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DOI: <https://doi.org/10.22141/2224-0713.21.5.2025.1199>M. Matiash¹ , O. Lazurenko¹ , N. Tertychna¹ , N. Smila² ¹Bogomolets National Medical University, Kyiv, Ukraine²G.S. Kostyuk Institute of Psychology of the National Academy of Pedagogical Sciences of Ukraine, Kyiv, Ukraine

Forced displacement as a factor in students' anxiety manifestation and neuroticization during the war

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Abstract. Background. The question of the impact of anxiety on different aspects of personality life in modern psychological research has gained wide interest and has become the subject of constant study. It is clear that military conflicts have a significant impact on the mental health of the population, the neuroticization of a young person who is in the period of active personality formation and self-identification. Changes in the internal condition and traumatic events during hostilities can cause exacerbation of stress, anxiety disorders, increased anxiety among young people, which can be a barrier to their adaptation to new conditions and social integration. That is why the study of this issue is relevant, because it is necessary to assess the state of anxiety in youth in time, to predict probable anxiety disorders, as well as to develop possible corrective and therapeutic measures. The purpose is to study students' anxiety as a mechanism of maladaptation during forced displacement in war. The main objectives are conducting a set of diagnostic procedures to study the general and specific features of anxiety in students during the war; comparing the main characteristics of anxiety in displaced and non-displaced students during a full-scale invasion. **Materials and methods.** The anxiety study included several stages and took place in March-May 2023. A sample group of 129 people was formed and divided into two subgroups. The first subgroup (47 %) includes internally (within the country) displaced people (IDP) and externally (outside the country) displaced people (EDP), and the second subgroup (53 %) consists of non-displaced people. The following research methods were used: 1) surveys — to collect socio-demographic data of participants (gender, age, and, in case of IDP/EDP, country or region of residence); 2) psychological testing — for screening anxiety and depression (the Hospital Anxiety and Depression Scale), to characterize state and trait anxiety (the Spielberger-Khanin Scale, the State and Trait Anxiety Inventory). **Results.** The study shows that displaced young students, as well as those who were not displaced during the war, have fairly high and very high levels of both types of anxiety — state and trait. The leading indicator for non-displaced people is the level of anxiety and nervousness due to possible events and difficulties, threats to life in general, and the state of insecurity caused by air raid warnings, the likelihood of being shelled or rocketed, or injured. As for the displaced people, the leading indicators of their condition are that they almost never feel peace of mind, are in a state of tension and irritability, experience troubles very hard and cannot forget about them for a long time and worry about any trifles during martial law. In addition, we have observed a pattern that state anxiety dominates in non-displaced people, and personal anxiety dominates in IDP/EDP. **Conclusions.** Based on the results, a consistent system of studying practically oriented disciplines was developed and implemented, which allowed students to use knowledge of methodological and theoretical problems of extreme psychology, explanation and psychological correction of their own destructive psycho-emotional states and the formation of ability to analyze and distinguish behavioral features of acute reactions to stress and signs of mental trauma, to determine factors that increase or decrease the level of state and trait anxiety during military operations.

Keywords: anxiety; anxiety disorders; neuroticization; students; war; maladaptation; forced displacement; emotional state



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Introduction

The issue of the impact of anxiety on various aspects of a person's life has once again gained widespread interest in modern psychological research and become the subject of constant study. It is clear that military conflicts have a significant impact on the mental health of the population, especially young people who are in a period of active personality formation and self-identification [5]. Changes in the internal state and traumatic events during hostilities can cause increased anxiety among young people, which can become an obstacle to their adaptation to new conditions and social integration. That is why the study of this issue is relevant, as it is necessary to assess the state of anxiety among young people in time, predict possible disorders, and develop corrective and therapeutic measures.

The psychological trauma of war can be long-lasting and have far-reaching consequences [4]. Understanding them is therefore essential to promote the mental health and well-being of young people. It is important to build a system of psychological assistance to students that would be aimed at strengthening the mental health, well-being and psychological resilience of young people through the acquisition of knowledge and skills of the first psychological self-help, mastering the necessary algorithms, specific psychological tools and developing skills to use them in everyday life.

During a war, people experience anxiety, which is a natural defence mechanism that helps protect ourselves from potential danger. Its symptoms can include poor sleep quality, compulsive news checking, physical body tension, and reduced performance [7].

