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FEATURES OF PSYCHOSOMATIC MANIFESTATIONS IN INTERNALLY DISPLACED PERSONS DURING THE WAR

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Abstract: The large-scale invasion of Russian troops in Ukraine in 2022 caused a significant number of social and individual tragedies, one of which was the mass exodus of people from dangerous areas due to the loss of their homes and the threat to their lives and health. By the end of November 2022, the number of internally displaced persons reached nearly 7 million. The suddenness and high intensity of stress in these conditions contributed to the emergence of various emotional and physiological reactions. Unprocessed trauma and psychological experiences related to the ongoing war triggered several psychosomatic disorders that may develop into diseases in the future. Therefore, it is necessary to identify effective ways to prevent the somatisation of psychological stress and reduce the impact of stress factors on the nation's health in the future. The study aimed to analyse and experimentally investigate the spectrum of psychosomatic disorders in internally displaced persons and the individual psychological characteristics of the personality that contributed to their manifestation. The research methodology is presented by theoretical methods such as analysis and synthesis, systematisation, and generalisation of the obtained information and modelling. Using correlation analysis, it was proven that some psychological defences, such as compensation, regression, and projection, have a direct connection with psychosomatic disorders. Based on the analysis of theoretical materials, methods, and questionnaires that reflect the presence and structure of psychosomatic manifestations, as well as the personal characteristics that affect this, were selected.

Keywords: psychosomatic disorders, internally displaced persons, somatisation, somatic complaints, psychological tension, stress, traumatisation, psychological protection, alexithymia.

1 Introduction

Psychosomatic disorders and diseases are becoming increasingly relevant today. This is especially true for Ukrainians. Since the start of the full-scale phase of the war that Russia launched against Ukraine, stress has become not something individual and abstract, living in the mind of a single person, but a genuine, large-scale, all-encompassing factor influencing the life, health, and in many cases, the physical survival of every citizen. The suddenness and intensity of the stressor caused an overload of physiological and psychological processes in the human body. They triggered a reaction in the body as the last line of defence against the stressor and adaptation to new conditions. A particular category of people in this context is internally displaced persons. If a person manages to survive and move to a safer place, which often happens on adrenaline and not entirely consciously, the next period involves processing and responding to the traumatic experience and settling into a new place.

At this stage, the risk of developing psychosomatic disorders increases rapidly. It primarily depends on the individual's psychological and physiological characteristics and the social environment in which the person finds. Therefore, it is essential to promptly identify and influence the factors that significantly cause the somatisation of psychological stress to prevent the occurrence or development of more severe and prolonged diseases.

Many domestic and foreign scientists have studied psychosomatic disorders. Sigmund Freud and his followers, such as G. Groddeck, M. Schur, A. Mitscherlich, F. Dunbar, and others, formed several psychoanalytic theories about the origin of psychosomatic diseases.

F. Alexander's theory of specific psychodynamic conflict is considered fundamental today. Cannon and Selye (2023) studied stress and its impact on bodily processes. J. Nemiah and P. Sifneos identified alexithymia as a psychological factor of somatisation in patients.

Among domestic scientists studying psychosomatics in medicine, S. D. Maksymenko (2004), O. S. Chaban, and O. O. Khaustova (2023) can be highlighted. Among psychologist-scientists studying psychosomatic disorders are O. M. Chervynska (2013), H. P. Mozghova, and D. M. Kharchenko (2012).

Research on the impact of armed conflicts on forcibly displaced persons and refugees and their ability to recover from stressful or traumatic events has been conducted by many scientists during and after the wars in the Persian Gulf, Syria, and the Balkans. Among them are A. Prorokovic, M. Cavka, L. Jolof, P. Rocca, A. Sabioncello, D. Kocijan-Hercigonja, and others. It has been found that resilience to diseases and the subjective sense of health of refugees is indeed related to improving their mental state. However, researchers also emphasise that cultural, social, material and personal factors play an essential role in the formation of psychological resilience (2022).

Research conducted by scientists has established that, compared to soldiers and the civilian population, forcibly displaced persons have higher levels of psychosomatic and depressive symptoms during the war period. It also indicates the relevance of the research topic and the importance of focusing on the selected population category.

The study aims to actualise the topic of psychosomatics during war trauma, to analyse and experimentally investigate the spectrum of psychosomatic disorders of IDPs, and to identify individual psychological characteristics of the personality and psychological defence mechanisms that contribute to their manifestation.

The research methodology is presented by theoretical methods such as analysis and synthesis, systematisation, and generalisation of the obtained information and modelling. For conducting the empirical study, the following methods were used: the Giessen Complaint List (GCL); the Symptom Checklist SCL-90-R, BSI-18 modification (Derogatis, Lipman, Covi); the Toronto Alexithymia Scale (Graz, Roemer); the Lifestyle Index (Plutchyk, Kellerman). Statistical methods such as correlation analysis of indicators were also used in the work.

2 Research results

According to the formulated objective, three stages of the study can be distinguished. In the first stage, we determined the empirical sample. Thus, 61 people aged 18 to 55 years participated in the study. Among them, 57 were women, and 4 were men. All respondents are internally displaced persons residing in the Vinnytsia community.

The survey was conducted online using a Google form. Correlation analysis was also used to determine the strength of the relationship between the measured indicators. The empirical study was conducted among internally displaced persons who left occupied territories or areas where military actions took place and moved to Vinnytsia. A total of 61 individuals participated in the empirical study. In the introductory questionnaire, respondents were asked about their age, gender, and general health assessment.

It was found that among the respondents, three individuals were aged 18 to 24 (5%), 17 individuals were aged 24 to 34 (28%), 24 individuals were aged 35 to 44 (39%), and 17 individuals were

aged 45 to 55 (28%). The structure of respondents by age is presented in Table 1 and Figure 1.

Table 1. Respondents' Age Grouping

Age	Total	
	Number of people	In %
18-24	3	5%
25-34	17	28%
35-44	24	39%
45-55	17	28%

In the question, "How do you assess your health condition?" six respondents answered that they were healthy, 49 had some health problems, and 6 had severe health problems. Thus, 90% of the respondents do not consider themselves healthy, which is a concerning trend and a signal for urgent intervention.

