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# IMPACT OF OCCUPATION AND WAR LOSSES ON MENTAL HEALTH AND THE SUBJECTIVE WELL-BEING OF CIVILIANS: ON THE EXAMPLE OF RESIDENTS OF KHARKIV AND KHARKIV REGION UNDER THE CONDITIONS OF FULL-SCALE INVASION OF RUSSIA IN UKRAINE

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**Annotation.** The article is devoted to the study of the impact of traumatic experience, in particular, related to being in the occupation, and losses in the war, on the mental health of the civilians who live near the hostilities or their epicenter (using the example of residents of the city of Kharkiv and the Kharkiv region). Conceptualized concepts of traumatic situation, traumatic experience, characterization of war losses (human, property, financial, material losses; loss of work; loss of physical and / or psychological health and loss of peace, etc.). The results of an empirical study of the mental state of civilians of Kharkiv and the Kharkiv region are presented (n = 730). In particular, according to the results of the correlation analysis, it was proven that respondents with occupation experience have more problems with sleep, in the cognitive and emotional spheres. They are more likely to believe that they have experienced a serious trauma, more often note the desire to drink alcohol before feeling intoxicated. Among them, there are more often those who are haunted by memories of recent negative events, in which paranoid moods are more common. It is noted that despite the significant losses suffered by representatives of the civilian population of Kharkiv region during the period of the full-scale invasion of Russia, they do not lose their positive attitude and self-belief, have certain achievements and value them highly, are goal-oriented, and are satisfied with family and personal relationships. However, losses still affect mental health and subjective well-being, in particular, significant losses (of loved ones, friends, one's own home, etc.) can cause more pronounced physical and mental discomfort.

**Key words:** traumatic situation, traumatic experience, war losses, mental health, occupation, civilian population.

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### **Introduction.**

*Actuality.* Russia's full-scale invasion of Ukraine, which began on February 24, 2022, caused and continues to cause a lot of harm to Ukraine and its citizens, who, despite all circumstances, steadfastly oppose the enemy on all fronts – military, informational, educational, scientific and many others. The targets of the Russian military are not only and not so much military objects as objects of civilian infrastructure (schools, hospitals, maternity hospitals, theaters, historical monuments of art and culture, houses and households of civilian Ukrainians, etc.). The Russian aggressor brutally destroyed many cities and towns of Ukraine just because it could not capture and occupy them. Kharkiv region, including the city of Kharkiv, is one of the most affected by Russian aggression, which was a strategically important goal for the enemy, which they failed to achieve. From a scientific point of view, it seems important to constantly monitor the state of mental health of the population of Ukraine, because the future of the entire society depends on the current state. The experience of being in the occupation and losses in the war are those powerful stressors that are generated precisely by the conditions of the war, have a significant negative impact on the state of mental health of individuals and groups, and are one of the main factors of post-traumatic stress disorder. The study of these stressors impact is extremely important for understanding the real situation, as well as for the development of special programs for psychological support and rehabilitation of the population that survived the occupation and suffered significant losses (human, property and many other).

Considering the above, **the purpose** of this article is to analyze the impact of traumatic experience, in particular, related to being in the occupation and losses in the war, on the mental health of the civilian population living near the hostilities or in their epicenter (using the example of residents of Kharkiv and Kharkiv region).

### **The methodology of the study.**

The conditions of war are an inexhaustible source of traumatic situations and traumatic experiences. The problems of traumatic situations and their impact on the mental states of individuals and groups were studied by the following scientists: T.M. Dzyuba, S.V. Dudnyk, O.V. Mamicheva, A.E. Meloyan, O.L. Turinina, V.V. Shafranovsky, K. Ackermann, S. Assari, D.W. Bunnell, A. Bernhard, T.D. Brewerton, I. Gavidia, J. Genet, A. Martinelli, D. Saure, L. Sand, A. Scandsen, H. Suro, M. Perlman, M. Teicher, K.M. Freitag, M. Heising, and others. [1; 2; 4; 17; 20; 21].

