International Journal of Basic and Applied Sciences, 14 (3) (2025) 72-80

International Journal of Basic and Applied Sciences

Website: www.sciencepubco.com/index.php/IJBAS
https://doi.org/10.14419/rr85p618
Research paper



Features of Students' Adaptation to Learning in Wartime Conditions: The Role and Significance of Resilience and Stress Coping Strategies (on The Example of Students from Kharkiv Universities)

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Received: June 9, 2025, Accepted: July 2, 2025, Published: July 14, 2025

Abstract

The article is devoted to the problem of adaptation and its factors. The authors aim at theoretical understanding and empirical research of the features of students' adaptation to learning activities in war conditions (on the example of students from Kharkiv and the Kharkiv region). During the theoretical analysis, it was clarified that the successful adaptation of students to learning in war conditions depends on many components, such as the motivational structure of the personality, self-esteem, flexibility of the nervous system, intellectual and creative abilities, and a positive emotional background. The authors note that adaptation is a socio-psychological process, and they also theoretically substantiate that adaptation is inextricably linked to their resilience and coping strategies. According to the results of an empirical study, it is proven that in war conditions, students who are forced to study remotely suffer from a lack of direct interaction with other students and teachers, which negatively affects their adaptation to learning in war conditions. At the same time, such positive trends as the dominance of a moderate desire to overcome unfavorable factors and acquire new experience, the expression of active stress coping strategies, and the prevalence of high rates of self-acceptance and positive self-esteem were revealed. The authors have formulated recommendations regarding the increase of the adaptive potential of students in war conditions, in particular, adaptation to the student group and educational activities.

Keywords: *Adaptation; Social and Psychological Factors; Learning; War; Students; University; Coping Strategies; Hardiness.*

1. Introduction

The successful adaptation of students to their studies is a constantly recurring concern for researchers, and in recent years it has once again become highly relevant, initially due to the COVID-19 pandemic and the introduction of quarantine measures, and now, during the state of war in Ukraine, these issues have become even more acute.

In the context of martial law, the educational process acquires many peculiarities, and changes also occur in its organization, which are usually negative. Students are forced to spend a lot of time in shelters or even leave their homes altogether. The conditions in which all participants of the educational process find themselves in times of war are specific, as they are characterized by permanent stress and create a constant emotional burden.

From the perspective of social and behavioral sciences, adaptation is the process of overcoming various problematic situations by an individual and/or a social group, during which the individual and/or group uses skills acquired at different stages of their development (including social skills) that allow them to interact with others without internal or external conflicts, to perform their main activities productively, to meet their expectations, and, at the same time, to assert themselves and satisfy their basic needs. Thus, from the perspective of social and behavioral sciences, adaptation is a socio-psychological process and involves the use by the adapting subject of individual, social, communicative, and similar skills and competencies.

In times of war, the adaptation process is greatly complicated, as these conditions generate numerous crises that make the social space highly dynamic and unpredictable. Therefore, individuals and social groups are, in essence, forced to adapt to uncertainty.

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Thus, the peculiarities of adaptation of representatives of certain social groups, especially those that are of fundamental importance for the development of society, require careful study and constant monitoring. Students are one such social group, possessing significant activity potential and being an important agent of social change, particularly in the post-war period.
Given the above, the purpose of this article is to theoretically comprehend and empirically investigate the specifics of students' adaptation to educational activities in wartime conditions (using the example of students from the city of Kharkiv and the Kharkiv region).