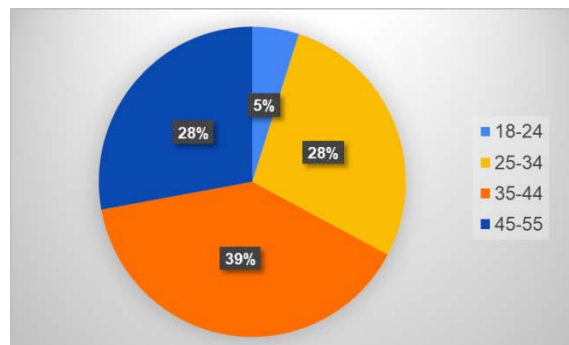


Figure 1. Diagram of Respondents' Age Grouping.

Table 2. Distribution of Complaints Intensity according to the Giessen Questionnaire.

Severity of complaints	Exhaustion	Gastrointestinal complaints	Rheumatic factor	Heart complaints	Severity of complaints
Low – up to 20%	5	32	2	26	7
Medium – 20% - 40%	23	18	16	23	31
High – 40% - 70%	19	10	24	11	21
Critical – more than 70%	14	1	19	1	2

The data collected using the Giessen Complaint List allows for analysing the intensity level and structure of respondents' complaints. The results are presented in Table 2.

In order to provide a visual representation of the data, it is proposed that the information be presented in the form of graphs.

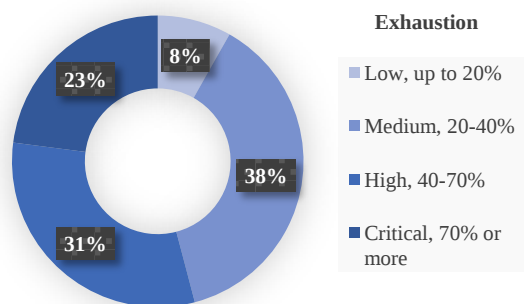


Figure 2. Severity of Complaints on the Exhaustion Scale.

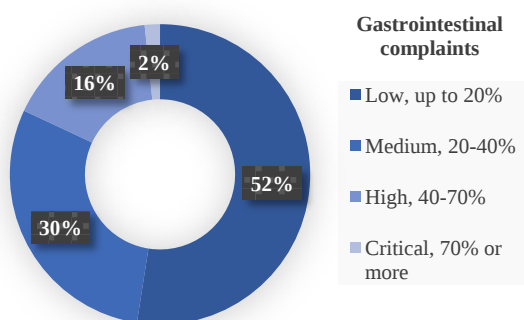


Figure 3. Severity of Complaints on the Gastrointestinal Complaints Scale.

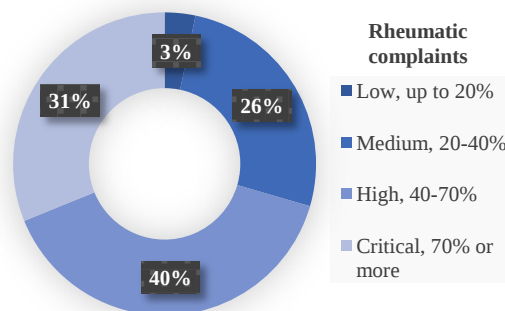


Figure 4. Severity of Complaints on the Rheumatic Complaints scale.

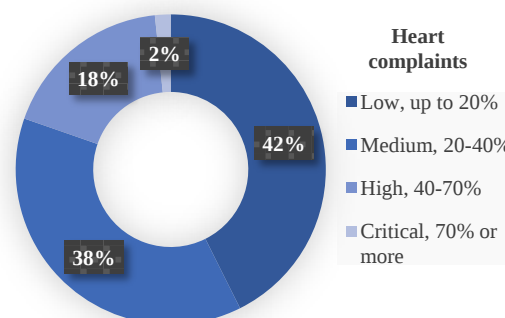


Figure 5. Severity of Complaints on the Heart Complaints scale

We see that the surveyed respondents often feel exhausted. Only 8% do not have or very rarely experience any symptoms. Regarding rheumatic complaints, the situation is even more critical, as two-thirds of respondents frequently or very frequently have related symptoms and body pains. Only 3% of those surveyed do not complain of rheumatic pains.

The situation with the cardiovascular system and gastrointestinal tract is better. Twenty per cent of respondents have a high and critical level of heart complaints, and around forty per cent occasionally experience various symptoms. It is important to

note that these twenty percent include younger people, half of whom are aged 25-34 (6 individuals) and 35-44 (5 individuals). It is a dangerous trend for the development of cardiovascular insufficiency in the future.

Regarding stomach complaints, 18% have a high or critical level, and 38% occasionally experience symptoms. These are mainly feelings of pressure or fullness in the abdomen and stomach pain. Some respondents occasionally or rarely complained of belching and heartburn.

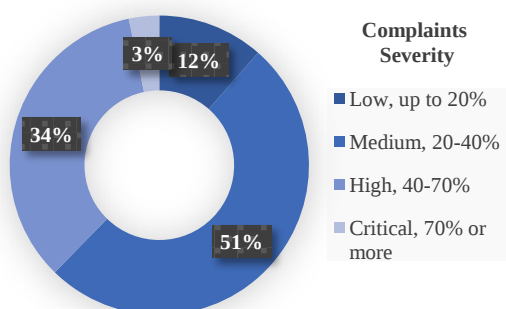


Figure 6. Overall Severity of Somatic Complaints.

Consequently, from the calculations, 85% of internally displaced persons predominantly have a medium to high level of somatic complaints. Moreover, a high or critical level of exhaustion and rheumatic pains are observed in 54% and 71% of respondents, respectively, which predisposes them to more severe illnesses. Discomfort in the cardiovascular system (medium, high, or critical) is occasionally experienced by just over half of the respondents, while about 40% complain about stomach issues. It is important to note that, for more accurate identification of people with psychosomatic symptoms, respondents with chronic organic diseases are usually excluded from the sample, as such diseases can independently cause discomfort and not be a result of stress. On the other hand, organic diseases related to psychosomatics can worsen against the backdrop of additional stress factors. Considering the category of internally displaced persons, we can assume that respondents have a relatively high-stress level to some extent so that we can disregard this remark in our study.

Looking at respondents in terms of well-being, out of 54 people with a medium, high, or critical level of psychosomatic complaint intensity, only three consider themselves healthy. Most indicate that they have some health problems, and 5 out of 54 have serious health problems, all of whom fall into the category with a high level of somatisation.

From the above, we can conclude that the vast majority of respondents have various psychosomatic symptoms and need psychological and psychotherapeutic assistance. Additionally, 49 out of 61 respondents expressed interest in participating in a corrective program to reduce and prevent psychosomatic disorders.

