

CHAPTER «MILITARY SCIENCES»

THE PECULIARITIES OF COMBATING PTSD IN CADETS WHO ARE WAR VETERANS

Lesya Muzychko¹
Valeriy Liashenko²

DOI: <https://doi.org/10.30525/978-9934-588-53-2-36>

Abstract. The problem of post-traumatic stress disorder and the need for combating it became even more urgent due to the general exacerbation of the social crisis, which is especially obvious among servicemen who are exposed to numerous stress factors of both social and personal nature. The development of psychological tension is also facilitated by the specifics of military activities, the nature of which, in combination with personal qualities, determines the peculiarities of experiencing critical (traumatic) situations.

Traumatic experience does not fit into everyday algorithms of human behavior. We are talking about situations that took place in the war zone, where there was a threat (physical, psychological) to person's life and safety, basic human instincts were violated: the self-preservation instinct, the instinct for saving future generations. In these cases, the acceptance of the entire situation at once has a devastating effect on the psyche. This is how a symptom complex that is called post-traumatic stress disorder is formed.

Certain distant or recent traumatic feelings from combat experience make it difficult to train cadets of higher military educational institutions. The study of these problems has led to the need to provide psychological assistance to servicemen in overcoming the effects of PTSD.

¹ Candidate of Psychological Sciences (PhD), Senior Lecturer,
Department of Moral and Psychological Support,
Hetman Petro Hetman Petro Sahaidachnyi National Army Academy, Ukraine

² Candidate of Sciences in Public Administration, Lecturer,
Department of Moral and Psychological Support,
Hetman Petro Hetman Petro Sahaidachnyi National Army Academy, Ukraine

The phenomenon of social maladaptation of young people is interpreted by the scientists as a process associated with the fact that a person is switching from certain living conditions and, accordingly, is getting used to other living conditions (L. Berezhnova). The most universal manifestations of maladaptation include emotional disturbances, neurotic reactions and states.

When talking about social adaptation of young people, we must be aware that it is a complex process that includes functional, educational, and socio-psychological adaptation. Functional adaptation means adaptation of an individual to the fulfillment of duties associated with the functional purpose of educational activity. Educational adaptation means adaptation to the conditions of studying in educational institutions. As for socio-psychological adaptation, it is defined as the most optimal adaptation of the psyche to the conditions of the social environment through acquirement and acceptance of goals, values, norms, and styles of behavior that are normal in this environment.

Overcoming the consequences of PTSD in cadets participating in hostilities is an activity aimed at optimizing the relationship between the serviceman and the environment, which consists in assessing the situation and correcting on this basis both the veteran's behavior and the state of his/her professional and social environment.

Social adaptation of young people who have been on war is aimed at restoring norms, socially useful relations with members of the society (groups and individual members), positive changes in communication, behavior, and activities. Psychological adaptation presupposes acquirement of socially useful behavior standards and values, approximation of person's attitudes and orientation to the expectations of the social environment. The social and psychological aspects of adaptation are inseparable, even though sometimes they may not coincide.

1. Introduction

Social adaptation of young students who have participated in war is aimed at restoring norms, socially useful relations with members of the society (groups and individual members), positive changes in communication, behavior, and activities. Psychological adaptation presupposes acquirement of socially useful behavior standards and values, approximation of person's

attitudes and orientation to the expectations of the social environment. The social and psychological aspects of adaptation are inseparable, even though sometimes they may not coincide.

The consequences of post-traumatic disorder in cadets have their own peculiarities, when the inner world of a young person is transformed, hidden potential is realized, which helps to fully integrate into the processes of social adaptation as an active person. Social self-consciousness of an individual acts as a mechanism of social adaptation, during which own social identity and role are formed and understood. There are also the following mechanisms of social and psychological adaptation of an individual:

- cognitive, which includes all mental processes related to cognition: feeling, perception, visualization, memory, thinking, imagination, etc.;
- emotional, which includes different moral feelings and emotional states: anxiety, concern, sympathy, condemnation, discomposure;
- practical, behavioral, which suggests some directed activity of people in social practice (Nikitin, 2002, p. 67).