From a psychological point of view, there are two types of anxiety: state and trait. State anxiety arises in connection with an objectively dangerous situation related to external factors that pose a social threat [2]. This state is a reaction to changes in circumstances that are perceived by the subject as stressful. Trait anxiety is a persistent individual characteristic that is usually associated with intrapersonal conflict and manifests itself through a sense of constant danger, uncertainty, anxiety, tension, and failure that may arise. The optimal level of anxiety positively influences the effective adjustment of the individual, and it is adaptive, unlike high levels of anxiety, which can lead to maladaptation, various disorders of the psycho-emotional state of the individual, loss of motivation, and reduced efficiency of learning activities. Providing psychological support to students allows them to restore their physical and mental resources in a timely manner, avoid deeper trauma to the psyche, and restore self-control, which often affects the somatic and mental health of a future specialist, his or her performance and effective interaction in society.

The purpose of the article is to study students' anxiety and neuroticization as a mechanism of maladaptation during forced displacement in war. The main objectives are: conducting a set of diagnostic procedures to study the general and specific features of anxiety and neuroticization in students during the war; comparing the main characteristics of anxiety in displaced and non-displaced students during a full-scale invasion.

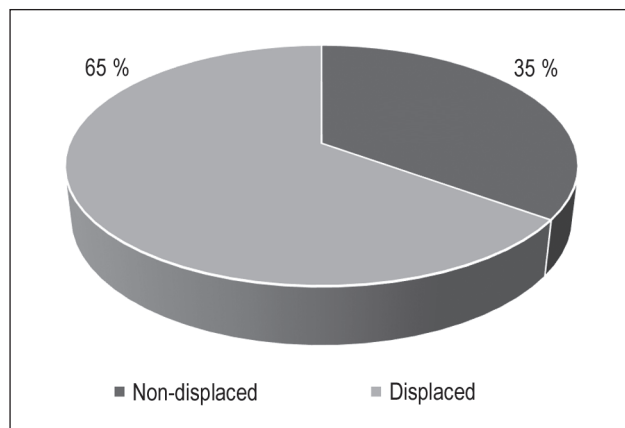


Figure 1. Anxiety and depression levels in non-displaced and IDP/EDP during the war (HADS)

Materials and methods

The procedure for studying the state of anxiety included the following methods: organizational, empirical, quantitative and qualitative analysis of the data, and interpretive. For the study, a sample group of 129 people was formed and divided into two subgroups. The first subgroup (47 %) includes internally (within the country) displaced people (IDP) and externally (outside the country) displaced people (EDP), and the second subgroup (53 %) consists of non-displaced people. The participants in the study were students aged from 17 to 23.

The young people were asked to answer questions on the methodology. Before the survey began, the respondents were informed about the purpose of the study and explained the instructions for working with each method. To increase the reliability of the results, the study was conducted anonymously (respondents were asked to indicate only demographic characteristics such as gender, age, and, in case of IDP/EDP, country or region of residence). The Hospital Anxiety and Depression Scale (HADS) developed by A.S. Zigmond [6] and the Situational and Personal Anxiety Scale by Spielberger-Khanin [1] were used to implement the tasks.

Results and discussion

At the first stage of the study, the HADS developed by A.S. Zigmond and R.P. Snaith was used to study the manifestation of general features of anxiety during the war. After calculating the total score for all scales, we compared the results of the first subgroup — displaced people — with the results of the second subgroup — non-displaced people. Thus, it was found that the anxiety level of IDP/EDP was 65 %, which, according to the interpretation of the results, indicates clinically pronounced anxiety and depression. At the same time, the level of anxiety in non-displaced people was 35 %, which, when calculated, showed the absence of significantly pronounced symptoms of anxiety and depression (Fig. 1).

According to the results of the first stage of research, we concluded that among the participants of our study, displaced people had a significantly higher level of anxiety, because they were forced to leave usual life, had to adapt

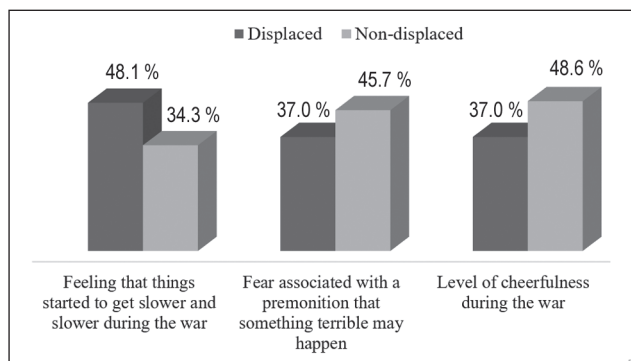


Figure 2. Comparison of the most pronounced anxiety indicators in non-displaced and displaced adolescents during the war (HADS)

to a new place, often living in difficult conditions, overcoming the language and cultural barrier and feeling guilty for leaving city or home country, while their family and friends remained. All of this is happening against the backdrop of traumatic events related to the war, which is forcing people to flee to other regions and countries [3].