The data collected using the following methodology, the "BSI-18 Symptom Checklist," gave us an idea of the respondents' levels of anxiety and depression. This questionnaire also includes a somatisation scale, which allowed us to compare the results with the data from the Giessen questionnaire. We will display the data in graphs for visual representation.

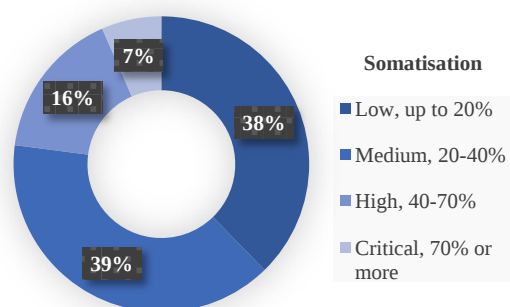


Figure 7. Complaints Severity by Somatisation Scale.

Consequently, 23% of respondents have a high level of somatisation, and about 40% have various symptoms. Only 2 out of 38 people consider themselves to be somatically healthy. The others indicated that they have some or severe health problems.

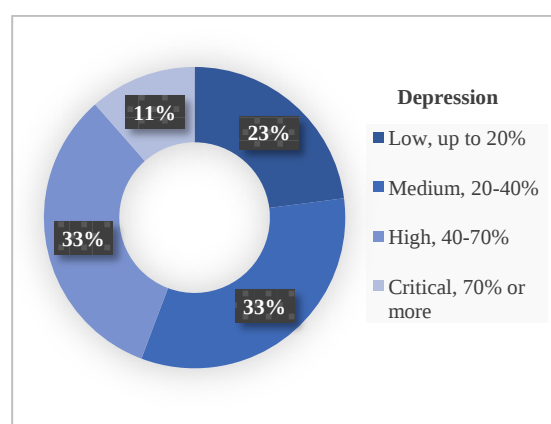


Figure 8. Complaints Severity on the Depression scale.

On the depression scale, a high level was found in slightly less than half of the survey participants (44%). Among the symptoms, respondents most frequently noted having a depressed mood and a lack of interest in anything, feelings of hopelessness and worthlessness. One person mentioned having thoughts of suicide very often.

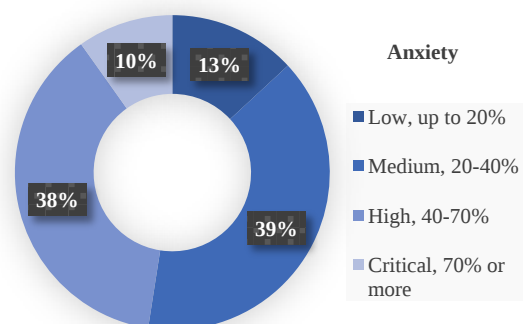


Figure 9. Complaints Severity on the Anxiety Scale.

It is worth noting that the level of anxiety is also relatively high. Only 13% do not report significant symptoms of anxiety. Meanwhile, around 40% have some manifestations of anxiety, and about half experience anxiety often or very often. It is essential to pay attention to such manifestations and teach people methods and techniques to overcome anxious states, expand their coping strategies, and promote the flexible use of psychological defences.

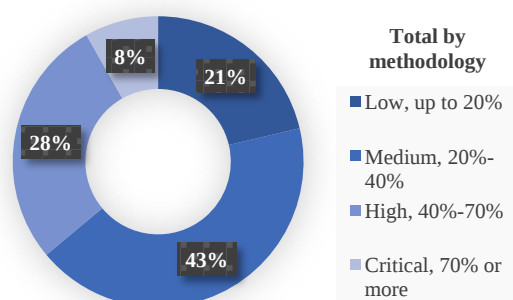


Figure 10. Complaints Intensity according to BSI-18 Methodology.

Thus, using the methodology, we found that the vast majority of respondents suffer from anxiety and depression, with more than half having a moderate to critical level. According to this questionnaire, somatisation is observed in more than 20% of respondents, while 80% occasionally experience various symptoms. This difference in symptom manifestation between the two methodologies can be explained by looking at the correlation between the somatisation scale of the BSI-18 questionnaire and the scales of the Giessen questionnaire.

From Table 4, it is clear that the somatisation scale of the BSI-18 has a closer correlation with the rheumatic factor and heart complaints than with exhaustion and stomach complaints. Therefore, we can assume that the questions selected in the BSI-18 questionnaire are inclined towards identifying these particular symptoms. In contrast, the Giessen questionnaire covers a broader range of symptoms.

Using the following methodology, we determined the level of alexithymia among the participants. This crucial indicator is one of the factors provoking psychosomatic disorders. Since a person is unable to identify their feelings or is in a state of constant negative well-being and cannot distinguish between normal and discomfort, such a person is not motivated to resolve internal conflicts effectively. Thus, a permanently high level of arousal leads to hormonal imbalances in the body and, as a result, provokes psychosomatic disorders.

Scientific literature states that alexithymia occurs in 10% of the population and can arise in several psycho-emotional states. Analysing the data collected through the questionnaire, we can assert that the level of alexithymia among internally displaced persons is significantly higher than the average. The results are presented in Table 3.

Table 3. Alexithymia Level

Presence of alexithymia	Number of people	In %
Absent, up to 62 points	18	30%
Risk zone, 63-73 points	22	36%
Presence of alexithymia, 74 and more	21	34%

Table 4. Respondents' Grouping by Complaint Intensity according to the BSI-18 Questionnaire

Tension	Somatisation	Depression	Anxiety	Total on the scale
Low up to 20%	23	14	8	13
Medium 20% - 40%	24	20	24	26
High 40% - 70%	10	20	23	17
Critical more than 70%	4	7	6	5

The graph shows that 25 out of 61 respondents have a high level of tension in psychological defences such as regression, projection, and reaction formation. Additionally, the respondents actively use defences such as denial, repression, compensation,

Consequently, it was found that among the respondents, a third exhibited alexithymia, and another third were at risk. It is a very high indicator, which may be explained not by a congenital predisposition but by the nature of the psycho-emotional state these individuals are experiencing. A high level of stress and the intensity of negative experiences harm the nervous system.

As a result, the psyche tries to protect itself from excessive emotional experiences by blocking emotional sensitivity. In turn, due to the high intensity of experiences and a wide range of emotions from negative to positive, coupled with reduced cognitive functions, the brain does not have time to process the entire emotional experience. Therefore, many experiences remain background, unconscious, and mixed, leading to a sense of oppression without understanding why and an inability to trace cause-and-effect relationships.