First of all, it should be emphasized that from a physical point of view, cadets participating in hostilities are absolutely healthy people who are highly motivated to continue to serve in the Armed Forces of Ukraine. Almost all of them have a completely realistic picture of their profession (including all stressful factors). During the first half a year of study, adaptive mechanisms are activated by the previous experience in adapting to extreme loads at war. However, the learning process places demands on them, which they have not coped with in the previous period and which require intellectual work related to mastering large amount of information, continuous concentration on one topic or block of topics, and remembering theoretical foundations of school subjects, etc. All of this, as well as other factors of everyday activities (such as communication with peers with no combat experience) create particular psychological difficulties.

There is no doubt about the need for modern reliance on the fundamental basis of classical developments in the announced issues.

The phenomenon of social maladaptation of young people is interpreted by the scientists as a process associated with the fact that a person is switching from certain living conditions and, accordingly, is getting used to other living conditions (L. Berezhnova). The most universal manifestations of maladaptation include emotional disturbances, neurotic reactions and states

(N. Zavadenko, A. Petrukhyn, N. Manhelys, T. Uspenska, N. Suvorina, T. Borysova); medico-biological, pathotemperamental and sociopathic dysfunctions, which complicate the process of social adaptation at any age (O. Zakharov, V. Arbuzova, et al.).

Social adaptation (from the Latin *Adapto* – to adapt, and *socium* – the society) is the process and the result of person's adaptation to the social environment by mastering socially acceptable behavior, fulfilling the requirements of the society, which are set in the relevant situations (Synov, 2007, p. 20). In the social and pedagogical sense, social adaptation is interpreted as the formation of the most adequate stereotypes of behavior under the conditions of the changing micro-social environment (Bezpalko, 2003, p. 60).

When talking about social adaptation of young people, we must be aware that it is a complex process that includes functional, educational, and socio-psychological adaptation. Functional adaptation means adaptation of an individual to the fulfillment of duties associated with the functional purpose of educational activity. Educational adaptation means adaptation to the conditions of studying in educational institutions. As for socio-psychological adaptation, it is defined as the most optimal adaptation of the psyche to the conditions of the social environment through acquirement and acceptance of goals, values, norms, and styles of behavior that are normal in this environment. Thus, a mismatch between the socio-psychological and psychophysiological status (or abilities) of young people and the requirements of life situations, which, in turn, prevents them from adapting in the conditions of the educational process, is defined as social maladaptation.

Social adaptation is an activity aimed at optimizing relations between people and the environment, which consists in the assessment of situation and correction of both person's behavior and the state of social environment that surrounds them (Synov, 2007, p. 9).

Personality development of people with post-traumatic stress disorders is a variant of normal development in “difficult conditions”, which are understood as a “suboptimal state of biological and / or social preconditions of personal development, which requires significantly increased efforts to solve development problems and therefore increases requirements to the individual” (D. Leontiev). In these conditions, the attitude of the individual to

the trauma, to him/herself and others is formed. Life's difficulties, which are perceived as a challenge posed by life itself (D. Leontiev, L. Alexandrova), can provoke the disclosure of the potential of the individual – his/her reserves and resources.

The basis of the positive course of overcoming the effects of PTSD in the cadet environment is the ability of a serviceman in the face of a traumatic situation to master and use available external and internal resources in order to realize and unleash their potential, as well as maintain internal harmony and integrity.

2. Problem statement and formulation of research tasks

The scientific and theoretical analysis of the problem of social and psychological adaptation of cadet youth – veterans of hostilities marked the need for empirical study of this problem.

Based on the general structure of post-traumatic stress disorder and taking into account its specifics, we believe that in the professional activities of servicemen it is formed by the following components: *intellectual* (features of the manifestation of stress disorders in educational activities); *emotional-volitional* (moral and volitional qualities of personality, the attitude to the presence of stress disorders and their dynamics), *behavioral* (ability to self-regulation, efficiency, adaptability, decision-making and ability to take responsibility for them), which allow servicemen to carry out professional activities in combat.

To study the *post-traumatic disorders of the intellectual and emotional-volitional sphere* of servicemen, we selected the psychodiagnostic tools that covered two blocks of methods. The first of them contained techniques that allowed us to identify the intellectual characteristics of servicemen, and the second one – techniques that studied the emotional-volitional development of servicemen.

The *first block* included Amthauer intelligence structure test aimed at determining the intellectual abilities of the individual.

The *second block* included the following methods – the Holmes and Rahe test method (stress disorder test), H. Eysenck self-assessment test of mental states, the method of diagnostics of neuroticism level by L. Wasserman, FPI questionnaire, the multilevel personality questionnaire “Adaptability” by A. Maklakov and S. Chernyanin (scales of adaptive abilities, neuropsychological stability, moral norms).

