**ORIGINAL ARTICLE** 





# Analysis of the emotional and psychological state of students in wartime conditions

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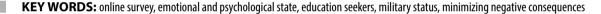
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#### **ABSTRACT**

Aim: To determine the emotional and psychological state of respondents through a survey, assess it according to the zones of emotional reflection, and develop recommendations on how to maintain balance in life, be aware of one's place in it, and feel in control of the situation.

Materials and Methods: This study used an online questionnaire to examine students' emotional states during the war, influencing factors, and ways to mitigate negative effects. A total of 156 students from Poltava State Medical University participated. Among them, 76% were not internally displaced persons (IDPs), while 24% were. Age distribution: 6.4% under 18, 84% aged 18-25, and 9.6% over 25. Gender distribution: 35.9% men, 64.1% women.

Results: Students' emotional states varied significantly. Most (44.5%) were in the learning zone, showing adaptation and resource-seeking. However, 18.1% experienced fear and uncertainty, highlighting the need for psychological support. IDPs were more often in the fear zone (27%), indicating vulnerability, while only 8% reached the growth zone, reflecting limited development opportunities. Women reported higher fear levels, whereas men showed slightly better adaptation. Correlation analysis confirmed relationships between IDP status, gender, and emotional well-being, emphasizing the need for tailored support. Conclusions: Understanding emotional responses and offering appropriate support are crucial for students' psychological well-being and adaptation during wartime.



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# INTRODUCTION

Modern realities caused by military events significantly affect the emotional and psychological state of students [1-3]. Constant stress, uncertainty, separation from loved ones, changes in the usual lifestyle and educational process - all this creates serious challenges for the psychological well-being of young people [3,4]. The importance of psychological resilience and adaptation in such difficult conditions is increasing, because they directly affect the success of learning, socialization and overall development of the personality [1]. However, the reaction of each person to a seemingly identical situation is purely individual. Therefore, timely identification of psycho-emotional difficulties in students and providing them with the necessary specific individual support from friends, teachers and parents is a necessary component in difficult times for the country and its citizens [4].

Comfort zones a psychological state in which we are safe and do not feel anxiety or fear.

The concept of the comfort zone originates in a classic psychological experiment conducted in 1908 by psychologists Robert M. Yerkes and John D. Dodson, who explained that this zone is a "space" with which we are completely familiar and in which we control almost everything.

Signs that you are stuck in your comfort zone:

- 1. You feel deep apathy and unmotivated.
- 2. You close yourself off to new ideas, you are afraid to take risks.
- 3. You won't learn anything new.
- 4. You follow the same routine.
- 5. You are afraid of hearing negative evaluations from those around you.

But to improve your quality of life, you need to experience a certain level of anxiety, go out and conquer a space where there's a little more stress. They called this the term "optimal anxiety."

The armed conflict in Ukraine has caused massive population displacement, including students who



Fig. 1. Comfort Zones by Robert L. Leahy

find themselves in new social and educational environments. Internally displaced persons (IDPs) among students face numerous challenges: adapting to a new educational environment, psychological stress, financial difficulties, and the need to integrate into new communities.

Internally displaced person (IDP) – in Ukrainian legislation, this is a citizen of Ukraine, a foreigner or a stateless person who is legally present in the territory of Ukraine and has the right to permanent residence in Ukraine, who was forced to leave or abandon their place of residence as a result of or in order to avoid the negative consequences of armed conflict, occupation, widespread violence, human rights violations and emergencies of a natural or man-made nature [5].

In fact, internally displaced persons are persons who fall under the definition of forced migrants, but who, having left their place of permanent residence, remain in the country of their citizenship and can benefit from its protection.

Providing proper conditions for learning, psychological support, and socialization of students is an important task for educational institutions and the state, because education remains a key factor in their stability and further development.

The objective of this work was to study the features of the emotional and psychological state of students during the war, the factors that determine it, and ways to minimize negative consequences. Analysis of this issue will help to form effective support strategies and create a favorable educational environment even in crisis conditions.

# **AIM**

Using a questionnaire, determine the emotional and psychological state of respondents, assess it according to the zones of emotional reflection, and develop advice on how to keep your life in balance, realize your place in it, and feel in control of the situation.

## MATERIALS AND METHODS

To conduct the survey, we developed an online questionnaire, which contained the following questions: age, gender, faculty, status: internally displaced person (IDP) / without IDP status (Appendix 1).