2. Literature review

General aspects of the adaptation problem were considered by such Ukrainian domestic and foreign psychologists as L. Vygotsky, S. Rubinstein, O. Leontiev, V. Petrovsky, H. Selye, J. Piaget, G. Khomych, I. Bulakh, O. Morozov, A. Furman, L. Bozhovich, E. Kagan, K. Bardin, N. Maksimenko, O. Skrypchenko [5]; [15]; [25]; [26]; [28]; [29]; [32]; [42];[44]; [45]; [54]; [52].
The analysis of the scientific works of the above-mentioned scientists allows us to conclude that adaptation is a necessary condition for ensuring optimal socialization of the individual. Satisfaction with the social environment, activity of self-expression, and acquisition of relevant experience are criteria for successful adaptation of a person to new conditions, to a new social environment. As experience of adaptation is acquired, a person develops a property as adaptability. People with developed adaptability more easily experience social changes and crises caused by these changes.
Problems of psychological adaptation of students to the educational process in wartime conditions were studied by such representatives of psychological and pedagogical sciences as T. Alekseeva, N. Atamanchuk, K. Bereznyak, O. Vasylieva, I. Gerasimova, N. Gerasimova, T. Golubenko, S. Dmytruk, G. Datsun, O. Nakorchevska, O. Nikitina, L. Tymkiv, S. Yalanska [1]; [3]; [9]; [10]; [38]; [32]; [48]; [53].
The results of the analysis of scientific literature related to the problems of adaptation to learning allow us to state that student adaptation should be considered as a process of his/her entry into a new social environment (university staff, student group), assimilation and reproduction of social norms and values inherent in this environment, mastering the relevant roles and functions. V. Starosta, O. Popadych, L. Nechytailo, L. Kuras, and O. Dziaman note that student adaptation is a two-way process that involves co-creation of all participants in the educational process (administration of the institution, teachers, curator, parents, members of the academic group, and the student himself) [37]; [46].
Key importance for student adaptation is played by factors that can be divided into two groups: 1) (micro)environmental (peculiarities of the organization of educational space and educational communication in the educational institution) [35]; [36]; 2) individual-personal (level of social and moral maturity of the student, individual-personal characteristics of the development of mental processes, etc.) [37]; [46].
It is important to emphasize that the conditions for successful student adaptation are fundamentally independent of the state of war. These conditions include: shaping students' adequate understanding of the chosen profession; assisting in the realization of the social significance of the profession and instilling love for it; forming adequate self-esteem; increasing volitional activity; conducting psychological and pedagogical diagnostics of the adaptation process; mastering methods of mental self-regulation by students; and the activities of the university psychological service [13]; [18].
In the context of our research, it is interesting to consider studies devoted to students' adaptation in war conditions in countries other than Ukraine. Tazan [52] emphasizes that the violence in Syria has had and continues to have a significant impact on people's lives. People have watched bloodshed, lost friends and family members, served as human shields, and had their towns besieged by warring sides. This has undoubtedly had a substantial negative influence on people's mental health, and students are no exception. In a previous study, Al Saadi et al. [3] studied the prevalence and risk factors for depression, anxiety, and stress among Damascus University students during the war. According to the survey, 60.6% of students have moderate, severe, or extremely severe depression symptoms, 52.6% are stressed, and 35.1% are anxious. According to Al Azmeh et al. [2], students in Syria must overcome many logistical barriers, such as successfully crossing military checkpoints, to pursue or complete their higher education. All these studies discovered student-specific problems, including poor attendance, low motivation, anxiousness, fear, distraction, and a lack of preparedness. At the same time, data suggests that the conflict had some good effects on students' drive to study and reconstruct Syria, which in turn influenced instructors' motivation [1].
The study by Balkan scientists Petreska et al. [44] aimed to investigate how higher education perceived value influences students' satisfaction with the service and migration intentions. Data from 1,150 Macedonian university students was collected and analyzed using Partial Least Squares Structural Equation Modeling. The findings revealed that functional, emotional, conditional, and image values perceived about the degree are important predictors of total satisfaction, but social impact by reference groups reduces satisfaction. As a result, student contentment lessens their desire to leave the nation. Furthermore, the scientists discovered that the year of study serves as a mediator, providing better satisfaction and hence lowering brain drain intentions for students in higher courses.
Of particular interest is the study of the relationship between academic motivation and student adaptation. One of the factors in successful student adaptation is the desire to achieve success in educational and professional activities. There is a relationship between motivation and personality traits: personality traits influence the characteristics of motivation, and the characteristics of motivation, once established, become personality traits that, in turn, affect adaptation in the social environment [22]; [24]; [39].
The structure of a student's motives becomes the core of the future specialist's personality. The development of positive learning motives is an integral part of the formation of socio-psychological adaptation of a student, including in times of war. At the same time, it should be emphasized that the adaptation of students to study in times of war depends on the development of military events. This is one of the peculiarities of today's Ukraine – when it is necessary to adapt and constantly adjust one's life in real-time mode.
Ukrainian scientists such as B. Savchuk, U. Borys, and L. Sholohon have explored emotional intelligence as a factor in maintaining mental health and adapting student youth to crises [41].
Yu. Krasilova, R. Prakapas, and I. Kolomyitseva found that maladjustment to studying under martial law is very common among Ukrainian students, which is manifested in low academic motivation and passivity in class. A sharp decline in motivation and activity was observed at the beginning of the full-scale Russian invasion of Ukraine [21].
T. Vasheka, O. Lych, V. Palamar, S. Palamar, V. Zhelanova, T. Safir, and N. Kurdil studied the psychological factors of hardiness in Ukrainian students in times of war. The results of their study showed a direct connection between hardiness and a strong and mobile nervous system, hyperthymic and demonstrative character accentuations. Students with a high level of hardiness are characterized by pronounced optimism, meaningfulness of life, and the use of adaptive coping strategies [49].
Based on the analysis of current scientific literature, three key components of hardiness can be identified: 1) involvement (a person's attitude towards themselves, a sense of unity with the surrounding world, inclusion in events that occur); the ability to self-expression and self-realization, which gives them strength and motivates them to a healthy lifestyle [54]; 2) control over one's own life and its

