

Research on the Experience of Users of Political Slogans in Ukraine

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Abstract: *The study partly reveals “Zelenskyi’s phenomenon”, when a person without any political experience confidently won a victory over an experienced politician at the presidential and parliamentary elections. The paper considered neuropsychological understanding of a brand as a multi-modal image with emotional connection and as an artificial addiction. Specific features of the perception of political slogans were studied with EMOTIV Epoc+ 14-channel mobile neurointerface and EmotivPRO and EMOTIV Brain Activity Map software. The ranking of slogans in terms of the efficiency of perception of the individuals of 40-60 years old was carried out on the basis of EEG and the cognitive and emotional indexes: obtained stress, interaction, interest, excitement, concentration, relaxation. The study involved 30 men and 30 women who intended to vote in the presidential elections of 2019. It was established which slogans are the best, good, average, ambiguous, with little effect, ineffective, with a negative effect. It was determined that the most effective and at the same time efficient slogan that evokes emotions and really encourages to support is PRESIDENT IS PEOPLE’S SERVANT. The best slogan that appeals to support it is “We Are Ukraine”, “New Policy of Ukraine”, “Country of Strong People!” The basic cognitive and emotional indexes that would contribute to the creation of effective psychological impact on voters’ behavior are the presence in the slogan of the word “Ukraine”, the avoidance of the so-called “stop words” (for women it is “army” and everything related to violence and death, and for men it is everything related to the provision of material benefits), the use of religious sentimentality in women and gender differences in slogans targeting. The value of the studied phenomenon and the efficiency of slogans and other media products before launching them into mass advertising has been proved.*

Keywords: *Cognitive and emotional indexes; subconscious reactions; neuropsycholinguistics; electorate; motivation for action.*

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1. Introduction

A striking event of 2019, attracting attention of experts in political sciences is “Zelenskyi’s phenomenon”, when the actor of a satirical genre, without any political experience confidently (73.0%) won a victory over an experienced politician – the incumbent President of Ukraine at that time – at the presidential elections. Moreover, Zelenskyi’s party – “People’s Servant” obtained 43.0% of the electors’ support and formed a majority at the parliamentary elections in the same year. It is unprecedented case in the country history when one political force has absolute power. This research reveals the mystery of the President Volodymyr Oleksandrovykh Zelenskyi’s success to some extent.

The issue of political ideas’ perception by the electorate has always been extremely relevant, especially in the pre-election period.

Political ideas are kind of “products” a politician or his/her team produces and distributes among the electorate. To be successful in political activities, they need to be distributed in a quick manner, in a large amount and to everyone. It is obvious that for this purpose there should be a certain range for each ‘consumer of political ideas’. As we know, political ideas are reflected in media products, slogans, and mottos, in particular. A slogan is an appeal or addressing in a concise form containing a leading idea or requirement. A motto is a laconic phrase that catches the eye, is easy to remember and expresses the essence of the message.

Political ideas, slogans, and mottos are divided into “positive” – to give something to someone; “negative” – to take something away from someone; “combined” – to take something away from someone and give it to someone else or give it, but not to all, or take away not all; “impressive” – to cause a stir; “unimpressive” – trigger emotions; “effective” – motivate to action; “non-ineffective” – do not motivate to action. There are also “new”, “old” and “forgotten” ones. Depending on the copyright, there are ‘own’ and ‘others’ slogans. Also, there are “basic” ones – general for all, in particular, reflecting the concept of a party, as well as “operational” ones – those developed for a specific event and a specific region to obtain the maximum political dividends.

For this purpose, as a rule, a whole team of myth designers, marketing experts, psychologists, philosophers, and psycholinguists try to create slogans to stand out among others, attract attention and motivate a voter to vote for a specific politician or party. Sometimes, this function of an expert team called political strategists is carried out by one person engaged in the ideological activities of a party. There are also commercial companies

specializing in psychological consulting, which provide services in development of slogans and mottos. Everyone seeks to create impressive and effective slogans relying on the existing analytics in terms of the electorate, previous election expertise, global trends, the “illusion of omniscience” provided by political strategists, epistemological approach and good luck.

