

*Kovalyshyn Kh. V.,  
Student of the Department of Applied Linguistics  
Lviv Polytechnic National University*

*Albota S. M.,  
Candidate of Philological Sciences,  
Associate Professor of the Department of Applied Linguistics  
Lviv Polytechnic National University*

## PSYCHOLINGUISTIC FEATURES OF HUMAN WAR PERCEPTION VIA SOCIAL MEDIA

**Summary.** Social media have been a great phenomenon for over a decade now. These sites from social environment have their structure, functions and linguistic specifics. Manipulative techniques are widely used by people and can be in detail revealed within the social networks. In order to understand society's motives, thoughts and desire to manipulate it is vital to use linguistic semantic analysis. Applying the latter, we can reveal the senses implied within the certain comment statement. The Instagram social virtual platform has been a platform for research material. In order to analyze user's motives different posts and periods of time have been taken into consideration. A lot of comments have been analyzed and marked with explicit or implicit meaning for a further linguistic analysis. We claim that psycholinguistics plays a significant role in the search for hidden meanings. This science is important because it combines concepts from both linguistics and psychology. Psycholinguistics tries to study how the human brain works, and with this knowledge you can understand why social media users form and express your opinion in a certain way. This type of linguistic research is used to encode speech signals. In order to understand the mental state of people living in war conditions, the words they want to express their thoughts and feelings have been analyzed. All linguistically analyzed comments have something in common: they express people's feelings. In general, these feelings are divided into several categories: implicit meaning of which mark uncertainty, fear, pain; those by which we mean hatred, anger; those that denote hope, faith, strength, power, pride. We claim that the mental state of people varies in relation to the unfolding of military events: relentless hatred of the occupiers and pride and belief in victory.

**Key words:** psycholinguistic features, mental state, PTSD, war, linguistic semantic analysis, hatred speech.

**Formulation of the research problem.** The main purpose of today's digital world is to make information easy for users to find. There are many platforms such as Instagram, Facebook, Reddit, etc. The first purpose is to provide creators with platform for posting their content. The second one – to create access to that information for users. The most interesting point for analyzing is specific behavior of social media users that can be seen as manipulative. It can also say a lot about person who writes such comment and about their mental state [1].

The main aim of linguistic and semantic analysis is to investigate the meaning of language. Words and sentences are seen as fundamentals in semantic studies. Their meaning is being interpreted

and explained as there can be a lot of senses that author wanted to put in them [2].

Huge role in finding hidden senses has psycholinguistics. In order to realize why people use certain words it is necessary to understand why they think in that particular way. This science is important because it combines concepts from both linguistics and psychology. Psycholinguistic helps in exploring of how human brain works and with that knowledge it is possible to understand why social media users form and express their opinions in a certain way. This kind of linguistic studies is used for encoding language signals. In this kind of studies one of the most important thing is to examine how environment affects people's way of thinking. Under environment in this particular case (this paper) we imply everything that can be seen or heard and can change somebody's mind, for example: foreign language, music, news, etc. These studies are widely used by scientists as they are a great source of knowledge about people's mind. Linguistic semantic analysis is used to describe mental things through the way of speech and words that people use in their everyday life as a part of routine or in unusual situations such as war, disease, pandemic, etc.

In order to understand mental state of people who live during war it is useful to analyze words that they use to express their thoughts and feelings. When analyzing these expressions, it is vital to use linguistic semantic analysis and have at least basic understanding of psycholinguistics to make conclusions about people's mental state. As conclusions that are made as a result of this type of analysis are needed and used in both linguistics and psychology it is necessary to analyze and understand author's motives, feeling and thoughts and their connection to words that were used by that particular person.