circumstances, which activates a person's ability to find ways to influence the results of undesirable changes [35]; 3) acceptance of risk, which ensures the openness of the individual to change [30]; [31].

In the work of N. Kordunova, I. Mudrak, and N. Dmytriuk, it was established that adaptability as a personality trait is important for a person's adaptation to extreme conditions and endurance in these conditions. At the same time, hardiness is seen as creating the necessary adaptive potential of the individual, which is extremely important at student age. The researchers found that among the students they studied (the study was conducted in 2021, before the start of Russia's full-scale invasion of Ukraine), high and medium levels of hardiness and adaptability prevailed [21]. The average level of hardiness contributes to the optimal experience of uncertain situations and includes the choice of coping strategies by the individual, which allow them to resist new difficulties in professional and personal life. Respondents with high rates of hardiness had a high level of adaptation effectiveness [27]. At the same time, a low level of hardiness and adaptability was characteristic of a third of the students studied, which could trigger the avoidance mechanism and reduce the ability to adapt to crisis conditions [21]. In a study by S. Kuzikova and I. Shcherbak, it was also found that the overall level of hardiness affects self-development, passion, optimism, and adaptability. It was stated that the indicators of adaptation expression have a positive and significant relationship with all components of hardiness and its overall indicator [27].

Considering the leitmotifs of the main discussions surrounding the adaptation of students to difficult conditions, particularly those caused by the war, it can be concluded that the adaptation of students, which is a socio-psychological process, is inextricably linked to their hardiness and depends on which stress coping strategies are used by students. The above formed the basis for our selection of psychodiagnostics methods for conducting our empirical study of students' adaptation to learning in wartime.

3. Method

To achieve the stated goal, the theoretical part of the article employs methods of analysis and synthesis (analysis of scientific literature, theoretical approaches to the study of the phenomenon of adaptation, basic conceptual tenets that reveal the essence of this process), comparative analysis (comparison of different adaptation theories to identify their common and distinct characteristics), and interpretation (interpretation of the results obtained in the context of current research and theories).

The empirical part of the article is based on the results of a study conducted by the authors using the following psychodiagnostic methods: "Adaptability of Students to Higher Education Institution" methodology [34]; "Hardiness Test" (Maddi [54]); "Adaptive Behavior Strategies" questionnaire (N. Melnikova (cited in Voronov [55]); Rogers-Diamond's method of diagnosing socio-psychological adaptation [36]. The data collection method is an online survey (n=244; sample is random, non-representative; data collection was carried out in November 2024). The respondents were students from six Kharkiv universities (the names of the universities are not specified in this article to preserve anonymity) aged 17-19 years who, at the time of the survey, resided in the Kharkiv region. We chose students from Kharkiv universities, and specifically those students who reside in the Kharkiv region, for our study because the Kharkiv region is one of the regions of Ukraine most affected by the actions of the Russian aggressor. Therefore, it is expected that the learning conditions here are more extreme, and accordingly, the processes of adaptation to these conditions are as complicated as possible.

The analysis of the data obtained was carried out using the special software IBM SPSS Statistics 27.0. Methods of descriptive mathematical statistics and correlation analysis (Pearson's r correlation coefficients) were used.

4. Results and discussion

The concept of "adaptation" is traditionally considered a general scientific concept. Similar concepts originate at the "junctions," at the "points of contact" of sciences, or even within individual sciences, followed by their extrapolation to a wide range of fields and specialties. Currently, there are more than 40 definitions of the concept of adaptation. This diversity of interpretations is associated with the use of this concept in various sciences – natural, human, social, and behavioral, among others (biological, social, psychophysiological adaptation, etc.). Naturally, each of these sciences places its emphasis and introduces its adjustments to the meaning of adaptation, which is related to the specifics of the subject field of each science, the tasks that this science performs about the corresponding sphere of life and society as a whole [4]; [41]; [47].