The most important issue of identifying the effectiveness of slogans is the lack of fast, reliable and cheap communication with voters. The results of the effectiveness of an election campaign, in particular its slogans and mottos, will be known exactly after the announcement of elections results by the Central Electoral Commission. Some parties believe in the “halo of an eminent political strategist”, and they do not verify slogans efficiency. But they should do it, as an expert is a person and as a person, he or she is able to predict the behavior of other people in the medium term only by 8.0%, and even less in the long term. After all, the behavior of a voter depends on the individual and typological features, current emotional condition and context circumstances (Tkach, 2018). Though it is possible to adjust to individual and typological features, it is quite difficult and financially costly for social engineers to control the current emotional state of the electorate and current context circumstances (Blynova et al., 2020; Isaienko, 2020; Khmiliar et al., 2020). It is also quite difficult to predict the tactics and strategy of competitors, it costs much money to organize and conduct research on social expectations of main opponents (Khmiliar et al., 2020; Khmil & Popovych, 2019; Popovych, 2017). Even if you have some kind of a “hyperbrain” expert (multiple brains integrated into one system) whose predictive ability was true by 50.0%, his predictions will not have value anyway.

Nevertheless, part of candidates and parties, check the developed media products before they spend a vast amount of money for their own advertising (television, off-line advertising, online advertising, electioneers...). For this purpose, they apply sociological research. The problem with their validity is not representativeness of selection, but the fact that people do not fully realize what they like and often give socially positive answers, especially when it is being recorded. For example, if you ask men: “How do you feel about wealthy people?”, they would say: “Neutral, positive”, but psychologists will notice manifestations of aggression, envy and so on. If you ask men the following question: “How do you feel about women of loose morals?”, they will say: “This is a negative phenomenon of our society”. But in fact, there will be signs of lustful joy and pleasure manifested. Here are the results of the survey and true attitude of

respondents. Others use technology of the last century 70-ies that is focus groups. However, focus groups are attended by a certain category of people (people who were engaged in it, understand the situation very well), rhetorical exercises of participants resulting in the level of falsehood starting with 30.0% and above. The results are still inaccurate, but they allow to adjust at least a little bit the results of the creativity of political strategists to the realities.

Needless to say, that the semantic differential is necessary for the construction of subjective semantic spaces in studies related to the perception of political slogans, with the analysis of pragmatic and connotative meanings of words and personalized meanings (Zasekina & Zasekin, 2008). However, we doubt that it can answer the question: “Do the studies provide frank or socially acceptable answers consistent with the ideology, dominant in society?”. The content-analysis of the texts of five speeches of the President of the Republic Kazakhstan Nursultan Nazarbayev of 1991–2015 (Abdiman, 2018) is of great interest from a scientific point of view.

There is research applied for objective evaluation of media production effectiveness, which is mandatory for the developed countries, that is User Experience. This is a recording by high-precision equipment of the subconscious reactions of people to audio, visual and other stimuli with the aim of identifying what a person actually feels when using the product/information (Absher & Cloutier, 2016). The main objects of research are attention, impressions, emotions, and benefits derived from the interaction with the product/information (Nobre & Kaster, 2014). Although the User Experience has a strong methodological basis, we should note that it is subjective and may change over time with changing context circumstances and the emergence of new competing products/information.

This method is not popular among Ukrainian election campaigns, perhaps, due to the lack of adequate knowledge in election team managers. Although for the sake of objectivity, impartiality, and completeness of the issue review, we should remember that in Ukraine there is a company capable of carrying out such research, that is “the First Neuromarketing Company of Ukraine Neuro Psy Tech Group”. This indicates reflection of scientific knowledge about brain, human psyche, neuroimaging and in general about the positive trend of the neuroculture development in Ukraine.