Even before the beginning of the full-scale invasion, the Ukrainian scientist T. Dzyuba noted that as a result of experiencing stress and various traumatic situations, every third Ukrainian suffers from one or another mental disorder during he / she life, among which depression, alcohol abuse and alcohol addiction are the most common. At the same time, mental disorders occur much more often in men than in women. Among men, the most widespread disorder is alcohol abuse, recurrent depression, alcohol addiction. Among women, recurrent depression and dysthymia (prolonged subdepression with symptoms insufficient to establish a diagnosis of "depression", but such that acquires a chronic course) are most common. Both men and women are characterized by stress-related neurotic disorders [4, p. 27].

According to the results of research by V. Shafranskyi and S. Dudnyk conducted, among Ukrainians in 2014, 481,763 people suffered from mental disorders of a non-psychotic nature (among which depressive disorders prevail) at that time. The researchers stated that only during the period 2008–2012, the prevalence of depressive disorders increased from 65.37 to 73.6 people per 100 thousand population, and the incidence rate increased from 8.74 to 9.06 per 100 thousand population [16, p. 15].

It has been scientifically proven that even in times of peace, social conditions in general were characterized by high stressogenicity, that is, no person was safe from (psycho)traumatic situations, which were often accompanied by traumatic stress and other negative consequences, mental disorders. In the conditions of a full-scale war, this stressogenicity increased thousands of times, at the same time, the number and variety of traumatic situations increased, and therefore, the deterioration of the state of mental health and well-being of Ukrainians should be expected. Under a traumatic situation, the domestic scientist O. Turinina understands certain “extreme critical events, threats that have a powerful and negative impact on an individual and require extraordinary efforts to overcome the consequences of this influence” [21, p. 5]. She also notes that traumatic situations can manifest themselves in different forms and events, that is, there is a great variety of them. At the same time, there is a main common feature, which is that all traumatic situations affect the individual in an extreme, extremely strong and unusual way. An individual, as a rule, acutely feels a threat to life or health (his and/or loved ones and relatives), loss of control over the situation and his own life, despair, etc.

A. Skandsen, M. Heising, K.G. Askeland, M.H. Tycher, L. Sand and others define traumatic experience as direct contact with death or witnessing death, threat of death, sexual violence, loss of loved ones (relatives, friends) [18, p. 2]. A. Bernhard, A. Martinelli, K. Ackermann, D. Saure, C. M. Freitag note that although the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5, 2013) describes exposure to traumatic experiences as part of the diagnostic criteria for acute and post-traumatic stress disorders, numerous studies link traumatic experience with other psychiatric conditions such as depression, conduct disorders, generalized anxiety disorder, eating disorders, attention deficit/hyperactivity disorder, psychosis and autism [2]. Researchers are asking a valid question: ‘Is exposure to traumatic experiences a transdiagnostic risk factor for mental health problems in general, or does it selectively increase risk for a limited set of disorders?’. In response to this question, the researchers point out that one of the recent studies by Danish scientists showed that most cases of traumatic experiences, with the exception of those related to pregnancy, were associated with all categories of psychiatric diagnoses [5]. This finding suggests that traumatic experiences can be considered as a general determinant of the risk of mental disorders.

Despite the wide variety of research vectors and conclusions, all scientists, without exception, agree that a detailed study and understanding of the relationship between traumatic situations, traumatic experiences and the emergence of psychopathologies can create a reliable scientifically based

basis for efforts aimed at the prevention or prevention of negative mental states.

In view of the above, the Department of Sociology and Psychology of the Kharkiv National University of Internal Affairs implemented the research project “The state of mental health and subjective well-being of the population of Kharkiv and Kharkiv region”, one of the tasks of which was to investigate the impact on the state of mental health and subjective well-being of the traumatic experience (staying in the occupation) and traumatic situations related to one or another loss that the respondents experienced during the full-scale invasion. The field stage of the research was implemented in October-November 2023 by researchers of the Department of Sociology and Psychology in cooperation with “IN-SCIUM” NGO. The respondents were representatives of the civilian population of Kharkiv and Kharkiv region (n = 730; data collection method – online survey; the sample is random, non-representative<sup>1</sup>). The survey toolkit contained 175 questions, its basis was based on the following methods: 1) “The modified BBC subjective well-being scale (bbc-swb) (P. Pontin, M. Schwannauer, S. Tai, & M. Kinderman; adaptation by L. Karamushka, K. Tereshchenko, O. Kredentser) [7]; 2) “Questionnaire of nervous and mental tension” or “Scale of nervous and mental tension” (T. Nemchyn) [9]; 3) “Traumatic stress questionnaire” (I. Kotienez) [13].