The study involved 123 people, aged 19 to 28, who had different general military experience and length of stay in the Joint Forces Operation area. These are cadets of the Hetman Petro Sahaidachnyi National Army Academy (Lviv, Ukraine), the servicemen who were directly involved in hostilities. These cadets have a traumatic experience of the influence of stress factors, which led to acquired disorders in the cognitive and emotional-volitional spheres.

The main tasks were as follows: to select and test the psychodiagnostic research methods of the study and identify the features of the components of the structure of post-traumatic stress disorder empirically; to substantiate the criteria and determine the levels of intellectual and emotional-volitional components of the post-traumatic stress disorder. Quantitative and qualitative results were obtained using four types of analysis: comparative, correlation, factor and cluster analysis.

Long-term observations, individual interviews and testing of cadets showed (despite the absence of the organic injuries) that the experienced stressful events were reflected in the abilities of analysis and synthesis, focusing, concentration and memorizing. The emotional-volitional component of post-traumatic disorders, which manifested itself in the increased anxiety, irritability, inadequate aggression, clearly correlated with the intellectual disorders.

In accordance with the tasks set, the criteria of post-traumatic stress disorder in military cadets were singled out. The criteria for the formation of the intellectual component of post-traumatic stress disorder are: sentence completion (completion of the sentence which was started), inductive verbal thinking, propensity to analogy, the ability to generalize, criticism, standard indicators of memory, the ability to solve mathematical problems correctly. The criteria for the formation of the emotional-volitional component of post-traumatic stress disorder are: the presence of stress disorder, anxiety, frustration, aggression, rigidity, neuroticism, persistence, self-control, risk-taking, depression, irritability, sociability, balance, reactive aggression, shyness, frankness, extraversion, emotional lability, masculinity, personality-adaptive potential, neuropsychological stability, communication skills, moral normativity.

According to the generalized results of the experiment and on the basis of the criteria substantiated during the theoretical analysis, such levels of post-traumatic stress disorder as high, medium, low were determined.

Table 1

Quantitative indicators of development of components of post-traumatic stress disorder of servicemen (in %)

Servicemen		
Levels	Intellectual component	Emotional-volitional component
I high	35.5	26.1
II medium	45.1	33.2
III low	19.4	40.7

According to Table 1, the emotional-volitional component is the most pronounced one (40.7% – low level), which is the result of high-quality training, and the intellectual component is the least pronounced one (35.5% is attributed to the high level). This situation is due primarily to the lack of experience of the extreme stress, insufficient, and not yet formed professional approach to ensuring the moral and psychological stability of fighters in open confrontation, the absence or lateness of psychological assistance in combat. In general, the results show that all components of post-traumatic stress disorder require intervention, which indicates the need for in-depth socio-psychological support and psycho-correction of servicemen to overcome post-traumatic stress disorder.

3. Selection of methods for overcoming the consequences of PTSD among cadets

The obtained data on the development of post-traumatic disorder in servicemen led to the search for ways, means and conditions for their purposeful overcoming.

The central direction of corrective influences on the psyche of cadets is the emotional-volitional component as a tool, through the strengthening of which we can influence the normalization and effectiveness of the intellectual component.

65 servicemen, cadets of the Department of Moral and Psychological Support of the Hetman Petro Sahaidachnyi National Army Academy (32 – EG and 33 – CG) took part in the experiment to overcome the consequences of PTSD. We have developed a program of step-by-step overcoming of the consequences of post-traumatic stress disorders in the

servicemen of the experimental group by training them for six months. There were 27 classes with a total of 72 hours.

The methodological basis for the creation of this program was formed by the works of G. Ball (1990, p. 98–99), S. Maksimenko (p. 19–20), V. Synov (2007, p. 98–99) and others on the development of personality, personality-oriented approach, the main principles of which are: taking into account the individual characteristics of each serviceman; providing conditions for the development and self-development of the individual; providing servicemen with the opportunity to realize themselves in various activities, based on their interests, values and subjective experience taken into account during the development and implementation of a model for overcoming post-traumatic disorders in servicemen.

The content of the model is aimed at creating psychological and pedagogical conditions for overcoming post-traumatic disorders in servicemen and at solving specific problems that arise in the intellectual and emotional-volitional sphere of servicemen in the process of such development.