An analysis of scientific sources as well as specialized reference literature allows us to define the term "adaptation" as the result of the interaction of living organisms and the environment, leading to their optimal adjustment to life and activity.

From a psychological point of view, adaptation is seen as the process of psychological inclusion of the individual in the system of social, socio-psychological, and professional-activity relationships [3]. Scientists distinguish between the following types of psychological adaptation: socio-psychological, professional-activity, ecological [14]; [48].

From a sociological point of view, adaptation is seen as the result or process of interaction between the individual and the social environment, leading to the establishment of an optimal ratio of goals and values of the individual and the group [20].

The authors of this article consider the process of adaptation based on the synthesis of psychological and sociological approaches, and therefore as a socio-psychological process, which is determined by relevant factors (psychological, individual and social, environmental, and communicational).

In addition, despite the great variety of interpretations of the concept of adaptation, we can highlight the following common theses in this diversity: 1) the process of adaptation is bilateral and necessarily involves the interaction of the subject adapting and the environment to which they are adapting; 2) this interaction can be described in terms of balance/imbalance, influence/subordination, and the like; 3) the main goal of such interaction is coordination (mutual adjustment) between the subject and the environment to which they are adapting; the degree and nature of such coordination can vary within a fairly wide range; 4) achieving coordination as mutual adjustment involves mutual changes, i.e., those that occur both at the level of the subject and at the level of the environment to which they are adapting.

The phenomenon of adaptation is traditionally considered in three dimensions: as (a) a process, (b) a state, and (c) a property. When studying adaptation as a process, the change in the stages of the process, the dynamics of changes in the emotional, behavioral, and cognitive components during the transition from one stage to another are considered. Interpretations of adaptation as a certain state include interpretations that describe this state as the degree of adaptation/maladjustment of an individual or group at a given moment. When adaptation is considered as a property, it refers primarily to adaptability as a certain characteristic of an individual and/or group (adaptive characteristics, adaptive behavior strategies, etc.) [2]; [29]; [40].

As mentioned in the previous section of this article, adaptation and adaptability are largely associated with hardiness and coping strategies. In the face of such global social upheavals as a pandemic or war, total uncertainty, fundamental changes in living conditions, increasing crises, and the absence of external points of support and reference points, high demands are placed on the resources of the individual,

requiring a rapid response, the ability to actively and effectively overcome negative influences, while maintaining optimal health, working capacity, and psychological stability. Collectively, all of the above create a quality described by the term "hardiness," which reflects the individual's abilities for mature and complex forms of self-regulation at the existential and psychophysiological levels of functioning [16]; [31]. Researchers define hardiness as a person's beliefs that allow them to remain active and prevent the negative consequences of stress [6].

A hardy personality knows how to protect themselves from stress, cope with stress, turn obstacles into opportunities, and maintain ultimate social activity and effective functioning in the socio-cultural space. The components of hardiness are formed in the process of socialization. This is especially active in childhood and adolescence, but at any age they can be purposefully formed (for example, through special training) [7] [7] [17]; [23]; [54].

A special role in the formation of hardiness is played by the period of study in educational institutions, in universities [17]. An analysis of special scientific literature shows that research on the phenomenon of hardiness in the context of university education is carried out in the following areas: understanding by students themselves of their hardiness [31]; studying hardiness as a personal factor of adaptation to the conditions of study at the university [17]; determining the dynamics of student hardiness [54]; characteristics of hardiness as a personal resource for obtaining higher education [23]; the specifics of hardiness as an adaptive resource for students who have changed their place of residence to study at the university [21]; characteristics of hardiness as a resource for the positive development of students' personality [49]; determining the dynamics of the level of hardiness in students receiving pedagogical education [9].

People with a high level of hardiness tend to use adaptive coping strategies. Coping is an individual way for a person to interact with a situation that is logical, meaningful, and consistent with their psychological capabilities [2]. Clinical psychologists (N. Haan, R. Lazarus, S. Folkman, C. Aldwin, and others) were among the first to study coping [25]; [27]; [28]. A modern approach to studying coping behavior considers the following: 1) humans have an instinct for overcoming [8], one form of which is exploratory activity (Rotenberg, 1976) [12]; [19]; 2) the choice of coping methods is influenced by individual psychological characteristics (temperament, anxiety level, type of thinking, locus of control, character orientation, attitudes, experiences, etc.), so the ability to cope with stress has not only external but also internal (personal) preconditions [43]; 3) coping strategies in difficult situations will depend on the level of self-actualization of the individual: the higher the level of personal development, the more successfully they solve difficulties [11].