Maksymenko (2015) notes that the choice of a method is a decisive condition for the theoretical construction of reality and external validity. Each science in its development reaches its culmination point, gets

suspended, and with the advent of new methods of knowledge, makes qualitative progress. With the advent of high-precision nanotechnology in psycholinguistics, a fundamentally new stage of the development of this science starts – neuropsycholinguistics. The main difficulty of this situation is the fundamental difference of psycholinguistics and neuropsycholinguistics in the approach to the analysis of mental activity of an entity/a person in learning and use of language. We had similar situation in the logic of the approach to the analysis of reasoning. Traditional logic analyses thinking, in particular, its forms such as concept, judgment and reasoning. While symbolic logic, which arose later, explores what we operate, namely, the semantic content of speech, that is, the terms and statements of speech (Maksymenko, 2015).

In neuropsycholinguistics, it is not an “entity” that uses the language, but a “person”, it is not a person as it is, but a “specific person”. Each person possesses his/her own connectome, the brain, a very inconsistent and variable organ (Maksymenko et al., 2019; Maksymenko & Orap, 2018).

Therefore, a method of neuroimaging the neuropsycholinguistics like so much such as functional magnetic resonance imaging that allows to record changes in a brain blood flow. Based on the analysis of hemodynamic reactions, it is possible to assume participation of a particular brain part in certain mental process connected with speech. Indeed, this method allows to detect significant objects and changes in skull space, but due to low resolution, it cannot distinguish a particular part of brain and what kind of cytoarchitectonic field or subfield it is. After all, brain variability in some areas varies by 40 times (Kolb & Whishaw, 2015). For example, in some people, the ventromedial part of the prefrontal cortex can be the size of a tangerine, which makes these people very empathetic and loving. In other people, it may be the size of a Brussel sprout making these people understand, feel the pain of others and be able to sympathize. And there are some people who do not have this part at all, and these people possess charisma, a constant striving to dominate over others, a frantic desire to get to the top of hierarchical social formations. These people are guided exclusively by economic benefit, they cannot be satisfied by resources and influence, they do not have moral principles. Besides, it is an incredible pleasure for them to watch other people manifest obedience and acquiescence towards them.

In addition, this method poorly captures the beginning of reaction that does not allow to carry out accurate correlation with psychological events.

Therefore, at this stage of neuroimaging development, we should rely not on anatomical reference to functions, but on integral indices reflecting cognitive and emotional indicators in each period of the study.

The process of creating slogans and the ideas their “creators” are guided by in this process is not our subject of research. We are to highlight how voters perceive ready-made political slogans.

The aim is, first, recording unconscious reactions of voters on the visual representation of political slogans; second, ranging due to the effectiveness of the most common slogans; third, the establishment of neuropsycholinguistic means of the reorganization of basic cognitive and emotional indicators to create an effective psychological impact on a voter’s behavior.

The slogans of the presidential election campaign have a strong affinity to the identity of a presidential candidate. The task of slogans is to form a personality brand. The understanding of the brand in the neuropsychological paradigm should be explained more clearly. A brand is a product/information for which a person is ready to overpay voluntarily. For a neuropsychologist, a brand is a multimodal image (spindle-shaped twist) with emotional affinity (limbic system) (Tkach, 2018). At a meeting with a brand, the EEG fixes in the frontal leads negative generated potential N100 after the start of stimulus, complex N100-P200 and wave P300. This indicates that a learned pattern has been recognized, very important in everyday life. Moreover, if the prolongation of the P300 wave in the P400 and P500 is recorded, it indicates certain actions (including speech) or a real intention to act, caused by this “brand” (Bors, 2019); Yadava et al., 2017).

There are many brands with new ones constantly arising, and the number of neurons is limited (the brain’s capacity to perceive information has not increased). That is why corporations, public figures and various “isms” are engaged in a fierce struggle for neurons to create and maintain their own multimodal brand image (Tkach, 2018). Presidential candidate branding is essentially a process of uniqueness and idealization of a politician’s image. According to psychological mechanisms, branding is identical to artificial additive behavior (Lytvynchuk, 2017).

Thus, the results of the theoretical understanding of the issue of identifying the effectiveness of political slogans allow to determine the objective psychologicistic evaluation, distinguishing slogan words that have a certain emotional color for a voter and motivate to action.