To implement the theoretical model for overcoming post-traumatic disorders in servicemen, the following principles are defined: 1) integrity (implementation of all stages of the system of means and to all participants); 2) consistency and continuity (effectiveness of overcoming post-traumatic disorders depends on the implementation of its previous stages); 3) taking into account the features of the social environment (reliance on the knowledge and socio-economic living conditions of the individual).

As a strategic vector, we have chosen the direction proposed by V. Synov (2007) to take into account individual characteristics and the need for systematic influence of the correctional process on the formation of semantic, activity and personal components of intelligence as a tool for balancing man and environment.

The theoretical model for overcoming post-traumatic stress disorder among servicemen has the following stages: preparatory, main, final. The preparatory stage includes acquaintance of servicemen with the basic principles and methods of training; formation of a positive attitude to classes; identification of the essence of the consequences of post-traumatic stress disorder. The main stage includes the formation of servicemen's confidence in the successful implementation of professional activities,

which harmonizes the semantic perspective, helps to think positively, to find solutions; expectation and construction of the desired result (intellectual component); the development of the servicemen's desire for self-improvement, integrity, goal-seeking in professional activity (emotional-volitional component). The final stage includes a summary of the experience gained by servicemen during the training.

The developmental work is focused on the intellectual, emotional-volitional spheres of servicemen. Overcoming post-traumatic stress disorder in servicemen can be done in both group and individual forms. The choice of a particular form depends on the nature of the problem and the preferences of the serviceman. One of the types of group work with servicemen is training. It is a form of active learning that allows a person to develop skills and abilities to build productive social interpersonal relationships, to learn and carry out other activities productively, to analyze the emerging situations from their own point of view as well as from the position of a partner, to develop the ability to perceive and understand themselves and others in communication and activities.

Trainings as forms of practical psychological work always reflect with their content a certain paradigm of directions, views of conducting training sessions. There are several of such paradigms:

- training as a kind of planishing, in which rigid manipulative techniques with the help of the positive reinforcement form the desired pattern of behavior, and with the help of the negative reinforcement the harmful, unnecessary patterns according to the presenter, are “erased”;
- training as training, as a result of which there is the formation and development of skills and abilities of effective behavior;
- training as a form of active learning, the purpose of which is, first of all, the transfer of psychological knowledge, as well as the development of certain skills and abilities;
- training as a method of creating conditions for self-disclosure of participants and their independent search for ways to solve their own psychological problems.

Training is primarily learning that is based on human experience, and it also assumes that the people present at the training, in addition to receiving new information, have the opportunity to immediately use it in practice, developing new skills. The results of practical research show

that psychological training (in particular, self-realization training) changes the worldview of its participants during communication: a person begins to realize the possibility of arbitrary mastery of his/her own behavior and reactions using other people's experience as indirect tools.

The training process within any theoretical paradigm has three key stages:

- withdrawal of the non-constructive elements and patterns of behavior from the internal plan to the external;
- construction of models of ideal behavior in the external plan;
- modification of the behavior of the participants of the training group towards the maximum approach to the standard and its consolidation in the internal plan (Kuzikova, 2012, p. 216).

In psychological trainings, the goals and tasks keep mainly within the limits of development of the abilities and skills defined by their content that explains the emergence of changes in participants directly in the course of training.

The training allows the participants to realize the views previously formed and solve personal problems, in the process of work there is a change of internal attitudes, the participants replenish their psychological knowledge and gain experience of a positive attitude towards themselves and others. The psychological training as a structured mediating action lays down the mechanism of purposeful self-improvement. In their feedback, participants call it “a stimulus, a motivation to the self-development.”

As a result of a series of trainings, the cadets should know: the features and patterns of overcoming post-traumatic stress disorder; the methods of overcoming post-traumatic disorders of intellectual and emotional-volitional development. The servicemen should also be able to: monitor their own psychoemotional state and take measures to reduce the consequences of severe emotional states.

After undergoing psychological training, the servicemen must:

- develop the ability to analyze life situations;
- reach a compromise in conflict situations;
- be aware of their own advantages and disadvantages in communication;
- learn to identify other people's emotions, show empathy in relationships.

We took some training exercises from the experience of practical psychologists: A. Kozlov (2009), I. Stishonok (2006). But the main

methodological basis was the training manual of the authoring team of the Department of Moral and Psychological Support of the Troops (Hrytsevyeh, Kapinus, Matsevko, Muzychko, 2019) “Training technologies in training and education of servicemen.”