R. Lazarus and S. Folkman introduced the concept of coping into scientific use in the context of developing a transactional model of stress [26]. In his book "Psychological Stress and the Coping Process," R. Lazarus refers to the concept of coping to describe conscious strategies for coping with stress and other anxiety-provoking events [29].

In general, scientists and practitioners attribute the basic coping strategies to "problem-solving," "seeking social support," and "avoidance" strategies.

The problem-solving strategy is an active behavioral strategy in which a person seeks to use personal resources to find possible ways to effectively solve the problem [25].

The strategy of seeking social support is an active behavioral strategy in which a person seeks help and support from family, friends, etc. to effectively solve the problem [25].

The avoidance strategy is a passive behavioral strategy in which a person represses the need to solve a problem [25].

The theoretical positions outlined above indicate the relationship between social adaptation, hardiness, and coping strategies and constitute the theoretical and methodological basis of our empirical research, which included appropriate psychodiagnostics methods in its toolkit.

Our empirical study aimed to identify current trends emerging in the adaptation of Ukrainian students to studying under war conditions, which are characterized by high levels of stress, extreme instability, and uncertainty.

The research toolkit was based on 4 psychodiagnostic methods described earlier in this article in the "Methods" section. In addition to the scales provided by the psychodiagnostic methods, the toolkit included questions aimed at determining the level of student satisfaction with the educational process, educational communication, and various aspects related to the quality of teaching and learning at the university.

The respondents were first-year students (17-19 years old) studying at Kharkiv universities who, at the time of the online survey, resided in the Kharkiv region. To obtain relevant data, not distorted by the prevalence of representatives of a particular gender in the sample, we tried to maintain a quantitative balance between respondents of different genders. We managed to achieve this balance, and therefore, 48.4% of the respondents are male, and 51.6% are female.

One should be aware that the sample is not quite representative, since age and gender characteristics, as well as the different landscape of safety in various regions of Ukraine, are not presented in our study. At the same time, namely Kharkiv represents a city with ‘classical’ war challenges in education – the city is not on front-line but is located relatively close to it in comparison with other Ukrainian major cities (such as Kyiv, Odesa, or Dnipro), and experiences frequent drones and missiles attacks, but, at the same time, unlike in front line cities and settlements, studying ‘offline’, in classrooms, takes place along with online studying. Meanwhile, coping with war stress in Kharkiv and other cities with the same safety situation, naturally, requires different efforts than the ones applied by students in rear regions, first, in the Western part of Ukraine. The scope of our research, however, did not imply investigating different coping strategies suitable for regions with various safety patterns.

Overall, the analysis of one-dimensional distributions showed that most respondents, 82.4%, are satisfied with the organization of the educational process in their universities. At the same time, 51.3% note that they are unable to study fully due to negative emotional state, poor Internet connection, and the lack of opportunity to interact directly with other students and teachers.

To the question of what kind of help students need most in their studies, more than half of the respondents, 53.3%, indicated that they independently seek ways to solve problematic situations in their studies. All others tend to seek help from teachers, friends, and classmates.

A third of the surveyed students (33.6%) indicated that they have adapted to studying in war conditions (are accustomed to the specifics of the educational process in a remote format; to the specific requirements of teachers). 27.8% indicated that they have personal difficulties (problems of interaction in the team and personal negative experiences). 24.6% of respondents pointed to technical problems that interfere with learning (unstable Internet connection, lack of a personal computer, and an isolated individual space for learning).

Most respondents (63.1%) believe that, despite the war, professors should not lower their standards for students. Regarding the assessment of academic motivation, 50.4% believe that academic motivation has not changed, while approximately 32% believe that motivation has decreased. The remaining respondents were unable to provide a definite answer to the question.

Almost half (49.6%) of the respondents consider the relationships within their student group to be amicable. At the same time, 44.7% believe that relationships in the group are based on the principle of "every person for themselves." Overall, 83.2% believe that relationships within the student group affect learning outcomes.

Analysis of the data showed that some students have certain difficulties adapting to learning in wartime conditions, specifically problems with interaction in the academic collective and difficulties adapting to the demands of learning. This prompted us to investigate the process of adaptation to learning in more detail.

The methodology "Adaptation of Students to Higher Education Institutions" is used to identify students who experience difficulties adapting in the group and academic activities. Adaptation indicators are provided in Table 1.