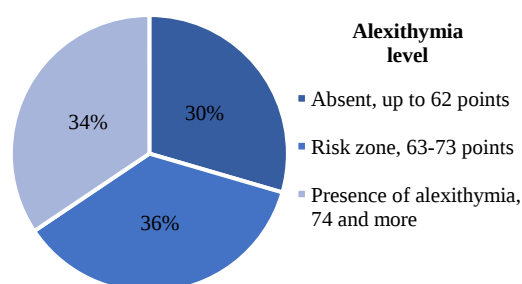


Figure 11. Respondents' grouping by Alexithymia level.

To correct and prevent alexithymia, it is necessary to consult a psychologist who can help trace the emotions and thoughts that cause it and provide practical recommendations and exercises for independent work on this problem. Otherwise, as scientific research has proven, there is a high risk of psychosomatic disorders.

The last methodology offered to respondents was the "Lifestyle Index." Using this questionnaire, we collected data on the psychological defences typical of the respondents. According to this methodology, studies indicate that most women aged 28-30 have a 40-50% defence tension. It includes 75% of the surveyed respondents. Among individuals with neuroses, this figure usually exceeds the 50% level, which allows us to assume that the Lifestyle Index reflects fundamental but unresolved external and internal conflicts (Zlyvkov et al., 2016).

In the context of studying psychosomatic disorders, we can rely on these data to analyse the psychological defences of our survey participants, as unresolved conflict situations influence changes in the overall emotional background and the autonomic components of emotional reactions, which is one of the factors in the occurrence of psychosomatic reactions and disorders. To assess the data for each defence scale, we use the following gradation: up to 40% – low tension level; 40-70% – active use of defence; more than 70% – high tension level. The analysed data are presented in Table 4.

and rationalisation. Regarding the tension of defences, the results are distributed as follows: low, up to 40% – 6 respondents; medium, 40-50% – 14 respondents; high, more than 50% – 41 respondents. The data are visually represented in Figure 12.

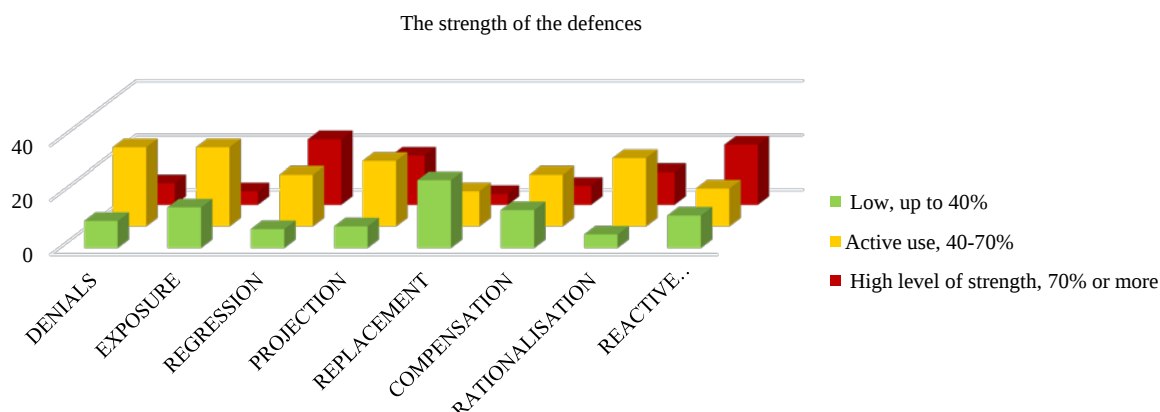


Figure 12. Respondents' Grouping by Frequency of Using Psychological Defences.

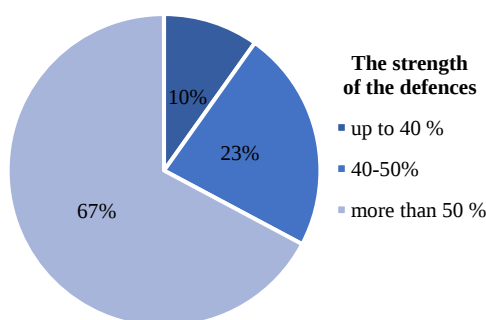


Figure 13. Respondents' Grouping by Protection Intensity.

Looking at the overall strength of defences, 67% of respondents exhibit a high strength—more than 50%. It indicates that most respondents predominantly use unconscious defence

mechanisms. It can be concluded that individuals cannot resolve many internal and external problems, so the psyche tries to adapt through mechanisms learned in childhood. In the context of psychosomatic illnesses, it is also essential to analyse the proportion of primitive defences and higher-level defences in the overall assessment of defences. Primitive defences are more destructive for individuals as they disrupt social connections, increasing stress levels and leaving problems unresolved. Primitive defences include regression, projection, and displacement, while higher-level defences include compensation, rationalisation, and reaction formation. Regarding denial and repression, these defences can be effective in certain situations. However, it should be noted that high tension on the repression scale may indicate a tendency to encapsulate traumatic experiences, which in turn is a high risk for the development of PTSD. The correlation between the types of defences used by respondents and each scale of the Giessen Questionnaire will be analysed. The analysis data are presented in Table 5.

Table 5. Correlation of Psychosomatic Complaints

	Exhaustion	Gastrointestinal complaints	Rheumatic factor	Cardiac complaints
1	2	3	4	5
Exhaustion	1			
Gastrointestinal complaints	0,492304	1		
Rheumatic factor	0,419404	0,480104	1	
Cardiac complaints	0,678136	0,553805	0,5949	1
Somatisation BSI-18	0,514232	0,547181	0,751538	0,774838

From the data analysis, we can conclude a correlation between the intensity of somatic complaints and the tension of defences, approaching a medium strength of 0.41. Specifically, regression and displacement have a medium or nearly medium correlation with exhaustion, heart complaints, and the overall intensity of somatic complaints. There is also a weak correlation between these scales and projection. It confirms our hypothesis about primitive defences and their impact on the manifestation of psychosomatic complaints. It is worth noting that stomach

complaints and the rheumatic factor do not connect with psychological defences, except for regression and the overall tension of defences, which weakly correlate with rheumatic complaints at 0.32 on both scales. We also used a different approach to determine the relationship between defences and somatic complaints. We identified the proportion of primitive and higher defences in the overall defence structure and determined the correlation between these indicators.

Table 6. Correlation between Types of Psychological Defences and Somatic Complaints according to the Giessen Questionnaire.