**Analysis of recent research and publications.** Studying mental state of people, especially those, who are living during or have survived war is essential in today's world. With knowledge in this area people would know how to provide help to others or how to save their own mental state. There is one interesting study referring to a refugee's mental state issue about mental state of refugees who escaped war. It is claimed that they have depression and PTSD, which clearly is unhealthy condition. It is proved that experiencing war affects big part of population. It leads to various problems with mental health. From the survey that this article refers to, we can see that 24 and 23% of adult war survivors are likely to experience PTSD and depression, 10% suffer from PTSD and depression and 34% of survivors have at least one of these diseases. These

figures are huge, especially considering the fact that most of the people, who suffer from these diseases are young with perspectives that are needed for economic growth and future at all. As it is said in that paper: majority of war survivors live in areas with difficult political and socio-economic conditions. There are a huge variety of problems in that kind of areas, such as unemployment, lack of opportunities for education, extreme poverty, in general uncertain future. These factors affect society in the worst of possible ways. Especially people with mental illnesses. It becomes more complicated for them to withstand those problems. However, it is highlighted that these problems can be solved, but there are no such resources in countries that are going through a war or had just survived it [3]. From the research mentioned above we state that problems with mental health are common in territories that suffer from war and that this problem must be discussed in order to have more healthy society.

There is another study about importance of linguistic when working with psychological trauma. This article claims that: «Psycholinguistics appears as a space of heuristic research in order to explain the etiopathogenesis, the clinical presentations and especially the offer of proposed care to patients suffering from post – traumatic stress disorder» [4]. Psycholinguistics plays a huge role in that kind of research. For example, this paper claims that its' authors created a study based on a semi-structured interviews of war – PTSD patients in order to perform a lexical analysis of their speech owing to a special software. These scientists developed a lexical class called «clinical psychotraumatic syndrome» so that they can achieve an interpretative phenomenological analysis. As a result of this study a new syndrome was discovered. It is called post – traumatic psycholinguistic syndrome. It is a function of three syndromes: traumatic anomia, linguistic repetition and disorganized discourse. As it can be seen from already existing studies, linguistics has huge role in studying, discovering and analyzing mental state of people, who were traumatized by war. It leads to a deeper understanding of how human brain works and about psychological aspect in general.

**The purpose** of this paper is to investigate, understand, analyze and explain mental state of people who live during war through words they use when communicating on social media using linguistic semantic analysis. In order to understand how people feel in certain situation (in this particular case – war) analysis of words that these people use is one of the most important things. Especially considering that huge part of these thoughts and feelings are released in social media, mostly in the comment section. This paper is focused mostly on the comments that were written as an answer to the Ukrainian president's posts in social media called Instagram. Considering the fact that war started on the 24<sup>th</sup> February of 2022, which means that it has been over a year now (June of 2023), it is vital to analyze posts from different periods of time. As a lot of events occur, people's mental state has been changing along with them. As a result, there is a huge problem in society which is called Post-traumatic stress disorder (PTSD). It has a lot of ways of showing. Certain things are different and the process of talking is not an exception. As it was mentioned in [5]: «Psychoanalysis held that the essence of neurosis is the pathological persistence of defense mechanisms employed to ward off unacceptable unconscious wishes and impulses...». Judging from quotations of the paper, everything that has to deal with PTSD is unique for everybody. But the fact that whole country is experiencing it at the same time, even if not in the same amount, makes this case interesting for analyzing.

**Outlining the main findings of the research.** It is vital to understand that social media have key role in today's world. People use them to communicate, keep in touch with each other, learn new information. In times of a war point of getting information is the most important one. Government and its' official representatives have their own accounts on social media where they share information about events that happen. One of the platforms that has the biggest amounts of users is Instagram. Accounts of official representatives have millions, or at least hundreds of thousands of followers. And a lot of these people feel the need to share their thoughts in a comment section. These thoughts and opinions were under comparative analysis.

While reading comment section related to an Instagram post made by the president of Ukraine Volodymyr Zelensky it can be seen interesting phenomenon. Those comments are divided in a few groups. First – people sending only emoji such as broken heart, simple heart, Ukrainian flag. Another category is flag of the country that people who comment come from and Ukrainian's flag which is a symbol of support. This type of comments means that people from certain country support Ukraine in this war.