Table 1: Indicators of Respondents' Adaptation to Higher Education Institutions (N=244, In % by Groups, Divided According to the Corresponding Scales)

Scales	High Indicators	Low Indicators
Adaptation to the learning group	56.1%	43.9%
Adaptation to learning activities	58.6%	41.4%

The analysis of the results revealed that 58.6% of respondents are fully adapted to learning. They are characterized by rapid acquisition of knowledge and successful completion of assigned tasks; they can freely express their own opinions and demonstrate their individuality and abilities. Approximately 56.1% are adapted to the learning group. In the group, such students feel comfortable and can easily find common ground with peers, following the norms and rules accepted in the group. Against this background, a significant proportion of students have not adapted to either the conditions of learning or the student group.
The distribution of hardiness indicators of the subjects according to the S. Maddi test is presented in Table 2.

Table 2: Distribution of Hardiness Indicators of Respondents (n=244, in % by Groups, Divided According to the Corresponding Scales)

Scales	Low level	Medium level	High level
Engagement	24.2%	61.9%	13.9%
Control	20.9%	55.7%	23.4%
Risk acceptance	35.2%	48.8%	16.0%
Overall hardiness	13.1%	75.8%	11.1%

As we can see, the percentage of respondents with a low level of overall hardiness is relatively low. Average scores prevail across all scales. Overall, approximately 75% have a medium or high level of engagement, and approximately 79% believe that they can control their lives at a medium level or higher. Approximately 64% rate their ability to take risks as medium or high.
According to the "Adaptive Behavior Strategies" questionnaire, results were obtained and detailed in Table 3.

Table 3: Distribution of Adaptive Strategies of Students (N=244, in % by Groups, Divided According to the Corresponding Scales)

Scales	Low level	Medium level	High level
Active modification of the environment	48.4%	49.6%	2%
Active self-modification	30.3%	63.6%	6.1%
Leaving the environment and seeking a new one	1.6%	47.2%	51.2%
Avoiding contact with the environment and immersing oneself in the inner world	7.7%	38.1%	54.2%
Passive self-representation	4.5%	84.9%	10.6%
Passive submission to environmental conditions	4.9%	60.7%	34.4%
Passive anticipation of changes	50.4%	43.5%	6.1%

As we can see, both active and passive strategies are present among the respondents' adaptive behavior models. At the same time, the level of avoidance strategy is rather high, as well as passive submission. These results necessitate the designing and introduction of psychological support programs for first-year students in Kharkiv, which can be implemented in the form of training, built according to the Kolb cycle model. Here, studying and adapting the experience of Syria can be of significant expediency. Psychological assistance for Syrian higher education students throughout the continuing crisis necessitates a multifaceted strategy. This involves resolving war-related trauma, offering mental health assistance, and establishing safe learning settings. Focusing on resilience, coping techniques, and early intervention is deemed critical, as is eliminating the stigma associated with obtaining mental health care [12].
Regarding the "Active modification of the environment" strategy, our subjects predominantly show low and medium scores. Therefore, the surveyed students are not characterized by a desire to actively influence the environment or other people to change them, to "adapt" them to their peculiarities and needs. At the same time, manipulations and strategies of pressure on others are not typical for them.
The distribution of responses regarding the "Active self-modification" strategy indicates that most students are not yet ready for an active transformation of their personality.
Regarding the "Leaving the environment and seeking a new one" strategy, referring to the data obtained, it can be argued that most respondents try to avoid contact with a frustrating environment, and from time to time, focus their efforts on finding a new, more acceptable environment (or partner).
The strategy of "Avoiding contact with the environment" in the form of locking oneself in the inner, "own" world is very characteristic of more than half of the respondents. Manifestations of this strategy are quite diverse and include the search for an alternative to the real world in fantasies. The strategy is characterized by a concentration on internal states and experiences and may be accompanied by psychological suppression, displacement of frustrating factors, and the use of psychoactive substances (alcohol, drugs) to change the internal state.
The "Passive self-representation" strategy is associated with the desire to assert oneself and defend one's "Self." It is fully inherent in 10.6% of the surveyed students, and a medium level of its expression is typical for 84.9% of students. This strategy manifests itself in a stubborn demonstration of one's position. As a rule, there is no activity aimed at changing the situation.
The strategy of "Passive submission to environmental conditions" is significantly inherent in more than a third of the surveyed students, and about 60.7% sometimes resort to this strategy. Therefore, changes that occur under the influence of external factors, without independent conscious analysis of the situation, do not involve a deep personal restructuring. But considering that the respondents are in a situation of learning and disciplinary requirements, the focus on external conformist behavior is very adaptive.
The strategy of "Passive anticipation of changes" is characteristic of only 6.1% of respondents. Thus, students do not seek to avoid unpleasant environmental influences.
It should be noted that the most popular adaptive strategies for students are the strategy of "Avoiding contact with the environment," "Leaving the environment and seeking a new one," and "Passive submission to environmental conditions." This proves that in contact with a frustrating environment, which is learning in unstable conditions, they actively change what does not suit them or look for an alternative, directing their activity into their inner world, into sports, creativity, computer games, or, without compromising their principles, demonstrate external conformist behavior.
Given the purpose of our study, it was important to determine how adequately students experience and are aware of critical moments in their lives. For this, the scale of socio-psychological adaptation developed by American psychologists C. Rogers and R. Diamond was chosen. The distribution of data obtained from the use of the corresponding methodology is presented in Table 4.