In addition to the standardized scales of the above-mentioned methods, a number of questions aimed at measuring features, which are hypothetically considered as independent variables affecting certain psychological states, (self) feelings, emotions, etc., were also included in the research toolkit, namely: the main social -demographic, socio-economic and other characteristics (gender, age, marital status, presence/absence of children, level of financial support and its dynamics, main type of activity, level of education); losses suffered by respondents during a full-scale invasion (human, material, property, physical and psychological health, etc.); place of residence of the respondents at the time of the survey (Kharkov city or Kharkiv region), presence / absence of experience of being in the occupation. The obtained results were processed using SPSS, the methods of correlation, factor and cluster analysis were applied.

#### **Presentation of research results.**

According to the results of the research conducted by the Institute of Sociology of the National Academy of Sciences of Ukraine, there are stressors that negatively affect the general state of mental health, that is, they are factors in its deterioration. Based on the received data, sociologists concluded that the rating of stressors is as follows (from the most difficult to the easiest): traumatic experience as painful memories; stressors of social interaction (conflicts,

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<sup>1</sup> Achieving the representativeness of the sample does not seem possible in the current conditions of war and martial law, because the real structure of the general population is unknown. Despite this, the research group tried to reflect the approximate parameters of the general population with a sample based on key socio-demographic characteristics, in particular, by gender and age.

insufficient support, discrimination) and personal actions; deterioration of living conditions; health problems; war-related threat to life<sup>1</sup> [19].

Part of the Kharkiv region was occupied from March to September-October 2022. Hypothetically, the experience of being in the occupation was accompanied by a greater severity of the above-mentioned stressors and could affect the mental health and subjective well-being of the corresponding part of the respondents. In the course of the questionnaire, we clarified information from the respondents regarding the presence / absence of their personal experience of being in the occupation. We did not aim to collect a critical mass of those who had relevant experience, sufficient for a comparative analysis, so the share of such respondents turned out to be small – a little more than 12%. Correlational analysis showed that respondents with the experience of being in the occupation have significantly more pronounced signs of deterioration of mental health and post-traumatic stress than respondents who avoided the occupation disaster. The experience of the occupation had a negative effect on the vision of the purpose of life and the feeling of optimism ( $r = 0.13$ ,  $r_s = 0.13$ )<sup>2</sup>, in addition, the respondents with the experience of the occupation more often observed physiological manifestations of a stressful state: deviation from the normal body temperature (in particular, the feeling of chills); increase in muscle tone; disorders of the gastrointestinal tract and respiratory system (an example of one of the specified manifestations is given in Table 1). In general, respondents with experience of occupation tend to evaluate the state of their own physical health more negatively than respondents who did not have such experience.

**Table 1**  
**Temperature manifestations depending on the experience of being in the occupation (in % of all respondents by group)**

Temperature manifestations	Complete absence of temperature manifestations	Minor sensations of temperature manifestations	Significant sensations of temperature manifestations
Experience of occupation			
Respondents with experience of stay in occupation (n = 88)	52,3	14,8	32,95
Respondents who have no experience of being in occupation (n = 624)	71,8	15,1	13,1

<sup>1</sup> The survey was conducted by the Sociological group “Rating” on the order of the National Academy of Sciences of the National Academy of Sciences throughout Ukraine (except the occupied territories of Crimea and Donbas) on October 6-10, 2023. Survey design: mixed mode using CATI for recruiting respondents and CAWI for respondents’ answers to the main block of the questionnaire. 2,767 Ukrainian citizens living in Ukraine were interviewed. The sample represents Ukrainians aged 18 to 69 who use a smartphone (approximately 74% of the adult population of Ukraine). The sampling error with a confidence probability of 0.95 and considering the design effect is  $\pm 2.1\%$ . The respondents’ reach rate is 9.5%.

<sup>2</sup>  $r$  and  $r_s$  are Pearson and Spearman rank correlation coefficients, respectively.