Protection type	Exhaustion	Stomach complaints	Rheumatic factor	Heart complaints	Severity of complaints
1	2	3	4	5	6
Denial	-0,24	-0,23	0,03	0,01	-0,14
Displacement	0,11	-0,12	0,20	0,02	0,07
Regression	0,41	0,16	0,32	0,45	0,42
Projection	0,38	0,14	0,20	0,31	0,33
Substitution	0,52	0,27	0,22	0,40	0,45
Compensation	0,17	0,06	0,09	0,28	0,19
Rationalisation	-0,08	-0,16	-0,21	-0,04	-0,14
Reactive formation	0,09	0,01	0,22	0,12	0,14
Defence intensity	0,42	0,06	0,32	0,47	0,41

Consequently, we see that the more significant the proportion of primitive defences in the overall structure of psychological defences, the higher the level of exhaustion and overall intensity

of complaints in an individual (+0.57 and +0.54, respectively) (Table 7).

Table 7. Correlation between Primitive, Higher and Other Defences and Somatic Complaints

Protection type	Exhaustion	Stomach complaints	Rheumatic factor	Heart complaints	Severity of complaints
1	2	3	4	5	6
Primitive	0,57	0,37	0,28	0,46	0,54
Higher	-0,37	-0,14	-0,32	-0,30	-0,33
Other	-0,42	-0,36	-0,08	-0,33	-0,38

It indicates a direct relationship between these somatic manifestations and the intensity of using regression, projection, and displacement. There is also a weak correlation between stomach (+0.37) and rheumatic (+0.28) complaints and primitive defences. Conversely, we observe a weak but inverse correlation with more constructive defences, such as compensation, rationalisation, and reaction formation, indicating a reduction in psychosomatic manifestations when these psychological defences are used. Similarly, an inverse correlation approaching medium strength is observed between other defences (denial and repression) and exhaustion (-0.42). A weak negative correlation is found regarding other scales and the overall intensity of somatic complaints.

These calculations confirm our assumption that it is essential to pay attention to the structure of psychological defences to understand whether they help a person cope with stress or, on the contrary, contribute to increased tension. It can be analogous to coping strategies, which can also be constructive or destructive. When working with clients, it is necessary to develop constructive stress-coping mechanisms and the ability to apply them flexibly.

In the next stage, we determined the closeness of the relationship between the BSI-18 questionnaire data and the alexithymia scale. The results are presented in Table 8.

Table 8. Respondents' Grouping by Frequency of Using Psychological Defences

Type of psychological protection	Low, up to 40 %	Medium, 40-70%	High, 70% or more
1	2	3	4
Denial	15	34	12
Displacement	22	35	4
Regression	10	24	27
Projection	11	28	22
Substitution	35	19	7
Compensation	18	32	11
Rationalisation	7	39	15
Reactive formation	17	19	25

The calculations show that there is a direct, reasonably close relationship between the somatisation, depression and anxiety scales. The data are presented in Table 9.

Table 9. Correlations between Alexithymia and Somatisation, Depression and Anxiety Scales

	Somatisation	Depression	Anxiety	Total by the methodology
Depression	0,57			
Anxiety	0,65	0,71		
Alexithymia	0,35	0,46	0,40	0,46

Anxiety correlates most strongly with depression (+0.71). It means that if a person feels anxious, they are likely to try to limit their actions to ensure peace of mind, which in turn will reduce activity and cause internal dissatisfaction with oneself. Against this background, anxiety will grow even more, as a lack of confidence in one's abilities will make problems seem even more catastrophic.

Regarding alexithymia, we see a positive correlation with anxiety (+0.40) and depression (+0.46), which is moderate. However, alexithymia has a weak influence on somatisation. As we have already mentioned, the alexithymia scale scores in our sample significantly exceed the average, which high-stress levels may cause due to constant life risks and negative news from which a person cannot distance themselves, even while being in relative safety. However, the inability to distinguish one's feelings is not a permanent characteristic of a person and may be situational. For example, short-term work with a psychologist can significantly improve understanding of one's emotions.

Many studies have confirmed the influence of alexithymia on the development of psychosomatic disorders (Chervynska, 2013). Consequently, it can be assumed that a high level of alexithymia over time can lead to health problems, the basis of which will be a psychological factor. Therefore, it is worth improving individuals' ability to recognise their feelings and find the cause-and-effect relationships that contributed to their occurrence.

3 Discussion

The impact of armed conflicts on internally displaced persons and refugees and their ability to recover after stressful or traumatic events has been studied by many researchers during and after the wars in the Persian Gulf, Syria, and the Balkans. Among them are A. Prorokovic, M. Cavka, L. Jolof, P. Rocca, A. Sabioncello, D. Kocijan-Hercigonja, and others. Over the past year, Ukrainian researchers have conducted surveys and analyses of the psychological state of Ukrainians and its impact on physical well-being. Among them are O. Kokun ("Your resilience in wartime"), M. Matiash, and S. Maksymenko ("Ukrainian syndrome. Behavioural and functional changes of Ukrainian youth in the context of the full-scale Russian invasion in 2022").

Prolonged stress and uncertainty have led to long-term consequences for the mental health of refugees and soldiers, primarily manifesting in psychosomatic symptoms. Psychosomatic complaints dominated among soldiers and refugees at all points of assessment ($F=210.30$; $p<0.001$). The highest level of depressive symptoms was found among refugees ($F=4.17$; $p=0.016$). The level of psychosomatic and depressive symptoms varied over time. Soldiers reported an increase in psychosomatic complaints over time, while refugees showed a sharp decrease in the somatisation of psychological

manifestations. This is evidenced by long-term studies (1993-2004), where psychosomatic complaints and depressive symptoms were assessed in civilians, refugees, and soldiers during the war and in the post-war period in Croatia (Prorokovic, Cavka, & Cubela Adoric, 2005; Chervynska, 2013).

Assessing the impact of distressing consequences of the war on the mental health of the civilian population can be exemplified by Syria (Shebanova, 2012).

The military conflict has led the population of Syria to a high risk of mental disorders: according to a survey of 195 individuals aged 19-25 years, 44% developed a probable severe mental disorder; 27% had a probable severe mental disorder along with all PTSD symptoms; 36.9% had all PTSD symptoms, and only 10.8% did not exhibit any positive PTSD symptoms or mental disorder. Thus, about 60% of the civilian population reported symptoms of moderate to severe mental disorder. About 86.6% of respondents indicated that the war was the leading cause of their mental dysfunctions, and 46% noted that they needed mental support (Tiurina & Solokhina, 2022).