Table 4: Distribution of Results According to the Methodology of Diagnostics of Social and Psychological Adaptation (N=244, in % by Groups, Divided According to the Corresponding Scales)

Scales	Low level	Medium level	High level
Adaptability	0,8%	57.7%	41.5%
Self-acceptance	2%	36.2%	61.8%
Acceptance of others	3.3%	59%	37.7%
Internality	0.4%	52%	47,6%
Emotional comfort	5.7%	65.2%	29.1%
Desire for dominance	0.4%	51.2%	48.4%
Escapism	7%	74.6%	18.4%

According to the "Adaptability" scale, it can be stated that respondents demonstrate sufficient adaptation to the conditions of interaction with others in the system of interpersonal relations. Their intentions mainly coincide with actions, ideas with implementation, and the impulse to action with its results.

According to the "Self-acceptance" scale, more than 60% of respondents have positive self-esteem, they are satisfied with themselves and are confident that they can be liked by others, be interesting and attractive to others.

According to the "Acceptance of others" scale, respondents demonstrate predominantly average and high rates. This indicates a moderate tolerance for other people and their shortcomings.

According to the "Internality" scale, high rates are observed in almost half of the respondents, and approximately the same number of respondents have average rates. This means that respondents feel like active subjects of their activities, and their internal motivation prevails over external. Respondents mostly know how to manage themselves and their actions, and tend to analyze their experience.

Measurements on the "Emotional Comfort" scale (optimism, balance, a sense of well-being in life) indicate a prevailing majority of average rates. Thus, it can be argued that the surveyed students mostly have a positive vision of the future.

Measurements on the "Desire for Dominance" scale indicate a prevailing moderate desire of respondents to influence others, convince them of their own opinions, and defend their positions, which is generally typical of their age (17-19 years). From time to time, this can be combined with a certain compliance, susceptibility to external influence.

Escapism can be expressed in immersion in the world of fantasies, books, movies, or computer games. The results of measurements on the "Escapism (avoidance of problems)" scale indicate that students are not inclined to focus on problems; they know how to distract themselves (switch to sports, creativity, etc.).

In general, according to the results of the diagnosis of social and psychological adaptation, the subjects demonstrate high rates on the scales of "Self-acceptance", "Adaptability", "Internality", and "Desire for Dominance", on which the success of overcoming difficult circumstances depends.

To establish the relationship between the types of students' adaptation to studying at the university and indicators of hardiness, adaptation strategies, and indicators of social and psychological adaptation, we conducted a correlation analysis (Pearson's correlation coefficient r). Table 5 shows the correlation coefficients indicating the presence/absence of a statistically significant relationship.

Table 5: Correlation between Types of Student Adaptation and Hardiness Indicators, Adaptation Strategies, and Indicators of Socio-Psychological Adaptation

Scales	Adaptability to the study group	Adaptability to academic activities
Involvement	0.27*	0.07
Control	0.09	0.28*
Risk acceptance	0.11	0.00
Overall hardiness	0.15	0.29*
Active change of environment	-0.12	0.13
Active change of self	0.14	0.13
Leaving the environment and searching for a new one	-0.11	0.12
Avoiding contact with the environment and diving into the inner world	-0.27*	0.01
Passive self-representation	0.09	0.07
Passive submission to environmental conditions	0.08	0.31*
Passive expectation of change	0.14	0.05
Adaptiveness	0.27*	0.28*
Self-acceptance	-0.06	0.12
Acceptance of others	0.29*	0.14
Internality	0.10	0.09
Emotional comfort	0.11	0.33*
Desire for dominance	0.08	0.10
Escapism	-0.10	-0.14

Note: *r = 0.163 at $p \leq 0.01$.

