

The Relationship Between Mental States and The Quality of Students' Education in War Conditions

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Abstract

The conditions of war, in which the people of Ukraine have been living for more than a year, pose a risk to the psychological well-being of an individual. The article presents the results of an empirical study of the mental state and changes in the quality of education of student youth. The following indicators of students' mental states were measured: "calmness-anxiety", "energy-fatigue", "exaltation-depression", levels of low mood, and the manifestation of anhedonia. A comparison of students' mental state indicators was carried out. Three groups of students were distinguished: those with an improvement in the quality of education, without changes in the quality of education, with a decrease in the quality of education.

It was concluded that the improvement of the quality of students' education is combined with the following indicators of mental states: a sense of peace, energy, elation, a normal mood, and a preserved ability to enjoy various aspects of life. Instead, a decrease in the quality of learning is more often accompanied by a feeling of fatigue, manifestation of anhedonia. It is proposed that by helping students to improve the quality of their studies, they will contribute to the improvement of their mental state.

Keywords: quality of student learning; anxiety; fatigue; depression; mood; anhedonia

Introduction

For more than a year, people in Ukraine have been living in conditions of war, which creates a tremendous amount of stress. Being forced to adapt to abnormal conditions, people continue to work, study, and perform their daily duties. It is clear that the need to function in extreme conditions create an additional burden on the psyche, causes a change in its state and necessarily affects the activity of the individual.

We conducted an empirical study on a sample of students to find out how a person's activity changed during a year of living in extreme conditions and how it is related to his mental state.

We proceed from the following hypothesis:

being in extreme conditions of war leads to a change in the emotional state of the individual (increases anxiety, causes fatigue, depression), causes a decrease in mood and destroys the ability to experience pleasure from various aspects of life, all of which collectively lead to decrease in the quality of education.

The purpose of our study was to check the relationship between students' perception of changes in the quality of their studies and indicators of their mental states.

Methods

We have developed comparative, empirical research. A block of questionnaires (questionnaire, A. Wessman and D. Rix's "Self-Assessment of Emotional States" method) and scale evaluation (The scale of low mood (sub-depression) from the questionnaire of V. Zung, the anhedonia scale of Stait-Hamilton) were used. The study collected data on (a) respondents' subjective perception of changes in the quality of education during the war and (b) indicators of their mental states: calmness - anxiety, energy - fatigue, elation - depression, the degree of mood reduction and the depth of the depressive state, and the severity of anhedonia. The research contains two parts, which is due to the specifics of the comparative study.

The first part collects information on the respondents' subjective perception of changes in the quality of education during the war. A survey

was used, for this purpose, during which the respondents had to choose the answers to the question: "How would you describe your studies at the university during the last year?" The answer options given were as follows: a) the same as before b) less quality c) better quality d) other.

In the second part of the research, we studied mental states: calmness – anxiety, energy – fatigue, elation – depression (was diagnosed by the A Wessman and D Rix's "Self-Assessment of Emotional States" method), the degree of mood reduction and the depth of the depressive state (studied by the scale of low mood (sub-depression) from the questionnaire of V Zung), the severity of anhedonia (studied using the anhedonia scale of Stait-Hamilton). Program SPSS.24.0 was used to compare the indicators of the mental states of students with different activities. Frequency analysis was used to determine the percentage of respondents, with different subjective perception of changes in the quality of their education. Fisher's ϕ -angular transformation was used to calculate the reliability of differences between independent groups of people, according to the criteria of the individual's subjective perception of changes in the quality of education during the war.

Results

The study was conducted on a sample of 155 students of all bachelor's and master's courses of the university on the day of the anniversary of the

beginning of the war in Ukraine. Application of the described methods made it possible to obtain the following results.

Subjective feelings of changes in the quality of education

The majority of respondents (62.5%) note that the quality of their education has not changed over the past year. A large part (24%) feels that the quality of their education has deteriorated during the war. It was also revealed that a part of students (13.5%) felt that the quality of their education improved during the last year.

Further, the analysis of indicators of mental states was carried out within three groups of subjects: 1) with a feeling of improvement in the quality of education, 2) without changes in the quality of education, 3) with a feeling of a decrease in the quality of education.

Emotional states of subjects with different feelings of changes in the quality of education

The study of emotional states according to the indicators "calmness – anxiety", "energy – fatigue", "elation – depression" proved the presence of differences between groups in the distribution of percentages of respondents with different levels of manifestation of such indicators (see Table 1).