Respondents with occupation experience have more sleep problems (difficulty falling asleep, sudden screams in sleep, waking up from sudden fear) and cognitive problems (changes in mental performance, decreased ability to concentrate, memory impairment (difficult to remember even what happened the day before)), problems at the level of the emotional sphere (increased emotional reactions, in particular, irritability) (an example of one of these manifestations is given in Table 2).

**Table 2**  
**Difficulty falling asleep depending on the experience of being in the occupation (in % of all respondents by group)**

Difficulty falling asleep	Strongly tangible	Rather tangible	Partly tangible	Rather not tangible	Not noticeable
Experience of occupation					
Respondents with experience of stay in occupation (n = 88)	17,05	21,6	30,7	19,3	11,4
Respondents who have no experience of being in occupation (n = 624)	9,8	13,1	26,95	29,0	21,2

Respondents with experience of occupation are more likely to believe that they have experienced serious trauma than those who have not had such experience, and they are also more prone to acute perception of other people’s pain. In addition, they more often note the desire to drink alcohol to the point of intoxication (Table 3).

**Table 3**  
**The desire to drink alcohol depends on the experience of being in the occupation (in % of all respondents by group)**

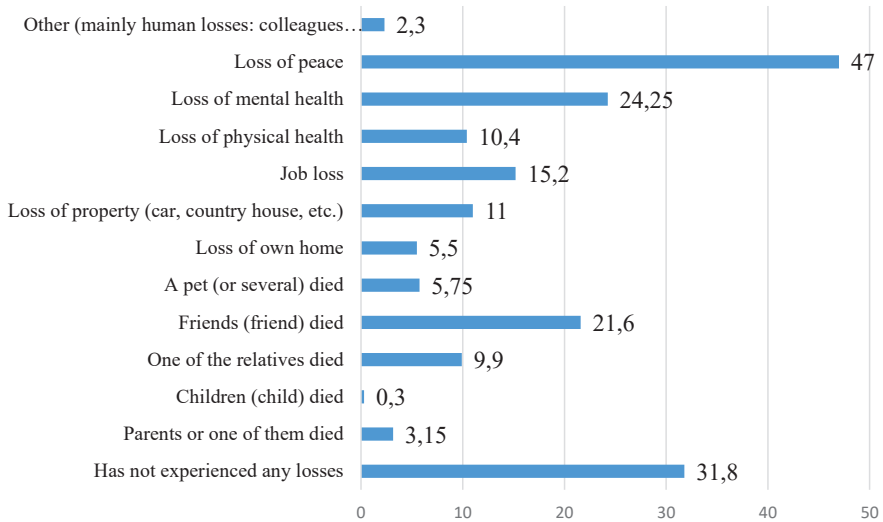
“Sometimes I have a desire get drunk”	Completely agree	Rather agree	Something average	Rather disagree	Disagree
Experience of occupation					
Respondents with experience of stay in occupation (n = 88)	21,6	12,5	30,7	11,4	23,9
Respondents who have no experience of being in occupation (n = 624)	10,1	11,8	26,0	23,2	28,8

Among the respondents who had experience of occupation, there are more often those who are haunted by memories of recent negative events, as well as among them, paranoid moods, thoughts that something negative is about to happen, danger will befall are more common among them (Table 4).

**Table 4**  
**The frequency of thoughts that danger will befall,**  
**depending on the experience of being in the occupation**  
**(in % of all respondents by group)**

Frequency of thoughts \ Experience of occupation	High	Rather high	Something average	Rather not high	There are no such thoughts
Respondents with experience of stay in occupation (n = 88)	11,4	14,8	38,6	26,1	9,1
Respondents who have no experience of being in occupation (n = 624)	3,1	12,9	32,7	31,0	20,25

It should be noted that respondents with experience of occupation rate their own material situation significantly worse than respondents who did not have such experience. Among the respondents with occupation experience, there are also more people who state that their financial situation worsened after the start of a full-scale invasion. Considering the fact that Kharkiv region is one of the most affected by the war, one of the hypotheses of our study is the existence of a relationship between the quantitative and qualitative characteristics of the losses experienced by the respondents and the state of their mental health and subjective well-being. The research toolkit provided clarification of the situation with losses, which was measured using a nominal scale with compatible alternatives (the number of alternatives was not limited, the respondents had the opportunity to choose all the types of losses proposed in the list). Therefore, the following results were obtained: about 47% of respondents noted that they lost their peace; about a quarter (24.25%) – experienced losses at the level of health; almost 35% – experienced human losses due to death as a result of the war (mostly these are friends, however, there are respondents who lost close relatives, parents and children); 15.2% – lost their jobs; about 11% suffered property losses; 10.4% – experienced losses of physical health; 5.75% – lost pets as a result of the war; 5.5% – lost their housing (Fig. 1).