The obtained correlations suggest that adaptation to the study group is directly related to gaining satisfaction from one's activities, personal significance in interpersonal relationships, skills to adapt to the conditions of interaction with others, searching for common goals and values that can be achieved in the process of interaction, tolerance for the weaknesses and shortcomings of other people, and criticality towards others. It is inversely correlated with the strategy of avoiding contact with the environment, which is reflected in a preference for the real world, not focusing on internal fears and anxieties, but actively interacting with the world.

Correlation analysis suggests that adaptation to academic activities is associated with students' desire to overcome unfavorable factors and embrace everything new, manage their own emotions and achieve their goals, see the relationship between their actions and consequences, but sometimes show passive agreement with external requirements, be flexible and submit to authority, that is, have good adaptation to the conditions of interaction with others and, most importantly, feel comfortable in the environment in which they are located and have a positive attitude.

We would like to note that both adaptation to academic activities and adaptation to the study group have a significant positive relationship with the "Adaptiveness" indicator, and since this indicator is responsible for good adaptation to the conditions of interaction with others in the system of interpersonal relations, it affects all aspects of adaptation to learning in times of war.

5. Conclusion

Based on the systematization and generalization of the results of the theoretical and empirical research on students' socio-psychological adaptation to learning in wartime conditions, it can be concluded that the success of adaptation depends on many components, such as: the motivational structure of the student's personality; self-esteem; adaptability, plasticity, and flexibility of the nervous system; intellectual and creative abilities; and a positive emotional background.

Socio-psychological adaptation of students to studying at university in wartime depends on the level of hardiness, as well as on the coping strategies used by students.

The empirical research conducted by the authors revealed both positive and negative trends that occur in the process of socio-psychological adaptation of students in wartime. The following should be considered as positive trends:

- A moderate desire to overcome unfavorable factors and gain new experience is dominant;
- Two active stress-coping strategies are pronounced, aimed at changing oneself and changing an uncomfortable environment;
- Students, having experienced difficulties in learning caused by the conditions of war, either actively change what does not suit them, or look for an alternative, directing their activity into their inner world (sports, creativity, etc.), or, without compromising their principles, demonstrate external conformist behavior;
- High rates of self-acceptance, positive self-assessments of personal qualities, and satisfaction with oneself prevail;
- Adaptability as a positive adaptation to the conditions of interaction with others in the system of interpersonal relations also prevails; internality also prevails as the ability to manage oneself and one's actions, the tendency to analyze one's experience, and a moderate desire to influence others, convince them of one's thoughts, and defend one's positions.

The intensification of interaction problems in the study group and with teachers should be considered a negative trend.

Adaptation to the study group is associated with obtaining satisfaction from one's activities, personal significance in interpersonal relations, with the skills to adapt to the conditions of interaction with others, the search for common goals and values that can be achieved in the process of interaction, tolerance for the weaknesses and shortcomings of other people, and criticality of others. It also lies in the preference for the real world, not being concentrated on internal fears and worries, but in actively interacting with the world.

Adaptation to learning activities is associated with the desire of students to overcome unfavorable factors and open up to everything new, manage their own emotions and achieve their goals, see the connection between their actions and the action, but sometimes show passive agreement with external requirements, be accommodating, and submit to authority, that is, to have good adaptability to the conditions of interaction with others, and most importantly, to feel comfortable in the environment in which they are located and have a positive attitude.

Based on the above conclusions, general recommendations can be formulated regarding the socio-psychological adaptation of students of Ukrainian universities to studying in wartime. These recommendations are primarily aimed at strengthening stress resistance, hardiness, awareness, and emotional relaxation.

Adaptation to a new group involves the formation of positive thinking, active involvement in joint activities with others, the development of communication skills, emotional stability and conflict resolution skills, mutual respect, management of anxiety and social fears, the search for social support, self-awareness, and self-development.

Adaptation to learning activities involves developing psychological strategies that can help facilitate and improve the effectiveness of learning, namely, developing time management and self-organization skills, forming realistic expectations of oneself and others, maintaining physical and mental health, having social support, managing stress and anxiety, finding resources for learning, flexibility, and hardiness.

General recommendations for improving students' adaptation to learning in wartime include:

- accepting one's own emotions;
- focusing on the present moments of life (living "here and now");
- maintaining social connections;
- preserving motivation and finding one's meaning;
- sufficient physical activity and a healthy lifestyle; paying attention to one's mental health, and seeking professional help from a psychologist or psychotherapist if necessary.

Further research perspectives may include expanded diagnostics of the psychological factors of maladjustment to learning in wartime, the development and testing of specific training programs aimed at: (1) developing/improving adaptation to the study group; (2) developing/improving adaptation to learning activities.

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