User Experience (UX) – is what a user feels when using a product, service or information immediately. The main objects of the research are impressions, emotions and benefit, obtained while using a product (service

or information). User experience is subjective in nature because it is related to individual feelings and thoughts) and can change in time when there are changes in circumstances and social events.

2. Research of methodology

In order to see the invisible and analyze the slogans based not on assumptions, but on facts, we have applied EMOTIV Epoc+ mobile 14-channel neurointerface and EmotivPRO, EMOTIV Brain Activity Map software. This allowed us to obtain raw EEG data, conduct EEG brain mapping and get transformed EEG indicators as basic cognitive and emotional indicators studied 128 times per second. Psychologists of the past could only dream of such neurotechnologies that really allow to record subconscious reactions of people.

Information about the date, location, conditions of the study and selection. Date: 12.11.2018. Location: Kyiv, Kherson and Ivano-Frankivsk. The study was conducted in a psychologist's office. Selection of 60 people with equal gender distribution. Respondents are aged 40-60. Selection was conducted among passers-by by stochastic method. It concerns only those people who will come to the elections. The way to identify intentions to come to the elections is an affirmative answer and the presence of a high level "interaction".

Information about the stimulus material and presentation form. Demonstration of slogans was carried out without reference to some politicians or parties. All slogans were presented in black color and Calibri font on a white background. All political slogans from outdoor advertising (big boards, city-lights) were represented in the research. Clarifications regarding the slogan: "We Are Ukraine". It contained a fairly long text made in small print and people could not read it from a distance. Therefore, we tested only those slogans, which were readable for people in real conditions. The exposition of slogans lasted for 10 seconds. The research is held according to the ethical standards of the committee on the rights of experiments of the Helsinki declaration (2013).

3. Results and discussion

Analytical Table 1 presents the results of the study. In particular, key cognitive and emotional indicators, the effect according to scale "the maximum effect – +5, no effect – 0 and the maximum negative effect – -5". Significance level concerns gender differences. In general, the slogans are arranged in descending order of effectiveness.

Briefly about the key cognitive and emotional indicators from the EMOTIV biometric company, which are formed on the basis of specific EEG patterns (Insight, 2017):

Stress shows the level of comfort a person feels.

Engagement determines the extent a person is focused on what he or she is doing or experiencing at the moment.

Interest reflects a person's level of interest in respect of an object.

Excitement reflects the level of emotional excitement.

Focus reflects how much a person has focused on this task.

Relaxation indicates the level of mental peace.

Table 1. *Cognitive and emotional indexes of political slogans*

Slogan		Basic cognitive and emotional indicators												Effect	
		Stress		Interaction		Interest		Excitement		Concentration		Relaxation			
		M	W	M	W	M	W	M	W	M	W	M	W	M	W
We	Are	30.0	27.4	59.2*	52.9*	49.1	49.4	41.0	54.3	32.4	22.7	22.1	27.5	+5	+4
PRESIDENT IS PEOPLE'S SERVANT		37.6*	39.5*	44.1*	51.4*	53.7	52.1	62.2*	73.0*	40.1	30.8	39.0*	28.2*	+4	+5
New	Policy of	29.2	25.9	49.5*	42.2*	49.5	49.3	38.7	40.6	36.3	28.1	21.1	27.4	+4	+4
State of Strong People!		26.2	29.3	54.2	41.6	53.0	52.2	39.1	28.7	21.2	20.4	23.8	26.3	+4	+4
Army!															
Language! Faith! AWAY FROM MOSCOW!		25.7*	46.0*	42.8*	45.8*	51.2	51.5	38.8	31.3	24.5	36.0	21.1*	17.9*	+4	+2
Honest People Prevail		38.2*	34.5*	52.8*	41.8*	50.6	49.7	14.8	14.4	35.2	24.2	26.4	22.0	+3	+3
ENERGY INDEPENDENCE OF UKRAINE		26.8	25.4	37.3	40.7	51.4	51.2	16.2	17.9	29.6	33.0	24.5	24.2	+2	+2
Faith	Protects	30.2	27.5	30.0*	44.9**	50.2	50.1	15.8	14.7	29.1	23.6	24.4*	32.3*	+1	+3
Our Souls		36.3*	33.8*	53.7*	38.5*	52.6	51.2	28.7*	47.6**	16.2	14.7	26.6	25.0	+2	+2
JOBS or IMF Slavery?															
POWERFUL ECONOMY ADVANCE 2019		26.5	29.2	47.0*	34.9*	51.4	52.4	27.4	18.8	29.2	18.7	24.5	26.5	+2	+2
		27.8*	48.4*	48.2*	40.3*	50.2	50.5	33.5	25.7	37.8	27.2	24.7*	16.8*	+4	-2
2019															
Army!															
Language! Faith!		24.5*	44.9*	44.8*	35.2*	54.0	51.7	26.9	21.4	27.5	26.9	26.1*	18.7*	+4	-2
WE															