Another category of comments is russian people who write awful things to demoralize Ukrainians. Here's translated examples: «*russia just saves its' people, not attacks Ukraine!*», «*russia, russia is the best*», «*He is an exiled devil*» (by «he» author means Volodymyr Zelensky). These comments are written in russian language and their authors have typical russian names. From these comments an interesting conclusion can be made: these people may work for russian propaganda, or they just believe in their country so much that they want to show it. As these comments are so mean, they can be defined as hatred speech and hate based propaganda. Also, these comments can be seen as manipulative, because their purpose is to create new feelings and thoughts in Ukrainian people. This conclusion can be made after understanding what hatred speech is. There is the research referring to a topic of hate speech – according to this study, hate speech is usually defined as «any communication that disparages a person or a group on the basis of some characteristics such as race, colour, ethnicity, gender, sexual orientation, nationality, region. Online hate diffusion has now developed into a serious problem and this had led to a number of international initiatives being proposed, aimed at qualifying the problem and developing effective counter-measures» [6]. As it can be seen from definition that has been mentioned above, comments from russians are manipulative and hatred and they are supposed to be offensive.

Another big amount of comments is from Ukrainian people that say «Glory to Ukraine!». These words are often followed by emojis of hearts and Ukrainian flags. These comments are written on Ukrainian language and supposed to create the feeling that Ukrainians are brave, strong and want to defend their country.

There is another category of comments that support Ukraine and that are written by russians saying that they don't support war and that they take Ukrainian side. These comments are written in both Ukrainian and russian languages but from russian people and they also can be seen as manipulative. It is known that russian propaganda is very strong and supposed to have its impact not only on russians, but on people of other nationalities too. Since the beginning of this war there has been huge propaganda with people that are named «good russians» or «russian world». There are thousands of posts on social platform called Instagram that have these hashtags, which means that there is a huge amount of informa-

tion related to this topic. And these comments that are supposed to be supportive are made to convince Ukrainians that there are good russian people that do not want war and that they know what to do to stop it. Categories of comments that have been mentioned above were written in the first day of the war. That day was the most emotional one and people needed to release their emotions.

But when reading the comment section more than a year after the beginning of the war one more interesting phenomenon can be seen. There are a lot of people writing comments such as: «*The year had passed*», «*Year...*», «*It has been a year, I cannot believe it...*», «*Just watched again, I have goosebumps*». These comments are written in Ukrainian language and by Ukrainian people. They are usually followed by a broken heart emoji. This can be seen as a post-traumatic syndrome. It is said in the research: «The diagnosis of PTSD is directly linked to experiencing or witnessing a traumatic event such as natural disaster, a serious accident, a terrorist act, war/combat, rape or other violent assault» [7]. Examples can be seen as manifestation of trauma (and PTSD) because when there was a day of the first anniversary of the war (24.02.2023) people re-played all the memories that are related to a day, when the war has started (24.02.2022). People felt all those painful feelings again while being constantly attacked by russian army. People wanted to let all those overwhelming feelings go, so that they decided to scroll through a lot of posts that were made during the whole year, find that particular post and write their comment. The fact that people use emojis in their posts means that they need to add more emotions. It is like they can not express all their feelings with just words and want to make their comment more specific. This fact also means that Ukrainians have PTSD and need to work on their trauma.

The last category of comments that stands out a lot is the dates, when massive attacks happened or days when people felt proud. There are people who commented nothing but dates. Examples: «20.06.23», «14.06.23», «12.06.23». These dates are usually followed by emojis: Ukrainian flag, smiley face that cries, heart, broken heart, etc. These comments mean that people feel overwhelmed and in order to release their emotions they write comments. This process helps them feel powerful and strong because they see how much they have been through. By using emojis people broadcast their emojis. Using smiley faces helps people feel better and decrease sadness, because they feel better after sharing their pain. Reading other people's comments helps with difficult feelings. People feel less lonely. There is the research that was analyzing topic about emojis and their impact on people [8].

Another period of war that is interesting to analyze is time, when people started feeling a little better and more confident, but a lot happened. Since 10.10.2022 russian army had been bombing Ukrainian critical infrastructure, so that Ukrainians would stay without electricity, network and heat. The date, mentioned above, is memorable for Ukrainian people because it is the date, when the first bombing happened. President of Ukraine Volodymyr Zelensky made a few posts in his Instagram account that day. There are a lot of comments under all of them. In this paper comments under only the one is analyzed.

