclusions

This research is topical because of the growing popularity of the provocative advertisement as a tool to influence public consciousness; lack of clear definition of provocative advertisement by legislation and the scientific community; poorly studied and developed methodologies for its evaluation (including expert); as well as the ambiguous perception of provocative advertisement by consumers and the controversial nature of its effectiveness.

The study showed the important role of graphic design of social advertisement in shaping public opinion. Graphic design in this sense can act both as a formative tool and as an indicator of social transformation. This is primarily due to the universal function of design — to influence the consciousness of the end user of the product. However, the study found a relationship between provocative graphic design and the depth of perception of the information provided. The more feelings the design is able to evoke in the consumer, the more effective is the promotion of the idea contained in the product.

The results of the study can be used by sociologists, psychologists, political scientists, graphic designers to understand the quality of social transformations through graphic design.

Further research should be aimed at finding methods for effective interpretation of graphic design elements as an indicator of social transformations.

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## Appendix A:

### Attitudes to graphic design in social advertisement questionnaire

We invite you to take part in a study aimed at identifying consumer attitudes to graphic design in social advertisement. The questionnaire is anonymous, the survey results will be used in generalized form. Thank you in advance for your honest answers!

Choose the appropriate answer (circle the one you want) or suggest your own.

1. Your gender:

- Male
- Female

2. Your age:

- 18-24
- 25-35
- 36-45
- 46-60

3. Education:

- general secondary education
- post-secondary education
- higher
- undergraduate degree

4. Your social status:

- student
- work concur with studying
- retired
- employed
- unemployed

5. Professional field of activity (speciality):

- Economics
- Marketing
- Production
- Other
- Services

6. Is the opinion of others important to you?

- yes
- no
- rather yes
- rather no

7. Which design is provocative for you?

- Design that affects physiological needs and instincts
- Design that influences the subconscious through shock, evokes negative emotion
- Design that encourages or compels the purchase of goods/services
- Design that influences the consumer by evoking positive emotions
- Other

8. What is the difference between provocative design and the usual one, which does not contain provocation?

- makes you hesitate
- makes you doubt
- is of interest
- immoral
- motivates to action
- offensive

9. What, in your opinion, the provocation is? (Choose no more than three answer options)

- The design contains sexual connotations
- The design contains foul language or its consonance
- The design contains offensive expressions
- The design uses the image of a famous person
- Sarcasm and ridicule are used in the design
- The design contains viral humor

10. Do you find provocative design effective?

- Yes
- No.



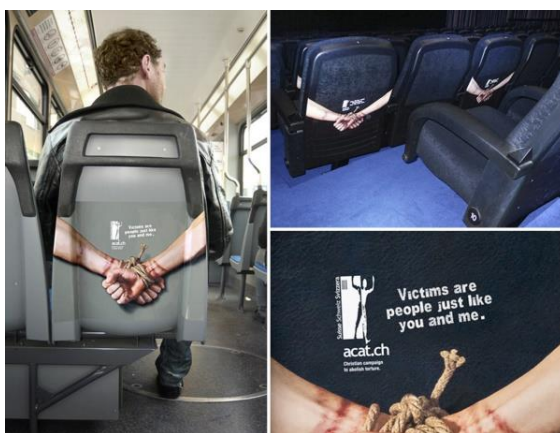
## Appendix B:

### Stimulus material

Samples of modern social advertisement

Source: <https://uamodna.com/articles/40-naysyljnishyh-socialjnyh-posteriv-yakizmusyatj-tebe-spynytysya-y-pomirkuvaty/>

Victims are people just like you and me.



#1

Advertising agency: Advico Y&R, Zurich, Switzerland

Stop the Violence. Don't Drink and Drive



#2.

Advertising agency: Terremoto Propaganda, Curitiba, Brazil



Save paper – save the planet



#3

Advertising agency: Saatchi & Saatchi, Copenhagen, Denmark

What we see when you smoke



#4

Advertising agency: JWT, Atlanta, USA

See how easy feeding the hungry can be



#5

Advertising agency: TBWA\Hunt\Lascaris, Johannesburg, South Africa

Appendix C:

Bipolar scales - Descriptors

Cognitive	Emotional	Behavioural	Expectations
1. High-tined — Immoral	1. Good - Evil	1. Educating-	1. Athletic-
2. Memorable-	2. Offensive-Funny	Uneducated 2.	Unsporting
Ordinary	3. Human-Cruel	Seductive-Repulsive	2. Available-
3. Unclear-	4. Disgusting-	3. Motivating-	Unavailable 3.
Understandable	Pleasant	Limiting	Exhausting -Health-
4. Unambiguous-	5. Uncomfortable-	4. Repulsive-	improving
Contradictory	Cozy	Attractive	4. Competent-
5. Contemptuous-		5. Selling-	Unqualified
Respectful		Disinteresting	
6. Relaxing-			
Provocative 7.			
Copying -Original			
8. Impressive-			
Boring			
9. Current-Obsolete			
10. Quality-Base			