Studies have shown that 49.9% of people changed residence due to the war, and 27.6% did so three or more times. Additionally, 64.3% of respondents lost loved ones due to the war, and 85.4% had a relative or close friend who was at risk of war-related injury.

High PTSD rates were most influenced by the number of times residence was changed due to the war, education level, psychological trauma and suffering from the sounds of war (Tiurina & Solokhina, 2022; Kharchenko, 2012).

Many students in Syria – nearly 60% – have PTSD symptoms and/or problematic anger. It is known that experiencing two or more traumatic events significantly increases the risk of developing PTSD, and the percentage of women with PTSD was four times higher than that of men. A meta-analysis conducted on studies of 29 adults who experienced psychological trauma indicates that the impact of a traumatic event on younger individuals was a decisive risk factor for developing PTSD symptoms (Kharchenko, 2012). Fearfulness, anger, nervousness, sleep disorders, lack of faith and hope in the future, and periods of terror or panic became negative consequences of psychological trauma among refugees from Syria. Medical sources studying the consequences of the war in Syria have recorded traumatic conditions of teeth and genitals as a result of the impact of PTSD and other mental disorders; a high percentage of individuals with laryngopharyngeal reflux, also caused by the war; and around 50% of the civilian population of Syria diagnosed with allergic rhinitis caused by the direct or indirect effects of the war (Kharchenko, 2012).

Refugees are usually a significant problem for all host countries, but they constitute only a tiny fraction of all those who have experienced war globally. If we look at the global scale, many more people have survived the war, individuals who do not want or cannot find asylum, and who continue to live in former or current conflict zones. There is no particular UN agency for these people, as there is for refugees, and no official statistics exist for them. Despite the very diverse findings regarding the prevalence of mental disorders among refugees, on average, the prevalence of PTSD and depression is not higher than among the population that remained in the conflict zone (Chervynska, 2013; Priebe, Giacco, & El-Nagib, 2024). For individuals who have survived the war, PTSD and/or depression have serious health consequences for their respective communities (Kudrytska & Kharchenko, 2018; Morina, Hoppen, & Priebe, 2020).

- PTSD and depression can have a chronic course and lead to significant mental suffering for individuals affected by the war, as well as their partners and families.
- Disorders associated with functional impairments affect the establishment of interpersonal relationships, reduce the quality of life and productivity, and result in significant overall health costs.

These studies indicate a correlation between unaddressed anger and PTSD. Consequently, this may be a cause of further domestic violence, increased desire for revenge, and subsequently heightened and provoked future conflicts.

PTSD generally coexists with other forms of psychopathology, and 90% of those with PTSD symptoms have at least one comorbid condition during their lifetime (Shebanova, 2012; Kessler, 1995). These comorbid conditions are most often depression, alcohol abuse or dependence, and other anxiety disorders. Increasingly, scientific literature presents evidence of comorbid conditions associated with borderline personality disorder (Pagura J. et al., 2010; Shebanova, 2012).

4 Conclusions

The empirical study aimed to determine the level of somatisation among internally displaced persons and the factors influencing this. Based on the analysis of theoretical materials, methodologies and questionnaires were selected to reflect the presence and structure of psychosomatic manifestations, as well as the personal characteristics influencing these. Thus, we selected four methodologies and surveyed 61 individuals. After analysing the collected data, we found that between 30% and 50% of respondents have high and critical levels of psychosomatic complaints. More than half of the respondents frequently or very frequently experience exhaustion and body pain. No less than a third complain of somatic symptoms in the stomach and cardiovascular system.

We also assessed the levels of depression and anxiety using the BSI-18 questionnaire. More than 70% of respondents have moderate to high scores on these scales, indicating a high level of stress currently experienced by displaced persons. Using the "Lifestyle Index" questionnaire, we determined the structure of psychological defences and their overall level of tension. As a result, 67% of respondents have more than 50% overall defence tension.

Regarding the factors directly affecting the ability to cope with stress, we found a correlation with such psychological defences as projection, regression, and compensation. Although the correlation is not very strong, it is evident that the tension of these defences directly affects the level of exhaustion, rheumatic complaints, and the overall intensity of psychosomatic complaints, according to the Giessen questionnaire. We also found a dependency between the structure of psychological defences and the level of somatisation. The more significant the proportion of primitive defences in the overall structure, the higher the level of psychosomatic disorders a person exhibits. As for higher defences, such as compensation, rationalisation, and reaction formation, an increase in their proportion in the overall structure of defences reduces psychosomatic manifestations. An inverse correlation is also observed between denial and repression, which we classified as "other defences" and the "exhaustion" scale.

Analysing the Toronto Alexithymia Scale data, we found that more than two-thirds of respondents fall into the risk zone or show signs of alexithymia. We also studied the impact of alexithymia on the levels of anxiety and depression and found a direct connection between these indicators. Thus, improving the ability to understand and verbally express one's experiences can reduce or prevent the occurrence of psychosomatic disorders. Therefore, it is essential to work on the awareness of one's emotions and experiences, learning to identify, describe, and determine which thoughts or events triggered a particular reaction.

Literature:

1. Blazhyna Iu.: Psychosomatic aspects of diseases. Bukovinian State Medical University, 2017 <https://www.bsmu.edu.ua/blog/5669-psihsomatichni-aspekti-zahvoryuvan/>
2. Bocheliuk V, Panov M, & Horshkova H.: Psychological counseling in the rehabilitation process. *Scientific perspectives*,