The specific psychological and pedagogical conditions for overcoming post-traumatic stress disorder in our program include:

1) strengthening the integration of self-assessment, which contributes to the expectation of success in various spheres of life;

2) development of emotional stability, stress resistance, which influences the success of professional activities;

3) strengthening positive expectations from the results of the activities;

4) actualization of the ability to be independent and self-regulate one’s own actions, which determines the confidence and persistence in achieving the goal;

5) strengthening the motivation to acquire new knowledge, skills and abilities, which influences the success of professional activity.

The training cycles were divided into three modules, with a total duration of 72 hours. During the training, the servicemen got acquainted with the therapeutic methods of overcoming post-traumatic stress disorders (brainstorming, supportive communication, art-therapeutic techniques), underwent a series of psychological trainings aimed at the development of intellectual, emotional-volitional spheres.

The program was implemented during three stages: preparatory (3 lessons), main (21 lessons) and final (3 lessons). Each of the established stages provided for the implementation of specific tasks, namely:

1) *the preparatory stage*: to acquaint servicemen with the basic principles and methods of training; to form a positive attitude to classes; determine the essence of the post-traumatic stress disorder;

2) *the main stage*: to form in servicemen confidence in successful performance of professional activity, which clears the semantic perspective, helps to think positively, to find ways of solution; expectation and construction of the desired result (intellectual component); to promote the growth of their own effectiveness by developing confidence in their own abilities with the expectation of success, awareness and integration of positive and negative assessments of the successfulness of their actions, learning techniques for regulating their own behavior (emotional-volitional);

3) *the final stage*: to summarize the experience gained by the servicemen in the process of training.

The program used mini-lectures, conversations, discussions, psychogymnastic exercises, modeling, psychotherapeutic techniques: elements of art therapy, psycho-drawing, etc. The content of the classes was aimed both at the development of each individual component of post-traumatic stress disorder in the servicemen, and comprehensively – at all components of post-traumatic stress disorder. The use of both individual and group forms of work was envisaged and the following forms and methods were planned: conversations – “My perception of a psycho-traumatic situation”, “Own reflections on post-traumatic stress disorder”, “I will be able to overcome post-traumatic stress disorder”; lectures on the topic: “Ways to overcome post-traumatic disorders in servicemen”, “Values and qualities of personality”, “Development of creative thinking”; intellectual trainings on the topics: “Achieving success in the professional activities of servicemen”, “Formation of emotional competence of servicemen”, “Management of aggression”; discussions on the topic: “My behavior and actions when there is a post-traumatic stress disorder”, “Strategies for overcoming negative emotional states”; projective models, in which there is a feeling of fear, anxiety, aggression, frustration, were used to elaborate corrective and psychotherapeutic actions (calm, persuade, support, find internal resources in overcoming post-traumatic stress disorder in servicemen).

Our model of overcoming post-traumatic disorders in servicemen is presented in Figure 1.

The very environment of a higher military educational institution has a strong psychological and corrective effect. After all, the curriculum in all areas and specialties here includes a number of disciplines of the psychological block, moral and psychological support. This, in turn, serves as a powerful educational source, from which to draw knowledge about the causes, mechanisms of action of the main stressors that cause PTSD. The methods of psychodiagnostic procedures used for our cadets serve for additional self-disclosure and self-understanding. There is also an understanding of the ways, in which those deficient aspects that complicate the learning process and daily activities are worked out.

An important factor in resource recovery is the training of various kinds of self-regulatory practices and techniques. This includes self-training,