**Fig. 1. Losses suffered by representatives of the civilian population of Kharkiv city and Kharkiv region since the beginning of the full-scale Russian invasion of Ukraine (in % of the total number of responses)**

It should be noted that among the residents of Kharkiv city and Kharkiv region who took part in the survey, compared to the all-Ukrainian data of the Kyiv International Institute of Sociology, there are almost twice as many people who lost their jobs (15 vs. 27%, respectively), as well as about 9% less people who suffered human losses (friends, family members, etc.) (35 vs. 44%, respectively). In our opinion, this difference is due to the fact that we surveyed only the civilian population of Kharkiv city and Kharkiv region, while the all-Ukrainian survey was conducted using randomly selected telephone numbers of all citizens of Ukraine, among whom there could very likely be military personnel. In addition, residents of Kharkiv city and Kharkiv region have a somewhat lower rate of loss of their own housing than in Ukraine as a whole (5.5 vs. 8%, respectively), and the loss of other movable and immovable property fully coincided with the all-Ukrainian rate of 11% [3; 10; 12].

The vast majority of our respondents chose at least 3 alternatives from the list of losses. Despite the fact that 32% of respondents chose the alternative “did not suffer any losses”, which was located first on the list and its selection gave the opportunity to move on to the next question, not a single respondent did not move on and, along with this alternative, chose one of the following types of loss (usually “peace”, “mental health” or “physical health”). Most likely, this situation is connected with the fact that in the respondents’ ideas, the loss was primarily associated with property, physical things or people. Those respondents who did not experience such losses initially chose the first alternative, which indicated their absence, however, as they moved further down the list, they still



found what they had lost – something that did not agree with their initial ideas about the loss.

In general, the correlational analysis showed that the feature indicating certain losses of the respondents has many statistically significant relationships with indicators of mental state, and especially with the feeling of subjective well-being.

Before presenting the results of the analysis, we consider it necessary to note that it is customary to consider a strong connection corresponding to indicators of the correlation or conjugation coefficient higher than 0.6. But practice has proven that the larger the sample size, the lower the coefficients should be expected. With large sample sizes, even a weak correlation can be analytically interesting if it is statistically significant. The phenomena, processes, and events studied in the social and behavioural sciences are so complex, multifaceted, and multifaceted that there cannot be linear dependencies here. That is, one event is usually influenced by many factors. If all these factors (or most of them) in the form of signs are included in the research toolkit, and if we imagine an ideal model of the uniform influence of each of them, then as a result we will get quite low correlation coefficients. That is, even relatively low correlation coefficients deserve attention and further analysis.

Correlation analysis of the data from our study showed results similar to those described above: all correlation coefficients, with a few exceptions, did not exceed 0.2. Nevertheless, many of them deserve attention, in particular, if we consider the classification of correlation coefficients, which is based on the size of the sample, according to which those coefficients with a significance level of at least 0.1 or 1% are taken into account.

So, we sought to find out whether there is a connection between the losses suffered by representatives of the civilian population of Kharkiv region and certain indicators of their mental health and subjective well-being. Despite the relatively low coefficients of conjugation, the highest of them (with a  $\chi^2$  test's significance level of 1%) are observed with such signs that indicate the respondents' satisfaction with their own physical health ( $T = 0.14$ ,  $T_c = 0.19$ )<sup>1</sup>, sleep quality ( $T = 0.14$ ,  $T_c = 0.18$ ), daily activity ( $T = 0.14$ ,  $T_c = 0.18$ ), as well as the ability to enjoy life ( $T = 0.13$ ,  $T_c = 0.18$ ) and the presence of depressive moods ( $T = 0.15$ ,  $T_s = 0.2$ ). Such correlations are quite understandable, since the respondents experienced the greatest losses precisely at the level of mental and physical health, and almost every second person lost their peace of mind. At the same time, the lowest values of correlation coefficients indicate that significant losses did not affect the purpose in life, confidence in one's own beliefs, ability to do what is desired and develop, satisfaction with oneself and one's own achievements, friendly and personal relationships.