GO OUR
OWN WAY!

Army Protects
Our Land

26.1*	42.7*	42.7*	38.0*	51.	49.	27.8	22.2	35.1	33.8	27.2*	18.1*	+	- 2
**	**	**	**	4	8					**	**	4	

HIGH
WAGES or
high tariffs?

34.6*	25.7*	48.1*	40.0*	53.	51.	16.0*	41.4*	22.8	22.4	17.8*	29.7*	-1	+4
**	**	**	**	7	5	**	**			**	**		

Language
Protects Our
Hearts

23.9	24.1	40.2*	43.8	50.	49.	13.8	15.7	30.8	30.5	18.5	23.6	+	+1
		**		7	8							1	

WE
STOPPED
DEFAULT in
2014

29.5	28.0	38.2	37.8	51.	51.	18.4	15.2	31.2	24.2	23.6	25.6	0	0
				4	7								

MINIMUM
WAGES
UNDER
THE
MILITARY
CONTRACT
TO
INCREASE
UP TO UAH
10.000

32.3	30.2	31.3	35.4	52.	51.	20.8	18.5	21.0	24.6	28.5	28.8	0	0
				2	5								

FINANCIAL
AID TO
KEEP YOUR
HOUSES
WARM TO
GROW TO 2
BILLION
UAH
THEY
FOUGHT
FOR US TO
WIN

38.8*	27.0*	47.2*	39.4*	53.	51.	18.7	25.1	31.3	18.0	16.5*	27.4*	-1	0
*	*	*	*	4	1					*	*		

28.6*	47.8*	29.5	25.3	51.	51.	16.5	26.3	36.2	14.3	27.6*	16.2*	0	-1
*	*			1	3					*	*		

Note: * – p=.05; ** – p=.01; *** – p=.001; the loadings of the significant indicators are given in bold type.

As the analytical table shows, none of the slogans is interesting or effective. Speechwriters and myth designers do not know how to create slogans that attract attention and how to reflect through language components of the image and the world of a contender for the position of President anticipated by electorate. However, the existing slogans allow to distinguish leaders from outsiders.

The best slogans to trigger support are “We Are Ukraine”, “New Policy of Ukraine”, “State of Strong People!”. By the way, P300-500 waves

arose on the word “Ukraine”. The slogan “We Are Ukraine” shifted activeness from left hemisphere to right hemisphere to a small degree.

The most impressive and at the same time effective slogan that evokes emotions and really encourages to support is “PRESIDENT IS PEOPLE’S SERVANT”. We believe that this slogan’s success is primarily due to not just skillfully selected words and semiotics, but to awareness and professional entertainment activities of V. Zelensky. In fact, this slogan is both political and advertising one, it announces a new series of a very popular same name film, where the actor plays a part of an honest and uncorrupted President, a common man. It is the only slogan which extremely activated left hemisphere, and it is an evidence of a certain relation to positive emotions (hypomania).

Good slogans are “Army! Language! Faith! AWAY FROM MOSCOW!”, “Honest People Prevail”. The first slogan, due to the concept of “staying away from the threat, the aggressor”, encourages to support it both men and women. However, the word “Army” makes women feel anxious. The latter slogan encourages to support but is slightly stressful for all respondents. Apparently, this is due to the fact that in the existing ‘dishonest’ circumstances of the deviant context, people have to break the far-fetched value and normative standards that are now adopted in society for the sake of survival.