For a more detailed analysis of the general features of anxiety during the war among students, we focused our attention on individual questions from the HADS, who have more pronounced indicators of this condition. The results showed that to the statement: “I think I started doing things more slowly”, 48.1 % of displaced people answered that this is indeed sometimes the case, while 34.3 % of non-displaced participants said that they continue to do everyday things at the same pace as before the war. Another common manifestation of anxiety among students is fear associated with the premonition that something terrible may happen. At the same time, 45.7 % of non-displaced people sometimes have this condition, but it does not bother them at all, while 37 % of displaced people experience it quite consistently. During the war, the level of productivity and activity among young people also significantly decreased. Meanwhile, 48.6 % of non-displaced people sometimes feel cheerful, and 37 % of displaced people said they rarely have this condition, which indicates a general inhibition of young people against the background of a stressful factor (Fig. 2).

Thus, at the first stage of studying the manifestation of general features of anxiety using the HADS, the results showed that the level of anxiety in IDP/EDP in students during the war is characteristically high, and therefore clinically pronounced anxiety and depression are observed, while non-displaced people do not have significantly pronounced symptoms of anxiety and depression. Having also studied some issues in detail, we came to the conclusion that displaced youths exhibit common features of anxiety, such as slowing down of educational and other activities, persistent premonition of fear, confidence that something terrible can happen at any moment, and, despite their displacement to safe areas of the country or abroad, rarely feel cheerful in general.

At the second stage of the anxiety study, the Spielberger-Khanin Scale was used, which is called the State-Trait Anxiety Inventory [1] (Fig. 3).

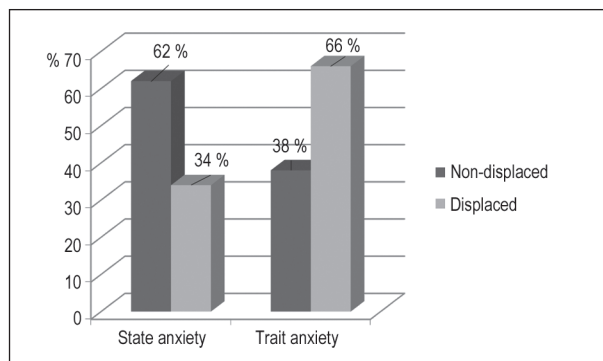


Figure 3. Indicators of state and trait anxiety in non-displaced and displaced students during the war (Spielberger-Khanin scale)

After analyzing the results, we determined that the overall level of state anxiety among non-displaced students is 62 %. Naturally, this state is quite variable and is caused by how respondents feel themselves “here and now”, experiencing subjective feelings of fear, tension, nervousness, anxiety and excitement during the war. The trait level of anxiety in the same students is 38 %, which corresponds to a moderate level, indicating high tension, stressfulness of the current situation in the country, which is expressed (according to the results of the first stage) in a high level of manifestation of fears associated with the premonition that something terrible may happen.

Study of anxiety among displaced young people has shown that the level of state anxiety in this sample subgroup is 34 % and the level of trait anxiety is 66 %. The pattern is as follows: non-displaced people have higher rates of state anxiety, and IDP/EDP have higher rates of trait anxiety. Since state anxiety is responsible for feelings of anxiety and stress arising from immediate danger, such as military operations, shelling, bombing, it is a natural reaction of the body to stressful situations and psychological pressure arising from war, that is why state anxiety is more pronounced in non-displaced youth. And trait anxiety is characterized by feelings of anxiety and stress that arise in connection with one's own experiences associated with feelings of helplessness and uncertainty in IDP/EDP. In addition, displacement can lead to emotional loss and trauma, which increase the risk of developing anxiety. These emotional reactions include the loss of relatives and friends, property, social status, significant contacts, etc. Therefore, in our study, state anxiety is more pronounced in displaced youth.

For a detailed analysis of the results, we also highlighted some of the questions from the Spielberger-Khanin Scale answered by non-displaced young people to determine the level of state and trait anxiety, which shows the highest level of anxiety during war (Fig. 4).

The results showed that one of the most striking indicators is the percentage of answers to questions that raise the topic of concern and nervousness about possible events and difficulties (“I am calm”, “I am not in danger”). On average, 60 % of young people noted that they often do not feel this particular state. It is also worth noting that an average of 45.7 % of respondents noted that they were under persistent stress. That is, we can trace increased anxiety in the emotional sphere of non-displaced youth.