Considering the results of the one-dimensional distribution, it can be concluded that the representatives of the civilian population of Kharkiv region, despite the significant losses they have suffered, do not lose their positive attitude and self-belief, have achievements and value them highly, are goal-oriented and

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<sup>1</sup> T and T<sub>c</sub> are the mutual conjugation coefficients of Tchuprov and Cramer, respectively.

achieve their goals, and are satisfied with family and personal relationships. Really, almost 60% of respondents are strongly and very strongly confident that there is a purpose in their life, 22.6% are moderately confident and only 5.2% are not at all confident (the average value on the entire scale is 3.6). Almost 60% are strongly and very strongly confident in their own beliefs; slightly more than 30% – average and not at all sure – only 3.7% (average value for the entire scale – 3.6). A slightly different (but hardly such that can be considered negative) situation with the ability of respondents to do what you want, as well as to grow and develop. The majority of respondents rate the ability to do what they want at an average level (40.3%), and the ability to grow and develop is rated somewhat higher by 36.4% – at an average level, and at a high level – 31.8% and at the highest level – about 10 %. Such distributions of responses are generally natural, subject to the considerable limitations imposed by the requirements of martial law and the conditions of war. Despite the war, representatives of the Kharkiv region believe that they have achieved and are mostly satisfied with them (on average – 42.6%, strongly – 27.4%, very strongly – 8.2%). More than half are very or very satisfied with their family life (about 52%) and about the same amount are very or very satisfied with their friendships and personal relationships.

According to the results of the correlation analysis, based on the loss received as a result of the war and the signs indicating the manifestations of Nervous mental tension (NMT), approximately the same dependencies emerge as with regard to assessments of subjective well-being. That is, the highest correlation indicators are observed with signs of physical and mental discomfort ( $T = 0.12$ ,  $T_c = 0.19$  and  $T = 0.14$ ,  $T_c = 0.22$ , respectively), muscle tension ( $T = 0.13$ ,  $T_c = 0.2$ ), characteristics of sleep and memory (respectively,  $T=0.15$ ,  $T_c=0.24$  and  $T=0.14$ ,  $T_c=0.22$ ), general emotional and mental state ( $T = 0.16$ ,  $T_c = 0.25$  and  $T = 0.16$ ,  $T_c = 0.26$ , respectively), by the frequency of occurrence and duration of the voltage state ( $T = 0.14$ ,  $T_c = 0.23$  and  $T = 0.14$ ,  $T_c = 0.23$  respectively).

If we look at the correlations between the losses suffered by residents of Kharkiv region and signs of post-traumatic stress, the highest coefficients are observed in the following cases: flinching from a sudden noise ( $T = 0.15$ ,  $T_c = 0.19$ ); physical health ( $T = 0.14$ ,  $T_c = 0.18$ ); sleep quality ( $T = 0.15$ ,  $T_c = 0.2$ ); constant return in thoughts to difficult and/or unpleasant events ( $T = 0.12$ ,  $T_c = 0.18$ ); feeling confused ( $T = 0.13$ ,  $T_c = 0.17$ ). The lack of statistically significant relationships indicates that the respondents' losses did not affect their satisfaction with their work, their desire to help people in trouble, their mood (irritation, etc.), their belief in "the triumph of justice", their assessment of themselves as a kind, attentive person who has nothing to be ashamed of. In addition, respondents' perceived losses did not increase their tendency to drink alcohol, nor did they believe that alcohol was an effective stress reliever.

Principal attention should be paid to self-assessments of losses at the level of mental and physical health, which among representatives of the civilian population of Kharkiv region are significantly lower than among the population of Ukraine as a whole. Thus, deterioration of mental health is recorded almost three times less often among representatives of the civilian population of Kharkiv region than throughout Ukraine as a whole (24 and 63%, respectively)

[10]. Deterioration of physical health is recorded approximately 5 times less often among representatives of the civilian population of Kharkiv region than throughout Ukraine as a whole (10 and 55%, respectively) [10]. We assume that to a certain extent such discrepancies are, again, related to the fact that we surveyed only the civilian population, while the sample of the all-Ukrainian study also included military Ukrainians. However, the difference in percentages is so large that the specified difference between the qualitative characteristics of the sample, in our opinion, is not the main factor causing this difference. In our opinion, we are observing a phenomenon here, the presence and action of which is specific to the residents of Kharkiv city and Kharkiv region. We have several hypotheses regarding its explanation, the essence of which we will outline below.