Neither good nor bad slogans are “ENERGY INDEPENDENCE of UKRAINE” – it is neutral to positive for all, “Faith Protects Our Souls” – neutral to positive for men and at the same time encourages to support women “JOBS or IMF Slavery?” – slightly stressful for all respondents, but encourages support in men and causes emotions in women, “POWERFUL ECONOMY” – neutral to positive for all and especially encourages men to support.

Ambiguous slogans are “ADVANCE 2019”, “Army! Language! Faith!”, “WE GO OUR OWN WAY!”, “Army Protects Our Land”, “HIGH WAGES or high tariffs?”. The first three slogans encourage everyone to support them, but they make women feel considerably anxious. This is due to the army and the very likely death of their own children in the war. The last slogan motivates everyone to support it, but men feel anxious, and women relax. We believe it is due to the difficulty for men of this age to find a job with a decent salary being a real problem. But women carrying on a line have an innate tendency to live in luxury and comfort. The word “army” causes strong activation of right hemisphere, and it is an evidence of its depressive effect.

Ineffective slogan “Language protects our hearts” encourages to support all respondents, but it is ineffective. Most often, there is a reaction to the words “heart” and “language”.

Non-effective slogans are “WE STOPPED DEFAULT in 2014”, “MINIMUM WAGES UNDER THE MILITARY CONTRACT TO INCREASE UP TO UAH 10.000”. The most “indifferent” word among all slogans is “default”. People under study did not know this word's semantics. Marketing trick “discount up ...” caused aversion, whereas the word “wages” caused increased attention of respondents. Therefore, the last slogan neutralized itself with its inconsistency. From the economic point of view, the funds spent on advertising these slogans would be better deposited. It is obvious that the election teams spent someone's money on these slogans irrationally.

“FINANCIAL AID TO KEEP YOUR HOUSES WARM TO GROW TO 2 BILLION UAH” and “THEY FOUGHT FOR US TO WIN” slogans have a negative effect. The first slogan is neutral for women and at the same time rather stressful for men. The latter is neutral for men and stressful for women. As you can see, this is an anti-propaganda at “own” expense.

4. Conclusions

1. UX research allows finding out exactly a voter's preferences and what exactly in the slogan encourages a voter to support a candidate for the presidency. This allows adjusting the political advertising content, choosing the right words and competently building media planning.

2. UX research allows election teams to allocate funds rationally and, most importantly, achieve success easily.

3. The main objective of the empirical study is to establish neuropsycholinguistic means of reorganization of the key cognitive and emotional indicators to create an effective psychological impact on a voter's behaviour. Thus, in the Western part of Ukraine, the presence of the word “Ukraine” clearly increases the effectiveness of slogans, as this word causes positive emotions and patriotic feelings that motivate people to act. “Stop-words” that cause anxiety and discomfort in women are “army” and everything related to violence and death. But for men, “stop-word” has everything to do with providing material goods. Women have a significant religious sentimentality, which can be skillfully used to encourage them to desired action. We have also noticed that one team creates slogans both effective and rather weak. Marketing experts and psychologists are well

aware that one negative slogan neutralizes the positive one. Therefore, we emphasize that we have studied the impact of each slogan separately without reference to a politician. After the election, it will be appropriate to consider integral impact of all slogans from one team on a voter in media planning.

4. It was established that in a consumer society's electorate a victory is won not by ideologies or views, but by a public image of a person and a virtual image of the President from the movie "PRESIDENT IS PEOPLE'S SERVANT".

5. In order to win in elections in Ukraine it is necessary to place strong emphasis mainly on emotions – to give positive impressions, and not on a rational component of ideology or a political program.