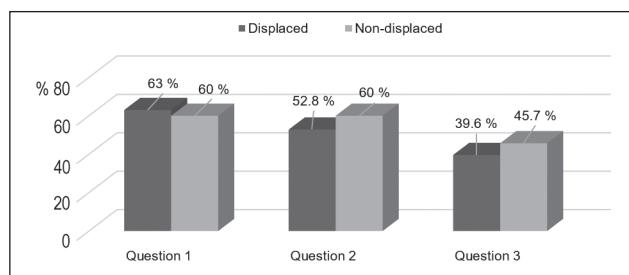


Figure 4. Comparison of the most pronounced indicators of anxiety in non-displaced and displaced adolescents during the war (Spielberger-Khanin scale)

We also reviewed and analyzed the responses of displaced young people. The results showed that the most impressive indicator among all the “situations” was observed in the question: “I feel peace of mind.” On average, 63 % of young people said that they almost never have this condition. Another striking indicator is the results of the question: “I can be irritable.” On average, 52.8 % of young people said that they often experience this condition. It is also worth noting that on average, 40 % of displaced people said that they often experience troubles quite hard, cannot forget about them for a long time, and are very worried about any trifles during martial law. Thus, we also observed increased levels of anxiety in the emotional sphere among displaced young people.

Thus, the full-scale war unleashed by Russia against Ukraine leads not only to significant civilian casualties, forced displacement from their places of permanent residence, loss of contact with loved ones and fear for their safety and the safety of their relatives, loss of the opportunity to study and work as usual, but also to an increase in mental and behavioral disorders caused by the prolonged full-scale Russian invasion. The stress of war inevitably affects the psycho-emotional state of students, causing an increase in anxiety and the development of anxiety as a personality trait. This, in turn, inevitably affects the adaptation of students to new living and learning conditions and the psycho-emotional state. They often experience anxiety, constant fear for themselves and their families, confusion in uncertain circumstances, and exacerbation of stress and anxiety disorders. Obviously, very high personal and reactive anxiety in adolescents is the result of the extremely difficult and dangerous conditions in which they are or have been.

Displaced young people, like non-displaced ones, have a high level of anxiety during war, but it should be considered on different levels. After all, the certain features of anxiety are related to more specific situations occurring in the context of war and may differ depending on the experience and situation faced by each individual, while the general features reflect the general tendency to increased anxiety in all people who have experienced conflict, including displaced ones.

Dealing with anxiety in critical situations is an extremely important condition for ensuring the health and safety of a young person, because during war, psychological resilience can be a key condition for survival and adaptation to new living conditions. In addition, if the state of anxiety is not relieved in time, it becomes long-term, which can lead to

serious problems not only of a physiological nature (sleep disturbances, constant headaches, eating problems), but also turns from a mechanism of adaptation to a mechanism of maladaptation to social change.

To fulfill these tasks, we developed and implemented a consistent system of practically oriented disciplines that allowed students, firstly, to use knowledge of methodological and theoretical problems of extreme psychology in the study, explanation and psychological correction of their own destructive psycho-emotional states and to develop ability to analyze and distinguish behavioral features of acute reactions to stress and signs of mental trauma, to determine factors that increase or decrease the level of state and trait anxiety during military operations.

Secondly, the students realized the psychological consequences of forced displacement and learned the tactics of providing emergency psychological assistance with recommended algorithms that can be used in case of acute manifestations of anxiety and panic attacks.

Thirdly, the program included the development of the ability to critically assess one's own psycho-emotional reactions in stressful circumstances and to master the skills of mental self-regulation in prolonged trauma due to forced displacement and military operations.

Displacement is a widespread and devastating consequence of war, and it can have a significant impact on young people's lives and their adaptation or maladaptation to new conditions. When youths are forced to leave their homes because of active hostilities, occupation or violence, they lose not only homes, property, and livelihoods, but also adaptation mechanisms. Displacement can cause significant mental and emotional suffering, including feelings of isolation, anxiety and depression, it can also have long-term consequences. Displaced people may find it difficult to rebuild their lives after a conflict and may face discrimination and marginalization in new communities. Displacement can also contribute to the destruction of social networks and community cohesion.

Therefore, psychological assistance to displaced young people should be aimed at building psychological resilience, creating new mechanisms of adaptation and promoting social integration. At the same time, the state's interest in the return of all externally displaced young people requires the development of models of interaction with them that would help form the need to return to home country, build plans and prospects for their future in Ukraine.