The survey was attended by 156 students of Poltava State Medical University. Respondents were asked to choose from the given options a description of their emotional state that corresponds to their current state. Each option characterized the corresponding zone of "emotional reflection". Our classification was based on the research of Robert L Leahy [6], who developed the concept of the comfort zone (Fig. 1). The options presented in the questionnaire corresponded to the following zones:

**1. Comfort zone**. "I feel good, safe, calm and familiar. Everything is stable for me, without change." The

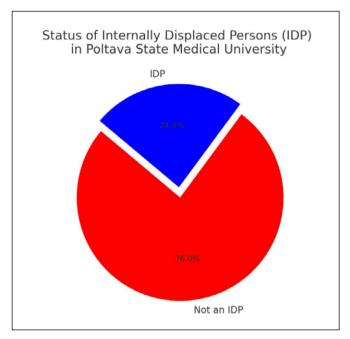


Fig. 2. Gradation of respondents by IDP and non-IDP status

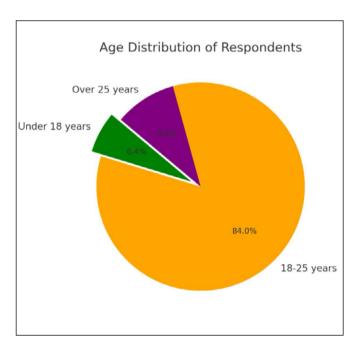


Fig. 3. Gradation of respondents by age

same "zone" where everything is familiar and familiar. A zero mark outside the scheme. A constantly repeating scenario. You know exactly what follows what. Woke up, washed, had breakfast, brushed your teeth... In a war situation, the traditional understanding of the "comfort zone" changes, since most of the usual aspects of everyday life are disrupted. Thus, the "comfort zone" can be reinterpreted as a state of relative stability within an unstable environment.

**2. Fear Zone**. "I get easily irritated, anxious and panicky. I am overwhelmed by feelings of uncertainty, fear

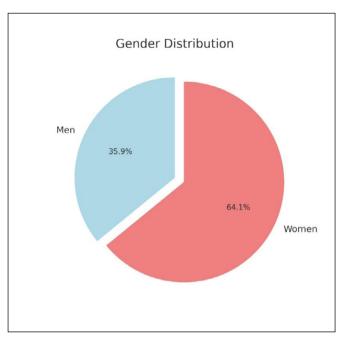


Fig. 4. Gradation of respondents by gender

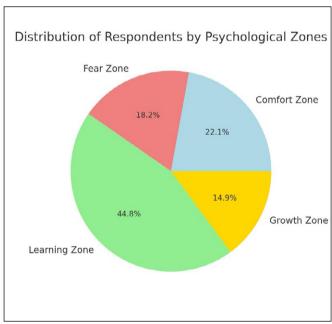


Fig. 5. Respondents' choice of comfort zone

and I am afraid of negative consequences." Fear zone: Change does not happen because people avoid new experiences for fear of failure or possible negative consequences. In the event of war, this zone expands to boundaries unknown in peacetime. Fears become a daily reality, and people learn to live with a constant sense of uncertainty.

3. Learning zone (cognition). "I feel a bit insecure, but I cope with my emotions, fears. I gain new knowledge, skills. I know what is happening around me, I check information. I support my friends." Learning zone: in which a person begins to accept challenges and new

	Usual security		Fear Zone		Learning area		Growth zone	
	IDPs	n\IDPs	IDPs	n\IDPs	IDPs	n\IDPs	IDPs	n\IDPs
	9	27	10	18	15	54	3	20
Total	36\23%		28\17.9%		69\44%		23\14.7%	
% of all	25	75	35.7	64.3	21.7	78.3	13	87
% among group	24%	22.7%	27%	15%	41%	45%	8%	16.8%

**Table 1.** Analysis of the relationship between IDP/non-IDP status and the emotional state of respondents

tasks. Fears still exist, but a person begins to learn to cope with them.

4. **Growth zone**. "I am successful in gaining knowledge, learning new things. I overcome the impossible. I am ready to accept changes, go through difficulties, remove everything unnecessary from my life. I am looking for ways to adapt to changes." Growth zone: where the most active personal growth occurs. A person sets long-term goals, overcomes previous limitations and begins to achieve successes that previously seemed impossible. Growth during war most often takes the form of "post-traumatic growth": when difficult circumstances stimulate the development of new personal qualities, such as resilience and empathy. For Ukraine, this can mean the development of national unity and pride, as well as a new understanding of its role and place in the international community.

Among the 156 students of Poltava State Medical University who participated in the survey, 76% did not have the status of an internally displaced person (IDP), 24% were internally displaced persons (IDP) (Fig. 2).

By age: 6.4% - under 18 years old; 84% - 18-25 years old; 9.6% - over 25 years old (Fig. 3).

The gender distribution is as follows: 35.9% - men, 64.1% - women (Fig. 4).