- 2023, (3), 33. [https://doi.org/10.52058/2708-7530-2023-3\(33\)-31-1-321](https://doi.org/10.52058/2708-7530-2023-3(33)-31-1-321)
3. Bocheliuk V., Panov M., & Spitska L.: Psychosomatic disorders: the current state of the problem. *Prospects and innovations of science*, 2022, 7(12). [https://doi.org/10.52058/2786-4952-2022-7\(12\)-542-552](https://doi.org/10.52058/2786-4952-2022-7(12)-542-552)
 4. Bogic M., Njoku A., & Priebe S.: Long-term mental health of war-refugees: a systematic literature review. *BMC International Health and Human Rights*, 2015, 15(1). <https://doi.org/10.1186/s12914-015-0064-9>
 5. Chaban O.S., & Khaustova O.O.: Medical and psychological aspects of the distress of war in Ukraine: what do we expect and what needs to be considered when providing medical care? *Ukrainian Medical Journal*, 2022, (150). <https://doi.org/10.32471/umj.1680-3051.150.232297>
 6. Chervynska O.M.: Psychosomatics. psychosomatic disorders. psychosomatic approach. *Ukrainian scientific and medical youth magazine*, 2013, 2, 70–72.
 7. Comtesse H. et al.: Long-term psychological distress of Bosnian war survivors: an 11-year follow-up of former displaced persons, returnees, and stayers. *BMC Psychiatry*, 2019, 19(1). <https://doi.org/10.1186/s12888-018-1996-0>
 8. Dembitskyi S., & Sereda Yu.: Symptom Checklist-90-R (SCL-90-R) by Leonard Derogatis: validation in Ukraine. *Sociology: theory, methods, marketing*, 2015, 4, 40-71. http://nbuv.gov.ua/UJRN/stmm_2015_4_5
 9. Hynie M.: The Social Determinants of Refugee Mental Health in the Post-Migration Context: A Critical Review. *The Canadian Journal of Psychiatry*, 2017, 63(5), 297–303. <https://doi.org/10.1177/0706743717746666>
 10. Jolof L. et al. Experiences of armed conflicts and forced migration among women from countries in the Middle East, Balkans, and Africa: a systematic review of qualitative studies. *Conflict and Health*, 2022, 16(1). <https://doi.org/10.1186/s13031-022-00481-x>
 11. Karamushka L.M., & Snihur Yu.S.: Coping strategies: essence, approaches to classification, importance for the psychological health of the individual and organisation. *Actual problems of psychology*, 2020, 1(55), 23–30.
 12. Kessler R.C.: Posttraumatic Stress Disorder in the National Comorbidity Survey. *Archives of General Psychiatry*, 1995, 52(12), 1048. <https://doi.org/10.1001/archpsyc.1995.03950240066012>
 13. Kharchenko D.M.: A comprehensive approach in the study of psychosomatic disorders. *Aktualni problemy psykholohii*, 2012, 1(35), 154–157.
 14. Kokun O.M.: *All-Ukrainian survey "Your resilience in wartime"*. Kyiv: Institute of Psychology named after H.S. Kostyuk of the National Academy of Sciences of Ukraine, 2022, 46.
 15. Kolomoets M.Yu., et al.: Theories and concepts of psychosomatic diseases. *Bukovyna Medical Herald*, 2008, 12(1), 141-144.
 16. Kudrytska O.S., & Kharchenko D.M.: *The impact of stress on the development of psychosomatic disorders*. Actual problems of natural sciences and humanities in the research of young scientists "Rodzinka-2018"/XX All-Ukrainian scientific conference of young scientists, 2018, 333-337. https://eprints.cdu.edu.ua/3872/1/sbornik_2018_2-335-337.pdf
 17. Lancaster M.A., McCrea M.A., & Nelson L.D.: Psychometric properties and normative data for the Brief Symptom Inventory-18 (BSI-18) in high school and collegiate athletes. *The Clinical Neuropsychologist*, 2016, 30(2), 321–333. <https://doi.org/10.1080/13854046.2016.1138504>
 18. Lazarus R.S., & Folkman S.: *Stress, Appraisal, and Coping*. Springer Publishing Company, Incorporated, 1984.
 19. Lazarus R.S.: The Psychology of Stress and Coping. *Issues in Mental Health Nursing*, 1985, 7(1-4), 399–418. <https://doi.org/10.3109/01612848509009463>
 20. Lemak M.V., & Petryshev V.Yu.: *To the psychologist for work*. Diagnostic techniques. Uzhhorod: Oleksandra Harkusha Publishing House, 2012. 616.
 21. Li S.S.Y., Liddell B.J., & Nickerson A.: The Relationship Between Post-Migration Stress and Psychological Disorders in Refugees and Asylum Seekers. *Current Psychiatry Reports*, 2016, 18(9). <https://doi.org/10.1007/s11920-016-0723-0>
 22. Linden M., & Muschalla B.: Anxiety disorders and workplace-related anxieties. *Journal of Anxiety Disorders*, 2007, 21(3), 467–474. <https://doi.org/10.1016/j.janxdis.2006.06.006>
 23. Maievska N.A., & Prokopenko K.V.: Psychological well-being of individuals with different ratios of displacement and anxiety level. *Bulletin of Kharkiv National University. Series: Psychology*, 2010, 902, 175-179.
 24. Maksymenko S.D.: *General psychology: a textbook for university students*. 2nd ed. Kyiv: Tsentr navch. lit., 2004, 271.
 25. Matiash M., Subbota S., & Lunov V.: Ukrainian syndrome. Youth in Ukraine in the face of a 2022-Full-scale Russian invasion. *SSRN Electronic Journal*, 2023. <https://doi.org/10.2139/ssrn.4318792>
 26. Meyer-Fehr P., & Buddeberg C.: *Grundlagen des Sozialverhaltens*. In: Psychosoziale Medizin Gesundheit und Krankheit in bio-psycho-sozialer Sicht. Berlin, Heidelberg, 1986, 16–77. https://doi.org/10.1007/978-3-642-96928-7_2
 27. Morina N., Hoppen T.H., & Priebe S.: Out of Sight, Out of Mind: Refugees Are Just the Tip of the Iceberg. An Illustration Using the Cases of Depression and Posttraumatic Stress Disorder. *Frontiers in Psychiatry*, 2020, 11. <https://doi.org/10.3389/fpsyt.2020.00179>
 28. Mosiichuk V., Tkach B., & Lunov V.: Ethno-Cultural Features of Mental Health and Psychosomatic Risks of Ukrainians in the Conditions of a Full-scale Russian Invasion. *SSRN Electronic Journal*, 2022. <https://doi.org/10.2139/ssrn.4269203>
 29. Mozgova G.P., & Uvarkina O.V.: Socio-psychological problems of personality. *Pedagogical sciences*, 2011, 95, 141-146.
 30. Mozgova H., & Vizniuk I.: Psychological rehabilitation of psychosomatic patients of working age. *Scientific journal of Mykhailo Dragomanov State University of Ukraine. Series 12. Psychological Sciences*, 2021, (16), (61), 62-73. [https://doi.org/10.31392/NPU-nc.series12.2021.16\(61\).06](https://doi.org/10.31392/NPU-nc.series12.2021.16(61).06)
 31. Neurova A. B., Kapinus O. S., & Hrytsevych T. L.: *Diagnosis of individual psychological characteristics of personality: Educational methodical manual*. Lviv: NASV, 2016, 181.
 32. Orlov V.F., Otych O.M., & Fursa O. O.: *Psychology of conflict: Educational and methodological manual for the preparation of masters in all forms of education*, Kyiv: DETUT, 2008, 422.
 33. Pagura J. et al.: Comorbidity of borderline personality disorder and posttraumatic stress disorder in the U.S. population. *Journal of Psychiatric Research*, 2010, 44(16), 1190–1198. <https://doi.org/10.1016/j.jpsychires.2010.04.016>
 34. Peleshchenko O.V., & Blyskun O. O.: *Socio-psychological factors of psychosomatic disorders of personalit*. In: Pohrebna V.L., Popovych V.M., Ostrovska N.V., Serha T.O., et al., editors. Society and personality in modern communication discourse: Materials of the II All-Ukrainian Scientific and Practical Conference. Zaporizhzhia: "Zaporizhzhia Polytechnic" National University, 2020, 498-500.
 35. Porter M., & Haslam N.: Forced displacement in Yugoslavia: A meta-analysis of psychological consequences and their moderators. *Journal of Traumatic Stress*, 2001, 14(4), 817–834. <https://doi.org/10.1023/a:1013054524810> (date of access: 11.03.2024)
 36. Porter M., & Haslam N.: Predisplacement and Postdisplacement Factors Associated With Mental Health of Refugees and Internally Displaced Persons. *JAMA*, 2005, 294(5), 602. <https://doi.org/10.1001/jama.294.5.602>
 37. Priebe S. et al.: Mental Disorders Following War in the Balkans. *Archives of General Psychiatry*, 2010, 67(5), 518. <https://doi.org/10.1001/archgenpsychiatry.2010.37>
 38. Priebe S., Giacco D., & El-Nagib R.: *Public Health Aspects of Mental Health Among Migrants and Refugees: A Review of the Evidence on Mental Health Care for Refugees, Asylum Seekers and Irregular Migrants in the WHO European Region* - NCBI Bookshelf. National Center for Biotechnology Information. <https://www.ncbi.nlm.nih.gov/books/NBK391045/>
 39. Prinz U. et al.: Comparative psychometric analyses of the SCL-90-R and its short versions in patients with affective disorders. *BMC Psychiatry*, 2013, 13(1). <https://doi.org/10.1186/1471-244x-13-104>