Conclusions

Thus, our analysis of the results showed that displaced young people, as well as those who were not displaced during the war, have fairly high and very high levels of anxiety and neuroticization in both types of anxiety — situational and personal. In addition, we have observed a pattern that state anxiety dominates in non-displaced people, and personal anxiety dominates in IDP/EDP. Having studied some of the issues in detail, we came to the conclusion that the leading indicator among non-displaced people is the level of anxiety and nervousness due to possible events and difficulties, threats to life in general and the state of insecurity caused by air raid warnings, the likelihood of being shelled or rocketed, or injured,

living in areas where hostilities are directly ongoing. As for the displaced people, the leading indicators of their condition are that they almost never feel peace of mind, are in a state of tension and irritability, and very worried about the uncertainty of the future and the possibility of returning to their own country.

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Conflicts of interests. Authors declare the absence of any conflicts of interests and own financial interest that might be construed to influence the results or interpretation of the manuscript.

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Примусове переміщення як фактор прояву тривоги та невротизації студентів під час війни

Резюме. Актуальність. Питання впливу тривожності на різні аспекти життя особистості в сучасних психологічних дослідженнях знову викликало суттєвий інтерес і стало предметом постійного вивчення. Зрозумілим є той факт, що воєнні конфлікти мають значний вплив на психічне здоров'я населення, невротизацію молодого людини, яка перебуває в періоді активного формування особистості та самоідентифікації. Зміни у внутрішньому стані та травматичні події під час воєнних дій можуть спричинити загострення стресу, тривожних розладів, підвищену тривожність серед молоді, що може стати перепорою в адаптації до нових умов і соціальної інтеграції. Саме тому дослідження цього питання є актуальним, адже необхідно вчасно оцінити стан тривожності в молоді, спрогнозувати ймовірні тривожні розлади, а також розробити можливі корекційно-терапевтичні заходи.

Мета: дослідити тривогу в студентів як механізм дезадаптації під час примусового переміщення впродовж війни. Основними цілями є проведення комплексу діагностичних процедур для вивчення загальних і конкретних особливостей тривоги й невротизації в студентів під час війни, порівняльний аналіз основних характеристик тривоги в переселенців та непереміщених студентів упродовж повномасштабного вторгнення. **Матеріали та методи.** Процедура дослідження тривоги включала кілька етапів і відбувалася в березні — травні 2023 року. Сформовано вибірку зі 129 осіб, розділених на дві підгрупи. Перша (47 %) включає внутрішньо (всередині країни, ВПО) та зовнішньо переміщених осіб (за межі країни, ЗПО), а друга (53 %) — непереміщених. Були використані наступні методи: 1) опитування — для збору соціально-демографічних даних про учасників (стать, вік та, у випадку ВПО/ЗПО, країна чи регіон проживання); 2) психологічне тес-

тування — для скринінгу тривоги та депресії (госпітальна шкала тривоги та депресії); щоб охарактеризувати ситуативну й особистісну тривожність (шкала Спілберґера — Ханіна). **Результати.** Дослідження показує, що переміщені молоді студенти, а також ті, хто не був переміщений під час війни, мають досить високий і дуже високий рівень обох типів тривожності. Провідним показником у непереміщених осіб є рівень тривоги та нервозності через можливі події та труднощі, загрози життю загалом та стан невпевненості, спричинений попередженнями про повітряні тривоги, ймовірність бути обстріляними або травмованими. Що стосується переміщених осіб, то вони майже ніколи не відчувають спокою, перебувають у стані напруги та дратівливості, дуже важко переживають неприємності, не можуть забути про них довгий час і турбуються про будь-які дрібниці під час воєнного стану. Крім того, відмічено закономірність, за якої ситуативна тривожність домінує в непереміщених осіб, а особистісна — у ВПО/ЗПО. **Висновки.** На основі отриманих результатів розроблено та впроваджено послідовну систему вивчення практично орієнтованих дисциплін, яка дозволила студентам використовувати знання з методологічних та теоретичних проблем екстремальної психології, пояснення та психологічної корекції власних руйнівних психоемоційних станів та формування вмінь аналізувати й розрізняти поведінкові особливості гострих реакцій на стрес та ознаки психічної травми, визначити фактори, що підвищують або знижують рівень ситуативної та особистісної тривожності під час військових операцій.

Ключові слова: тривога; тривожні розлади; невротизація; студенти; війна; примусове переміщення; дезадаптація; психоемоційний стан