# **RESULTS**

22% of respondents were in the comfort zone. Fear zone – 18.1%. Learning zone – 44.5%. Growth zone – 14.8% (Fig. 5).

Next, it was analyzed whether there is a connection between the status of "IDP/non-IDP" and the emotional state of the respondents. The results of processing all responses are presented in Table 1.

In general, most people, regardless of status, are in the learning zone (44.5%). The fewest respondents are in the growth zone. There is a small share of people with IDP status here – only 8%. In the fear zone, we see a large share of internally displaced persons (27%). In the comfort zone, there are approximately equal numbers of people from both groups.

Next, the presence of correlation between groups was tested using statistical methods to support the

objectivity of the study. Spearman's rank correlation coefficient was chosen.

As a result, a direct correlation of medium strength (R=0.4) was found.

Therefore, this confirms the feasibility of comparing these groups.

We also calculated the correlation between the male/female ratio and the quantitative composition of the groups in a similar way. Here, too, a direct correlation of medium strength was found (R=0.4).

The aim of the study was not only to perform statistical calculations, but also to develop advice on improving the psycho-emotional state for each individual group [3-9]. To implement it, we reviewed the works of Robert Leahy and other specialists, conducted interviews with psychologists, and analyzed the media.

However, we must emphasize that this is only advice, and for full-fledged qualified assistance, you should contact specialists.

Thus, a smart step outside your comfort zone promotes new career prospects and self-fulfillment, and most importantly, opens doors that were closed not so long ago. Real life begins where the comfort zone ends.

# WE STEP OUT OF OUR COMFORT ZONE AND DON'T STAND STILL

Remember your achievements and understand that courage, boldness, and going beyond the usual framework led you to them. Break the path to the global goal into small, specific steps. This will make it easier for the brain to map out the vector of movement and finally start acting. Do what you are afraid of. You won't get rid of your fears and doubts, but you will be ready to fight them. Accept that failure is inevitable. Make it a habit to try something new.

But we would like to note that in conditions of martial law, many people first need to find their comfort zone, especially internally displaced persons who have lost their sense of security due to the war and are constantly in a zone of fear (which was confirmed by the statistical data of our study). In addition, alternating between leaving the comfort zone and returning is a guarantee of an unfading interest in life.

# DISCUSSION

The results obtained indicate a complex and at the same time adaptive picture of the emotional and psychological state of students in wartime. The majority of respondents (44.5%) are in the so-called "learning zone", which demonstrates a desire to adapt, overcome stress and form new skills. This fact confirms the flexibility and internal resource of Ukrainian youth even in crisis conditions. At the same time, a significant part of the respondents (18.1%) are in the "fear zone", and a minority (14.8%) are in the "growth zone", which indicates uneven psychological adaptation and the need for additional support.

It is worth noting the role of the status of an internally displaced person (IDP) in shaping the emotional state. The study data confirmed that persons with this status are more likely to find themselves in the "zone of fear" (27%) compared to other categories, which is quite natural, given the traumatic experience of forced displacement, loss of home and destabilization of the usual way of life. In contrast, only 8% of IDPs reached the "zone of growth", which indicates more difficult paths of adaptation for this group and the need to create targeted psychological rehabilitation programs.

Interestingly, despite the general perception that young people are vulnerable to stress, the majority of respondents in the 18–25 age group (84% of the sample) demonstrate the ability to reflect, learn, and support each other, which coincides with the concept of "optimal anxiety" (Yerkes & Dodson), which promotes development under conditions of moderate stress. This also confirms the concept of "post-traumatic growth" described in the scientific literature, when it is the crisis that becomes the impetus for personal development [6, 7].

The correlation coefficient between IDP/non-IDP status and the choice of emotional state zone (R=0.4) indicates a medium but significant relationship, which confirms the feasibility of a deeper analysis of the impact of displacement on the psychological well-being of education seekers. A similar correlation was found between emotional state and the gender of respondents, which also requires further research taking into account gender-specific stress response patterns.

According to the works of Leahy and others [6-8], overcoming psychological discomfort and developing resilience is possible through a gradual and controlled exit from the comfort zone. However, in wartime conditions, the key task is to first restore a basic sense of security, which is especially relevant for IDPs. Only after this is it possible to move on to the next stages - learning and growth.

Given the results, it is worth emphasizing the importance of institutional support (from universities, psy-

chological services, the state), which should be flexible, differentiated and individualized. Psychoeducation, mentoring programs, group therapy, personal growth trainings - all these are tools that can help young people go from fear to growth.

Thus, the results of our study not only reflect the current state of education seekers, but also indicate areas for further work: the development and implementation of psychological support strategies that take into account both general patterns of adaptation and the specifics of individual social groups.