Groups of subjects	N studied	% of the studied by indicators								
		Calmness-anxiety			Energy-fatigue			Elevation-depression		
		Severe anxiety	Indicators are balanced	Calm dominates	Severe fatigue	Indicators are balanced	Vigor dominates	Severe depression	Indicators are balanced	Elation dominates
Students whose quality of education has improved	21	23.8	28.6	47.6	9.5	61.9	28.6	4.8	66.6	28.6
Students whose quality of education has not changed	97	26.8	49.5	23.7	34	54.6	11.4	14.5	68	17.5
Students whose quality of education has deteriorated	37	41	35	24	46	48.6	5.4	24	68	8
Sample as a whole	155	30	43	27	34	54	12	15	68	17

Table 1: Results of frequency analysis of indicators of emotional states in respondents, N=155

As we can see from Table 1, with regard to the "calmness – anxiety" indicator, among the subjects who note an improvement in the quality of their studies, the largest share is of individuals who are dominated by calmness (47.6%); among the subjects without changes in the quality of education, the largest share of persons with balanced indicators of calmness and anxiety (49.5%); among the subject with a reduced quality of education, the share of person with severe anxiety is the largest (41%).

Regarding the "energy – fatigue" indicator, among all the studied groups, the largest share of people in whom these indicators are balanced: 61.9% – in the group with improvement in the quality of education, 54.6% – in the group without changes in the quality of education, and 48.6% in the group with reduced indicators of the quality of education.

The situation in the groups with the "elevation – depression" indicator is similar: in all groups, the shares of people with balanced indicators are the largest (66.6% – in the first group, 68% – in the second and third groups).

At the same time, a comparison between groups of the percentages of people with different indicators of emotional states using the Fisher angular transformation method made it possible to identify the following statistically significant differences:

- among the respondent whose quality of education has improved, there is a significantly higher proportion of people who are dominated by a sense of calm, compared to the group whose quality of education has not changed ($p \leq 0.017$), and compared to the group whose quality of education has worsened ($p \leq 0.034$);
- among respondents whose quality of education has improved, the proportion of people with pronounced fatigue is significantly lower, compared to the group whose quality of education has not changed ($p \leq 0.004$), and compared to the group whose quality of education has deteriorated ($p \leq 0.001$); in addition, in the group of respondents without changes in the quality of education, the proportion of people with pronounced fatigue is significantly lower than in the group whose quality of education has deteriorated ($p \leq 0.001$);
- among the respondents whose quality of education has improved, there is a significantly higher share of people who are dominated by energy, compared to the group whose quality of education has not changed ($p \leq 0.034$), and compared to the group whose quality of education has deteriorated ($p \leq 0.006$);

- among respondents whose quality of education has improved, the proportion of people with severe depression is significantly lower, compared to the group whose quality of education has deteriorated ($p \leq 0.017$);
- among the respondents whose quality of education has improved, there is a significantly higher share of persons dominated by sublimity, compared to the group whose quality of education has deteriorated ($p \leq 0.021$).

Mood of respondents with different perception of changes in the quality of education

The study of mood proved the existence of differences between groups in the distribution of percentages of respondents with different levels of manifestation of its decrease (see Table 2).

Groups of subjects	N experimental	% of the studied by indicators			
		Mood is normal (no decrease)	A pronounced slight decrease in mood	Significant decrease in mood	Profound decreased mood (subdepression)
Students whose quality of education has improved	21	86	14	0	0
Students whose quality of education has not changed	97	74	24	2	0
Students whose quality of education has deteriorated	37	64.9	16.2	18.9	0
Sample as a whole	155	73.6	20.6	5.8	0

Table 2: Results of frequency analysis of indicators of low mood of respondents, N=155

As we can see from the Table 2, among all the studied groups, the largest share of persons whose mood is normal (no decline).

At the same time, a comparison between groups of the percentages of people with different indicators of mood reduction using the Fisher angular transformation method made it possible to identify the following statistically significant differences:

- among the respondents whose quality of education has improved, there is a significantly higher share of persons whose mood is normal, compared to the group whose quality of education has deteriorated ($p \leq 0.033$);
- among the respondents whose quality of education has improved, the share of persons (0%) with a significant decrease

in mood is significantly lower, compared to the group whose quality of education has deteriorated ($p \leq 0.01$); in addition, in the group of respondents without changes in the quality of education, there is a significantly lower proportion of people with a significant decrease in mood compared to the group whose quality of education has deteriorated ($p \leq 0.001$).

Anhedonia of respondents with different perceptions of changes in the quality of education

The study of anhedonia proved the presence of differences between groups in the distribution of percentages of respondents with different levels of its expression (see Table 3).