From thousands of comments that were left under the Ukrainian president's post we can make a conclusion that there are a few groups of similar thoughts, opinions.

First group that stands out is comments from Ukrainian people that show their support and love to a president of Ukraine. Comments such as: «*We have the best president in the world (three*

*Ukrainian flag emojis) We are proud! We are standing! We defend ourselves! We believe in the best! », «russia will pay for everything!!! Glory to Ukraine (two Ukrainian flag emojis) », «Glory to Ukraine! Wish a death to that cursed russian people!». These comments have positive semantics for a few reasons that are mentioned below.*

Words that are used widely in this type of comments not usually appear to have positive meaning. Words such as «*Glory, believe, the best, proud, etc*» are used to describe positive things. From this perspective, type of comments, that have been mentioned above, is used as a manifestation of the positive energy, hope, belief that people have. Society shares its positive attitude and shows that it has resources to stand against its opponent.

On the other hand, there are comments where words such as «*Wish a death, russia will pay for everything, etc*» are believed to have only negative connotation. Moreover, they can be classified as hate speech. But it must be understood that for Ukrainian people using of these words helps release their pain, emotions and hatred. During war such thing as losing of that negative meaning can occur. There is a research about hate speech, which describes exactly what is happening in Ukraine – people consider dead russians as something normal and it is accepted by society to hate russia and everything that may be connected to it [9].

Another type of comments that stands out a lot is opinions of russians. Or russian-speaking people. Comments such as: «*I am so scared, I am from moscow and I love russia and putin, but I love Ukraine too...Why does all of this happen! God, please help finish all of this as quickly as possible...other countries just sit and watch...we are fighting...we russians and Ukrainians are dying...and nobody knows the truth.....*», «*Why the sun is on the left and lightning on muzzle can be seen on his right? (this sentence is followed by smiley face that laughs with tears)*», «*(seven smiley faces that laugh with tears) president)))) makes Instagram stories)))) (five smiley faces that laugh)*». These comments are written in russian language. As their content is provoking, they can surely be called manipulative. These manipulations can be seen in example where somebody comments lightning on Ukrainian president's face. This comment was made purposely to increase doubts in president's actions and to make people's mental state worse. Another example of manipulation is third comment when president is accused of not doing his job properly but in making stories on his personal account on Instagram. It must be remarked that these comments are taken from the comment section related to a post about massive attack made by russian army to a Ukraine's critical infrastructure. And the last comment from examples that are given above is the one where woman who claims to be from russia says that she loves both Ukraine and russia and can not believe that the war is happening. Also, she accuses other countries in «*just sitting and doing nothing*» which is a huge sign of russian propaganda, where russians hate every other country that is not a russia or its' partner.

Another comment section which shows mental state of people during war is a section related to a post about first anniversary of the war. On 24.02.2023 president of Ukraine Volodymyr Zelensky made an Instagram post where he told Ukrainian people how strong they are and reminded that Ukrainian's victory becomes closer with every single day.

There also were different types of comments that can be divided into different categories.

The first category is comments from Ukrainian people that express their feelings, pain, emotions, for example: «*The year had passed, it feels like time had stopped....*», «*This year will end with our victory*» (under the word «our» we imply Ukraine, its' people, army...), «*Pain (broken heart emoji) it has been 365 days... it doesn't go away (crying face, broken heart) Glory to Ukraine (Ukrainian flag, red heart)*», «*We have no choice but VICTORY (emojis where hands are put together, yellow heart, blue heart)*», «*We will win (blue heart, yellow heart)*». These comments are written in Ukrainian language and show that people feel so many things that they cannot hold it to themselves. These comments are usually followed by emojis, which is a sign that using only words is not enough for people to express everything that is on their mind. These comments show that mental state of Ukrainians varies from hope to a constant pain. People try to learn how to live with such contradictory emotions and how to function properly in that unstable situation. Sadness, lack of hope and energy can be seen in comments where words «*pain...it doesn't go away, it feels like time had stopped....* » are used. These words are believed to have negative semantic and they are commonly used in situations that are considered sad, traumatizing and just bad in general. We can see, that people do not feel good because when they saw that post and decided to leave a comment their dominant feeling was despair.