## CONCLUSIONS

The study showed that the emotional and psychological state of students in wartime varies significantly, but the majority of respondents are in the training zone (44.5%), which indicates gradual adaptation and the search for resources to overcome difficulties. At the same time, a significant part of respondents (18.1%) feels fear and uncertainty, which confirms the need for additional psychological support.

Analysis of the relationship between IDP status and emotional state showed that internally displaced persons are more likely to be in the fear zone (27%), which indicates their vulnerability to the challenges of war. At the same time, only 8% of persons with IDP status are in the growth zone, which indicates limited opportunities for development in conditions of instability. A similar situation is observed in terms of gender distribution: women are more likely to feel fear, while men demonstrate a slightly higher level of adaptation.

Correlation analysis confirmed the existence of a medium-strength relationship between IDP/non-IDP status and emotional state, as well as between gender of respondents and level of adaptation. This indicates the need for a differentiated approach to support different categories of students.

Based on the data obtained, recommendations were developed to improve the emotional state of students, including:

- Maintaining a stable educational process to ensure a sense of normalcy and structure.
- Providing psychological support and creating a safe environment for emotional expression.
- Encouraging students to engage in active social interaction and self-development.
- Gradually leaving your comfort zone to achieve new goals and overcome fears.

Thus, understanding the emotional reactions and providing appropriate support to students are key factors in their psychological well-being and effective adaptation in wartime.

# Appendix 1

# ZONES OF PSYCHOLOGICAL COMFORT

Dear students! We sincerely appreciate your responses, which will help us conduct our research.
Name:
Email address:
Your age:
o Under 18 years old
o 18 to 25 years old
o Over 25 years old
Gender:
o Male
o Female
Your faculty:
o Dental
o Medical 1
o Medical 2
o Other
Select your status:
o Internally displaced person (IDP)
o I do not have IDP status
Choose the psychological state description that best applies to you:
o I feel good, safe, calm, and comfortable. Everything is stable and unchanged for me.
o I get easily irritated, anxious, and panicked. I am overwhelmed by feelings of uncertainty and
fear, and I am afraid of negative consequences.
o I feel somewhat insecure but manage my emotions and fears. I am acquiring new knowledge
and skills. I am aware of what is happening around me and verify information. I support my
friends.

#### **REFERENCES**

- 1. Akgül G, Ergin DA, Çok F. Resilience and coping strategies in immigrant and non-immigrant adolescents and identity development. Br J Guid Couns. 2024;52(5):887-901. doi:10.1080/03069885.2024.1234567.
- 2. Bonanno GA. Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? Am Psychol. 2004;59(1):20-28. doi:10.1037/0003-066X.59.1.20.
- 3. UNICEF Ukraine. The impact of armed conflicts on the mental health of children and youth. Kyiv: UNICEF; 2023.
- 4. Lackéus M. Comparing the impact of three different experiential approaches to entrepreneurship in education. Int. J. Entrepr. Behav. Res. 2020;26:937–971. doi: 10.1108/IJEBR-04-2018-0236.
- 5. Van Gelderen MW. "Entrepreneurs' competencies," in The Psychology of Entrepreneurship. New Perspecives. Milton Park, MD: Routledge. 2020, pp. 210–227. doi: 10.4324/9781003137573-12.
- 6. Leahy RL. The worry cure: seven steps to stop worry from stopping. Harmony. 2006, p.336.
- 7. Tracy B. Eat that frog! Get more of the important things done today! Kyiv: KM-Books. 2017, p.144.
- 8. Hudson-Hall K. Anxiety hacks: proven techniques, tools and tips to calm your anxiety quickly. 2022, p.268.
- 9. Van Gelderen MW. Developing entrepreneurial competencies through deliberate practice. Educ. Train. 2022.doi: 10.1108/ET-10-2021-0396.

Initiative research project of the Department of Propaedeutics of Therapeutic Dentistry of the PDMU "Substantiation of the choice of methods of treatment of diseases of the oral cavity organs depending on their morphofunctional features" State registration number 0124U004553. Deadline 01.2024-12.2029.

Research project funded by the Ministry of Health of Ukraine from the state budget "Development of methods for treatment and prevention of pulmonary fibrosis by activation of PPAR-gamma receptors" State Registration No.0122U201686. Implementation period 01.2023-12.2025.

#### **CONFLICT OF INTEREST**

The Authors declare no conflict of interest

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## **ORCID AND CONTRIBUTIONSHIP**

A — Work concept and design, B — Data collection and analysis, C — Responsibility for statistical analysis, D — Writing the article, E — Critical review, F — Final approval of the article

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