40. Pronoza K.V.: *Features of psycho-correction of middle-aged psychosomatic patients*. https://umo.edu.ua/images/nocent/nashi_vydanya/stud_almanah/50.pdf
41. Prorokovic A., Cavka M., & Cubela Adoric V.: Psychosomatic and depressive symptoms in civilians, refugees, and soldiers: 1993-2004 longitudinal study in Croatia. *Croatian medical journal*, 2005, 46(2), 275–281.
42. Proroković A., Cavka M., & Cubela Adorić V.: Psychosomatic and depressive symptoms in civilians, refugees, and soldiers: 1993-2004 longitudinal study in Croatia. *Croatian medical journal*, 2005, 46(2), 275–281.
43. Sabioncello A. et al.: Immune, Endocrine, and Psychological Responses in Civilians Displaced by War. *Psychosomatic Medicine*, 2000, 62(4), 502–508. <https://doi.org/10.1097/00006842-200007000-00008>
44. Salnikova A.: Alexithymia and ludomania: the mediating role of stress. *Psychosomatic medicine and general practice*, 2022, 6(4), 51-53. <https://doi.org/10.26766/pmgp.v6i4.316>
45. Selye H.: *Stress in health and disease*. Berlin: Butterworth-Heinemann, 2013, eBook ISBN: 9781483192215. <https://shop.elsevier.com/books/stress-in-health-and-disease/selye/978-0-407-98510-0>
46. Shebanova V.I., Didenko G.O.: Coping behavior in contemporary psychological research. *Collection of scientific works "Problems of modern psychology"*, 2017, 39, 368–379. <https://doi.org/10.32626/2227-6246.2018-39.368-379>
47. Shebanova V.I.: Issues of mechanisms of psychological defense. *Scientific journal of Mykhailo Dragomanov State University of Ukraine. Series 12. Psychological Sciences*, 2012, 37, 246-249.
48. Shportun O.M., Levchuk N.V.: Empirical study of the features of the influence of motivation and attitudes on the preservation of psychological health of youth. *Dnipro Scientific Journal of the Public Administration of Psychology of Law*, 2022, 4, 145–152. <https://doi.org/10.51547/ppp.dp.ua/2022.4.21>
49. Shportun O.M.: *Features of social and psychological adaptation of youth during the period of military actions in Ukraine*. In: Psychological principles of development, psychodiagnostics and personality correction in the system of continuous education: collection of materials of the All-Ukrainian scientific and practical conference with international participation (December 9-10). Vinnytsia: KZVO "Vinnytsia Academy of Continuing Education", 2022, 297.
50. Tiurina V.O., & Solokhina L.O.: *The impact of military conflicts on human mental health: a brief review of foreign studies*. In: Personality, society, war: theses of the reports of the participants of the international psychol. forum. Kharkiv: KhNUVS, 2022, 116-121.
51. Tofighi B. A.: *Study of the Relationship between Stress and Psychosomatic Disorders*. *Int Proc Econom Develop Res*, 2012, 44, 124-127. <https://www.scribd.com/document/427599958/027-ICSHH2012-W10019>
52. Tolstoukhov A. et al.: Ukrainian Syndrome. Behavioral and Functional Changes In Ukrainian Youth Under The Conditions of A 2022-Full-Scale Russian Invasion. *SSRN Electronic Journal*, 2023. <https://doi.org/10.2139/ssrn.4319951>
53. Vichkovska O. Ya.: *Tasks, content, and features of corrective work with psychosomatically focused clients* (Master's thesis). Ternopil: Western Ukrainian National University, 2020. <http://dspace.wunu.edu.ua/bitstream/316497/40308/1/%D0%B2%D1%96%D1%87%D0%BA%D0%BE%D0%B2%D1%81%D1%8C%D0%BA%D0%B0.pdf>
54. Yarosh N.S. Analysis of studies of internal predictors of stress-coping behavior. *Bulletin of Kharkiv National University named after V. N. Karazin. Series: Psychology*. Kharkiv, 2015, 58, 60-64.
55. Zlyvkov V.L., Lukomska S.O., & Fedan O.V.: *Psychodiagnostics of personality in crisis life situations*. Kyiv: Pedahohichna dumka, 2016, 219.

Primary Paper Section: A

Secondary Paper Section: AN