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References

- Abdiman, Z. (2018). "Inaugural Address of the President of the Republic of Kazakhstan Nursultan Nazarbayev (1991-2015): Genre Peculiarities of Inaugural Discourse", *Astra Salvensis*, 6(12), 19-33.
<https://astrasalvensis.eu/2018-2/>
- Absher, J. R., & Cloutier, J. (2016). *Neuroimaging Personality, Social Cognition, and Character*. Amsterdam: Elsevier.
<https://www.elsevier.com/books/neuroimaging-personality-social-cognition-and-character/absher/978-0-12-800935-2>
- Blynova, O., Lappo, V., Kalenchuk, V., Agarkov, O., Shramko, I., Lymarenko, L., & Popovych, I. (2020b). Corporate Culture of a Higher Education Institution as a Factor in Forming Students' Professional Identity. *Revista Inclusiones*, 7(Especial), 481-496.
<http://www.archivosrevistainclusiones.com/gallery/41%20VOL%207%20NUM%20ESPECIAL%20EUROASIA.pdf>
- Bors, C. (2019). The Importance of Image when Developing a Powerful Political Brand. *Postmodern Openings*, 10(3), 72-85. <https://doi.org/10.18662/po/82>

- Insight. (2017). *Emotive*. <https://www.emotiv.com/insight/>
- Isaenko, I. (2020). The Crisis of Power as a Problem of the Development of Public Administration in the Postmodern World. *Postmodern Openings*, 11(3), 231-243. <https://doi.org/10.18662/po/11.3/210>
- Khmliar, O., Popovych, I., Hrys, A., Pavliuk, M., Zavatska, N., Lytvynenko, O., & Blynova, O. (2020). Spatial Regulation of Personality Behavior in the Conditions of Progression of the COVID-19 Pandemic. *Revista Inclusiones*, Vol: 7 num Especial, 289-306. <http://www.revistainclusiones.org/gallery/23%20VOL%207%20NUM%20OCTDIC%20ESPECIAL2020%20REVISINCLUSIIL.pdf>
- Khmil, V. V., & Popovych, I. S. (2019). Philosophical and Psychological Dimensions of Social Expectations of Personality. *Anthropological Measurements of Philosophical Research*, 16, 55-65. <https://doi.org/10.15802/ampr.v0i16.187540>
- Kolb, B., & Whishaw, I. Q. (2015). *Fundamentals of Human Neuropsychology* (7th ed.). New York: Worth Publishers.
- Lytvynchuk, L. M. (2017). *Psychology of drug addict's rehabilitation: monograph*. Zhytomyr: Zhytomyr Ivan Franko State University.
- Maksymenko, S. D. (2015). *Genesis of Personality Existence: monography*. Montreal: Accent Graphics Communication.
- Maksymenko, S., & Orap, M. (2018). *Psycholinguistic Predictors of Health*. *PSYCHOLINGUISTICS*, 24(1), 252-268. <https://doi.org/10.31470/2309-1797-2018-24-1-252-268>
- Maksymenko, S., Tkach, B., Lytvynchuk, L., & Onufrieva, L. (2019). Neuro-Psycholinguistic Study of Political Slogans in Outdoor Advertising. *PSYCHOLINGUISTICS*, 26(1), 246-264. <https://doi.org/10.31470/2309-1797-2019-26-1-246-264>
- Nobre, K., & Kaster, S. (2014). *The Oxford Handbook of Attention*. New York: Oxford University Press. <https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199675111.001.0001/oxfordhb-9780199675111>
- Popovych, I. S. (2017). *Psychological dimensions of social expectations of personality*. Kherson: KTPH. <http://eKhSUIR.kspu.edu/handle/123456789/6466>
- Tkach, B. M. (2018). *Neuropsychology of deviant behavior*. Lviv: ATB Ukrainian Scientific Educational Consortium. <http://odnb.odessa.ua/vnn/book/2975>
- World Medical Association Declaration of Helsinki. (2013). *Ethical principles for medical research involving human subjects*, 310(20), 2191-4. <https://doi.org/10.1001/jama.2013.281053>

Yadava, M., Kumar, P., Saini, R., Roy, P. P., & Dogra, D. P. (2017). "Analysis of EEG signals and its application to neuromarketing". *Multimedia and Applications*, 76(18), 19087-19111. <https://doi.org/10.1007/s11042-017-4580-6>

Zasekina, L. V., & Zasekin, S. V. (2008). *Psycholinguistic diagnostics*. Lutsk: Vezha.