Firstly (which is the most likely in view of other results of our research), the situation of differences described above may be another confirmation that part of the representatives of the civilian population of Kharkiv region are experiencing the second stage of stress and are in the second stage of NMT, which is characterized by general rise of moral, mental and physical forces. At the same time, if certain unpleasant sensations are observed on the part of somatic organs and systems, they remain invisible to their “owners”, they are masked by a general positive emotional background, a cheerful mood, an influx of physical strength and an active desire to overcome difficulties. During the second degree of NMT, there are changes in the dynamic characteristics of the nervous system, which in general can be qualified as an increase in the level of its activation. The results of our research proved that the average indicators of the civilian population of the Kharkiv region fluctuate between the first and second degrees of the NMT, tending to the second. Despite the fluctuations, the deferred threat regarding the transition to the third (very difficult and destructive for the individual) degree clearly persists, considering the delayed and uncertain perspective of the end of the war, as well as a certain hopelessness of the situation in which the residents of the city and region found themselves, due to the geographical proximity to the aggressor country. The third degree of NMT is characterized by disorganization of mental activity, significant deviations in psychomotor skills, deep shifts in neurodynamic characteristics, and a feeling of common physical and mental discomfort in general. If the symptoms of the third degree of NMT will increase and spread to a significant part of the population of the region, it will certainly have a negative impact on all social, economic and other processes taking place there. In our opinion, preventive measures that can prevent the transition from the second to the third degree of NMT are absolutely necessary.

Secondly, the identified differences may be a manifestation of the mobilization of physical and mental resources of the civilian population of Kharkiv city and Kharkiv region as a result of feelings of rage. According to the results of the Traumatic Stress Questionnaire, the average of demonstrable anger (rage) attacks is 3.2 on a 5-point scale, where 5 is the highest degree of symptom manifestation. In addition, the results of the factor analysis also indicate that anger is a factor in the respondents' social and labour activity, but also indicate that the manifestations of anger are directed specifically at the Russian aggressor, and not at one's own environment [14, p. 177]. Kharkiv residents have always

been distinguished by a heightened sense of love for their city. According to the results of a sociological study conducted already after the full-scale invasion of Russia, Kharkiv residents have the highest level of pride in their city. More precisely, to the question “Do you feel proud to be a resident of your city?” 86% of Kharkiv residents answered “Definitely yes.” For comparison, 78% of those who answered similarly are from Kyiv residents, 77% – from Odesa residents, the same number from Lviv residents, 75% – from Vinnytsia residents, etc. [22].

Kharkiv has a border with Russia at a distance that slightly exceeds 20 kilometres, so new destructions in the city caused by the Russian aggressor occur almost every day. Residents of Kharkiv are watching them and certainly feel rage for every innocent death, mutilated building, destroyed architectural monument, destroyed buildings of native schools and universities, etc. Kharkiv and Kharkiv region are in a permanent state of danger, according to the number of alarms, Kharkiv region ranks 3rd in the corresponding negative rating, where it is surpassed only by Donetsk and Luhansk regions. Despite this, Kharkiv residents are returning to the city. Before the war, about 1.5 million people lived in Kharkiv. After the beginning of the full-scale invasion of Russia, the population of the city decreased sharply. In March 2022, about 400,000 people remained in Kharkiv, and this was the lowest point. The people evacuated to the western regions and abroad. However, already in December 2022, the third wave of the return of people was observed, which brought the population closer to the pre-war indicators – 1.2-1.3 million (of course, considering the fact that the city received many forced migrants from Donetsk, Luhansk, Zaporizhzhya and Kherson regions) [8]. By the way, accepting internally displaced persons, relatives and friends who were left without homes, job, property, etc., the people of Kharkiv also feel rage, and at the same time, the desire to live, work, express social activity, in spite of everything and against the evil of the enemy to survive, to fight without giving up. Since rage is a state of overexcitement that affects the psyche’s formation of negative emotional sensations in the human mind, here we are probably dealing with the compensatory and protective function of emotions, which is activated in the event of a low probability of satisfying a need, activates the activity of internal organs, increases potential opportunities to meet the need [16, p. 16]. That is, excessive mobilization of energy resources occurs, which insures the body against possible failure.