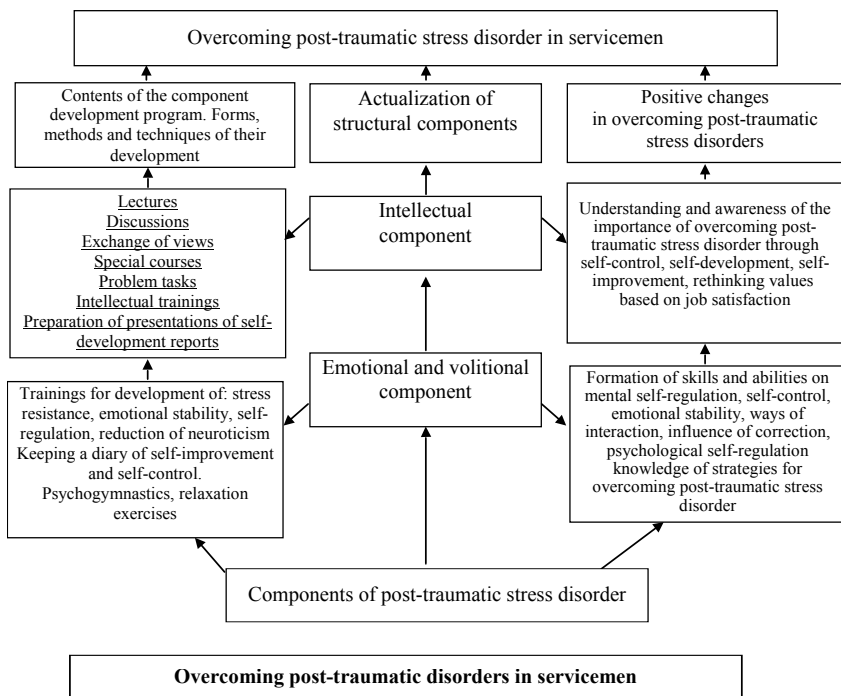


Figure 1. Theoretical model of overcoming post-traumatic disorders in servicemen

progressive muscle relaxation, breathing practices, and visualization of positive images. All this is taught to future officers within the walls of higher military educational institutions.

4. The results of the control experiment

According to the results of our program, a control experiment was conducted according to the same methods as at the ascertaining stage of the study. Quantitative indicators of the structural components of post-traumatic stress disorder in servicemen before and after testing the authors' program are presented in Table 2.

The results of the final stage of the experimental study were processed using Student's t-test.

Table 2

**Dynamics of development of indicators of the intellectual component
in the participants of experimental and control groups before
and after the formative experiment**

Indicator of intellectual component		Before the formative experiment						After the formative experiment						t-test
		L				H		L		M		H		
		N	%	N	%	N	%	N	%	N	%	N	%	
Finding numerical patterns	EG	13	37	12	38	7	25	7	24	16	43	9	33	2.371
	CG	10	27	13	45	9	28	10	32	14	38	8	30	
		2.873											3.457	
Generalization	EG	10	35	13	39	9	26	8	26	15	44	9	30	2.482
	CG	17	58	9	24	6	18	11	32	13	41	8	27	
		1.113 2.247												
Memory capacity	EG	14	31	10	47	8	22	8	13	14	52	10	35	2.172
	CG	16	37	9	51	7	12	5	20	15	55	12	25	
		2.459											3.528	

* – $p < 0.05$

According to the data of Table 2, the servicemen of the experimental group in the state of the *intellectual component* statistically raised the levels of indicators significantly, such as: finding numerical patterns ($t = 2.371$, where $p \leq 0.05$), generalization ($t = 2.482$, where $p \leq 0.05$) and there was a tendency to increase the level of memory capacity ($t = 2.172$, where $p \leq 0.05$). The servicemen increased the rate of finding numerical patterns, generalization and memory capacity, which has improved the efficiency of mental operations and mental actions.

Also the study statistically revealed in the representatives of the experimental group a decrease in the levels of such components of the *emotional-volitional component* as: neuroticism ($t = 2.386$, where $p \leq 0.05$), increased adaptability ($t = 2.477$, where $p \leq 0.05$), self-control ($t = 2.623$, where $p \leq 0.05$). The rate of adaptability and self-control of servicemen has increased, which influences the level of stress resistance and adaptation to the professional environment.

The participants of the experimental group also statistically confirmed an increase in adaptability (from 32% to 34%), self-control (from 23% to 31%) and a decrease in neuroticism (from 44% to 23%). The data are statistically significant.

Table 3

Dynamics of development of the indicators of emotional-volitional component in the participants of experimental and control groups before and after the formative experiment

Indicator of the emotional-volitional component		Before the formative experiment						After the formative experiment						t-test
		L		M		H		L		M		H		
		N	%	N	%	N	%	N	%	N	%	N	%	
Neurotization	EG	6	24	8	32	18	44	25	48	7	29	4	323	2.383
	CG	12	35	15	37	5	28	20	31	19	30	14	315	
		3.467						4.235						
Adaptability	EG	8	19	16	49	8	32	3	16	19	50	10	34	2.477
	CG	7	26	20	44	5	30	5	19	18	47	9	34	
		4.274						5.312						
Self-control	EG	10	29	16	48	6	23	4	12	19	57	9	31	2.623
	CG	9	33	15	45	8	22	6	22	20	49	6	29	
		5.373						5.639						

* – p<0.05

In contrast, the participants of the control group also statistically confirmed an increase in adaptability (from 30% to 34%), self-control (from 22% to 29%) and a decrease in neuroticism (from 28% to 24%), but the data obtained are not statistically significant.