Another popular opinion is Ukrainian victory. People believe in Ukraine, its' army, president, government and help those feeling in keeping themselves sane. This can be seen in comment where the word «victory» is used: «*...no choice but victory, ...year will end with our victory*». These are examples where word «victory» is used without temptations. It has no hidden meanings, just explicitness. When using such words people show their hope, belief and support to Ukraine. This support can be seen clearly in comments such as: «*We will win*». This comment shows that person who wrote it has no doubts in the nation he/she belongs to.

**Conclusions and prospects for further development.** During war people's mental state is very unstable. To understand how people feel during such hard times it is vital to analyze their comments using linguistic semantic analysis. It helps see implicitness and hidden meanings of the words used to help society feel better. To express their feelings people found a lot of ways. One of the most popular is comments in social media. These comments are usually made under posts where news is being told by the government representatives. In this paper comments that were left under the posts that were made by the Ukrainian president on his official page on social media called Instagram were analyzed. There is a big variety of those comments but they have something in common: they express people's feelings. In general, these feelings can be divided into few categories: those, whose implicit meaning is uncertainty, fear, pain; those, under which we imply hate, anger; those, which mean hope, belief, strength, power, pride. Seeing all this leads to a conclusion that people's mental state can be compared to a roller coaster: their emotions vary from hate of russians to a pride and belief in Ukraine. People are overwhelmed. It can be seen from their need to write comments, show and release their emotions. As people use huge amount of emojis it can be understood as a need to share more, using only words is not enough for them to feel better.

In perspective, there is a need to study psycholinguistic features of human victory perception and provide a linguistic model of positive Ukrainian life pattern in peaceful country.

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#### Ковалишин Х. В., Альбота С. М. Психолінгвістичні особливості сприйняття війни користувачами соціальних мереж

**Анотація.** Соціальні мережі вже більше десяти років використовують у лінгвістичних дослідженнях. Соціальне середовище має свою структуру, функції та мовну специфіку. Маніпулятивні техніки виявляємо саме за допомогою соціальних мереж, у яких можна детально простежити усі нюанси психолінгвістичних впливів. Для того, щоб зрозуміти мотиви, думки та бажання суспільства маніпулювати, необхідним вбачаємо використання лінгвoseмантичного аналізу. Останній допомагає виявити імпліцитні та експліцитні смисли висловлювань у коментарях соціальних мереж. Для аналізу обрано соціальну віртуальну платформу Instagram. Для аналізу мотивів користувачів до уваги взято різні дописи та періоди часу. Стверджуємо, що у пошуку прихованих смислів значну роль відіграє психолінгвістика. Щоб зрозуміти, чому люди вживають певні слова, необхідно зрозуміти, чому вони думають саме так. Ця наука важлива тим, що поєднує поняття як з лінгвістики, так і з психології. Психолінгвістика допомагає досліджувати, як працює людський мозок, і з цими знаннями можна зрозуміти, чому користувачі соціальних мереж формують і висловлюють свої думки певним чином. Цей вид лінгвістичних досліджень використовується для кодування мовних сигналів. Щоб зрозуміти психічний стан людей, які живуть в умовах війни, проаналізовано слова, які вони використовують для вираження своїх думок і почуттів. В усіх лінгвістично проаналізованих коментарях є дещо спільне: вони виражають почуття людей. Загалом ці почуття розділено

на кілька категорій: ті, імпліцитним значенням яких є невпевненість, страх, біль; ті, під якими ми маємо на увазі ненависть, гнів; ті, що означають надію, віру, силу, могутність, гордість. Стверджуємо, що психічний стан людей варіюється в залежності від розгортання

військових подій: невпинна ненависть до окупантів та гордість і віра в перемогу.

**Ключові слова:** психолінгвістичні особливості, психічний стан, ПТСР, війна, мовний семантичний аналіз, мова ворожнечі.