Thirdly (which is the least probable), the peculiarity we found may indicate that for part of the civilian population of Kharkiv city and Kharkiv region, a state of eustress (positive stress) is characteristic. The inhabitants of this region, in the less than two years of the full-scale invasion (at the time of the survey), managed to survive all the hardships of the war: hunger, cold, death of loved ones, destruction, bombings, blackouts, occupation, etc. (which are not abating even now). That is, a strong experience of stress is guaranteed for each of them. Modern scientific investigations by representatives of psychological science indicate that stress should be considered as a factor not only in negative manifestations and deviations from the side of human health, but also in strengthening the body and increasing its ability to resist adverse conditions. Therefore, stressful situations can have not only a destructive effect, but also

stimulate the protective mechanisms of the individual. Moreover, some scientists claim that in the continuous adaptation of the individual to the forced changes in the environment (namely, the residents of Kharkiv and the residents of the region have been in such conditions for more than two years), stress is the best and most reliable “ally” [6, p. 111].

### **Conclusions.**

Some residents of Kharkiv city and Kharkiv region survived the occupation, and this experience had a negative impact on their mental health. As expected, our study found that they were more traumatized by war than those who had no such experience. Respondents with occupation experience have quantitatively more pronounced sleep problems and cognitive problems (changes in mental performance, decreased ability to concentrate, memory deterioration (when it is difficult to remember even what happened the day before), problems in the emotional sphere (increased emotional reactions, in particular, irritability) They are more likely to believe that they have experienced a serious trauma, in addition, they more often note the desire to drink alcohol to the point of intoxication. Among the respondents who had the experience of occupation, there are more often those who are haunted by memories of recent negative events, as well as paranoid moods, thoughts that something negative is about to happen, are more common among them.

Despite the significant losses suffered by representatives of the civilian population of Kharkiv city and Kharkiv region during the period of the full-scale invasion of Russia, they do not lose their positive attitude and self-belief, they have achievements and value them highly, they are goal-oriented and satisfied with family and personal relationships. However, losses still affect mental health and subjective well-being, in particular, significant losses can cause more pronounced physical and mental discomfort.

Our study did not reveal the prevalence of post-traumatic stress disorder among respondents [14, p. 276], but this does not mean that they do not need psychological support and psychological support. If it is specifically about those respondents who survived the occupation, as well as those who suffered losses in the war, then the key recommendations regarding their psychological support and professional support of a psychologist can be summarized and presented in the following list [11; 15; 21]:

- listen, accepting, and not judging (this especially applies to those citizens who have lived through the occupation; it should be based on the understanding that a person has passed a certain negative “trial” that is not typical for everyone, so no one has the right to judge him / her);
- clearly convey to the client / patient your desire to help express his / her grief;
- be prepared that some clients / patients will get angry and openly show their anger and aggression;
- remember that it takes more time than usual for trust to appear (until it is there, the client / patient is not able to share his experiences);
- work on fostering hope (for example, encouraging the client / patient that, despite the pain of the ordeal, people still recover from grief);

- keep a reasonable distance, do not allow yourself to get entangled in other people's problems so much that it becomes impossible to maintain the position of someone who helps;
- allow the client / patient who has experienced a loss to express his feelings and thoughts as fully as possible;
- be realistic and do not seek to eliminate the pain of the client / patient immediately, this is inappropriate;
- if it is about the loss of a loved one, encourage the client / patient to talk about the deceased and express feelings;
- perceive as a norm when the client / patient repeats the story about the death of a close person or animal, etc. (repetition and speaking is a natural way to cope with grief);
- inform the client / patient about what is "normal" for the state of grief (for example, somatic symptoms, sleep disturbances, poor appetite, etc.);
- allow the client/patient to take a "break" from grief, while not allowing the process of "grief work" to be avoided.

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