The development of these qualities will allow the servicemen to be more adequate to their own capabilities, adapt to the new situation better, perform the work more efficiently, as well as show the acquired knowledge and willpower in the implementation of their own plans.

Thus, identifying the levels of components of overcoming post-traumatic stress disorder in servicemen allows us to conclude that the servicemen who have been involved in a program to overcome post-traumatic intellectual and emotional-volitional disorders have a higher level of its development than those who have not participated in such classes.

The servicemen of the experimental group have become more adapted, balanced, stress-resistant, able to make independent decisions and take responsibility for their own actions. They are more objective about themselves and their capabilities, aimed at overcoming post-traumatic stress disorders successfully.

In turn, the activation of the mechanisms underlying the overcoming of post-traumatic stress disorder has been carried out by organizing targeted psychological and pedagogical impact, and provided qualitative and quantitative changes in the components of psychological mechanisms that overcome post-traumatic stress disorder in servicemen, namely, finding numerical patterns, generalization, memory capacity) (*intellectual factor*), neuroticism, adaptability, self-control (*emotional-volitional factor*). The dynamics of the indicators of the mechanism of the intellectual component are presented in table 4.

Table 4

Dynamics of indicators of the mechanism of the intellectual component in the participants of the experimental and control groups before and after the experiment

Indicator		Before the formative experiment						After the formative experiment						t-test
		L		M		H		L		M		H		
		N	%	N	%	N	%	N	%	N	%	N	%	
Finding numerical patterns	EG	8	25	15	47	9	28	4	12	17	55	11	33	2.573
	CG	10	31	12	51	10	18	6	22	12	53	14	25	
		2.374						3.275						
Generalization	EG	8	18	19	50	5	32	4	9	20	54	8	37	1.329
	CG	6	24	22	52	4	24	3	17	19	53	10	30	
		3.426						4.627						
Memory capacity	EG	11	23	14	45	7	32	4	8	19	54	9	38	2.556
	CG	13	30	16	42	3	28	9	23	17	47	6	30	
		4.392						5.043						

* – p<0.05

The dynamics of the indicators of the emotional-volitional component are presented in Table 5.

The study gives grounds to assert that all the techniques and means of psychological and pedagogical influence have been adequate to the purpose and main tasks. However, it does not claim to be an exhaustive statement of all aspects of the stated problem. The subject of further research should be the identification of individual and gender characteristics of overcoming post-traumatic stress disorders, the study of the affect of post-traumatic stress disorders on other areas of human life.

Table 5

Dynamics of the indicators of the mechanism of emotional-volitional component in the participants of experimental and control groups before and after the experiment

Indicator		Before the formative experiment						After the formative experiment						t-test
		L		M		H		L		M		H		
		N	%	N	%	N	%	N	%	N	%	N	%	
Neuroticism	EG	10	23	16	42	6	35	9	38	20	46	3	16	2.725
	CG	10	32	18	40	4	28	6	24	14	44	12	32	
		2.567											3.652	
Adaptability	EG	8	22	13	41	11	37	6	13	16	48	10	39	2.312
	CG	11	28	14	36	7	36	7	24	18	44	7	32	
		3.265											4.387	
Self-control	EG	9	19	11	48	12	33	5	16	14	49	13	35	2.623
	CG	15	33	13	42	4	25	6	19	14	46	12	35	
		3.423											4.235	

* – p<0,05

5. Conclusion

All methods that are effectively used in the process of overcoming the consequences of PTSD in the cadet environment can be divided into four categories: 1. The first category is for educational methods. They include the discussion of books and articles, acquaintance with the basic concepts of physiology and psychology. For example, only a simple acquaintance with the clinical symptoms of PTSD helps cadets to realize that their experiences and difficulties are not unique, but are “normal” in the current situation. 2. The second group of methods is in the field of holistic attitude to health. A healthy lifestyle with adequate physical activity, proper nutrition, abstinence from alcohol and drug use provides the basis for a quick and effective recovery from traumatic events. 3. The third category includes methods that increase social support and social integration. Individual and group psychotherapy, the development of a self-help network, formation and support of public organizations are necessary for social rehabilitation. 4. The fourth category is actually therapy. It includes work with grief, fears, psychosomatics, traumatic memories and aims to “recycle” the problem.