Groups of subjects	N experimental	% of the studied by indicators					
		The ability to have fun is normal	Low	Downgraded	Medium	Increased	High
Students whose quality of education has improved	21	95	0	5	0	0	0
Students whose quality of education has not changed	97	78.4	7.2	11.4	1	2	0
Students whose quality of education has deteriorated	37	62.2	13.5	16.2	8.1	0	0
Sample as a whole	155	76.8	7.7	11.6	2.6	1.3	0

Table 3: Results of frequency analysis of anhedonia of respondents, N=155

As we can see from Table 3, among all the studied groups, the largest share of persons able to derive pleasure from various aspects of life (no anhedonia).

At the same time, a comparison between groups of the percentages of people with different indicators of anhedonia using the Fisher angular transformation method made it possible to identify the following statistically significant differences:

- among respondents whose quality of education has improved, there is a significantly higher share of people with preserved ability to enjoy various aspects of life, compared to the group whose quality of education has not changed ($0 \leq 0.016$), and compared to the group whose quality of education has deteriorated ($0 \leq 0.001$); in addition, in the group of respondents without changes in the quality of education, the share of such

- persons is significantly higher compared to the group whose quality of education has deteriorated ($0 \leq 0.031$);
- among the respondents whose quality of education has improved, the share of persons (0%) with a low level of anhedonia is significantly lower, compared to the group whose quality of education has deteriorated ($0 \leq 0.002$); in addition, in the group of respondents without changes in the quality of education, the share of such persons is significantly lower compared to the group whose quality of education has deteriorated ($0 \leq 0.001$);
 - among the respondents whose quality of education has improved, the share of persons (0%) with an average level of anhedonia is significantly lower, compared to the group whose quality of education has deteriorated ($0 \leq 0.017$); in addition, in the group of respondents without changes in the quality of education, the share of such persons is significantly lower compared to the group whose quality of education has deteriorated ($0 \leq 0.026$).

Discussion

The obtained results are the basis for a number of conclusions.

Despite the extreme conditions of the war, most students are able to maintain the quality of their studies at the usual level.

In the extreme conditions of war, a significant proportion of students experience a deterioration in the quality of their studies, which can be both a consequence of stress, and itself can serve as an additional source of stress.

There is a part of students who in extreme conditions due to various reasons (greater awareness of their life, increased responsibility for their actions, sublimation of negative experiences, natural course of development) feels an improvement in the quality of their studies.

Students whose quality of education has improved significantly more often than others have a dominant feeling of calmness, energy, elation, a normal mood, a preserved ability to enjoy various aspects of life; significantly less often have a pronounced feeling of fatigue and depression, a significant decrease in mood, a low and medium level of anhedonia.

Among students whose quality of education remained, in comparison with the group of students who note a decrease in the quality of their education, cases of pronounced fatigue, low and medium levels of anhedonia occur significantly less often, and significantly more often have a preserved ability to enjoy various aspects of life.

Preservation of positive indicators of emotional states, mood and ability to enjoy life contributes to improving the quality of students' education.

Pronounced fatigue, the development of anhedonia is accompanied by a decrease in the quality of student learning.

The presence of a connection between the mental state and the quality of education gives grounds for concluding that it is bilateral. Therefore, by helping students to improve their learning (by diversifying it, providing additional advisory assistance), teachers can contribute to improving indicators of their psychological well-being.

The results obtained by us regarding the indicators of the mental state of the subjects are consistent with the research data of the Institute of Social and Political Psychology (ispp, 2022), conducted half a year after the start of the full-scale war in Ukraine. According to these data, representatives of all demographic groups and regions of the country rated their psychological well-being quite highly (6.7 points out of 9 possible).

During our research, other indicators were also studied (Martyniuk I., 2023). In particular, data were presented, according to which the distribution of respondents with different levels of indicators of mental states is similar among those who spent most of their time in Ukraine and those who spent most of their time abroad.

In general, studies of the impact of extreme war conditions a various category of the population, including student youth, are just beginning and are important for finding ways to further correct their negative consequences.

Limitation of the application of the obtained results

The results were obtained from a sample of respondents from one university, without differentiation of the level of students' stressful experiences.

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Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

1. Doslidgennia psychologichnogo stanu naseleennia v umovah povnomashtabnoyi viynu. (2022). Instytut sotsialnoyi i politychnoyi psykholohiyi NAPN Ukrayiny [Study of the psychological state of the population in conditions of full-scale war: press release. Institute of Social and Political Psychology of the National Academy of Sciences of Ukraine]. Kyiv.
2. Martyniuk I. Student Activity Ensures Adaptability in War Conditions. *Journal of Psychological Science and Research*. 2023;3(1):1–15.



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