In general, a strict agenda, regime, and physical activity have a positive effect on combating the consequences of PTSD. Since the cadets are in stereotyped conditions and time frames, this results in the fact that their excessive anxiety and tension are reduced, and sleep disorders become more regulated. Holistic healing at the level of the physical body and predictability of the temporal continuum lead, in turn, to a qualitative improvement of the moral and psychological state of servicemen, improve mood, and stimulate effective mental activity.

The positive impact of individual approach of teachers to every cadet in their phenomenological situation on the processes of re-adaptation of combatants should be specifically noted. Every combatant can receive professional advice from a psychologist at any time, and, if necessary, they can attend a series of therapy sessions. The atmosphere of understanding and support at the Hetman Petro Sahaidachnyi National Army Academy is the strongest guarantee of our students' recovery and their return to military activities. After all, in the military environment there is no feeling of isolation and lack of understanding of the specifics of war experience, but there is a sense of belonging to like-minded men and brothers in arms.

Cadets who are war veterans receive all the opportunities for self-realization, in particular, in their profession, which significantly improves self-esteem. There is an acute need for analysis, generalization, and transfer of information about events they experienced (as opposed to the civilian environment) to cadets without war experience.

The exchange of vital information helps to reduce the degree of uniqueness and unbearableness of own psychological traumas. There is an understanding of collective army experience, which, through further appliance in the combat zone, improves their military efficiency and stress resistance.

Thus, under the influence of all of the aforementioned factors, occurrence of residual post-traumatic manifestations in cadets of the Hetman Petro Sahaidachnyi National Army Academy is minimized. Processes of returning to peaceful military service receive a sound theoretical and practical basis. Our students rethink many worldview values, the basis of which is awareness of the social significance of their role in the defense of territorial and national integrity of their homeland. "Thanks to the war, I became stronger," "now I know exactly what fraternity is" – these and similar phrases are a significant ground for melting military experience into a launching pad for further prospects in professional and personal life.

References:

1. Ananyev, B. (1968). *Chelovek kak predmet poznaniya* [Man as a subject of knowledge]. Izdatel'stvo LGU.
2. Ball, G. (1990). *Normy deyatelnosti i tvorcheskaya aktivnost' lichnosti* [Norms of activity and creative capacity of a person]. *Voprosy psikhologii*, 6, 92–101.
3. Bezpalko, O. (2003). *Sotsial'na pedahohika v skhemakh i tablytsyakh* [Social pedagogy in diagrams and tables]. Tsentr navchalnoyi literatury.
4. Hrytsevykh, T., Kapinus, O., Matsevko, T., ... Muzychko, L. (2019). *Treninhovi tekhnolohiyi u navchanni ta vykhovanni viyskovo-sluzhbovtziv* [Training technologies in training and education of servicemen]. Hetman Petro Sahaidachnyi National Army Academy.
5. Kozlov, A. (2009). *Kak povysit samoootsenku: sposobi vospitaniya zdorovogo egoizma* [How to increase the self-esteem: ways to educate healthy selfishness]. Rech.
6. Kuzikova, S. (2012). *Psyhologichni osnovy stanovlennya subyekta samorozvytku v yunatskomu vitsi* [Psychological bases of formation of the subject of self-development in youth]. Sumy State Pedagogical University named after A.S. Makarenko: MakDen.
7. Maklakov, A., Chermynanin, S., & Shustov, E. (1998). *Problemy prohnozu-vannya psyhologichnykh naslidkiv lokalnykh viyskovykh konfliktiv* [Problems of forecasting the psychological consequences of local military conflicts]. *Psyhologicheskyy zhurnal*, 19(2), 15–27.
8. Nikitin, V. (ed.). (2002). *Sotsialnaya pedagogika* [Social pedagogy]. VLADOS.
9. Stishonok, I. (2006). *Trening uverennosti v sebe: razvitiye i realizatsiya novykh vozmozhnostey* [Confidence training: development and implementation of new opportunities]. Rech.
10. Synov, V. (2007). *Korektsiyna psyhopedahohika. Olihofrenopedahohika* [Correctional psychopedagogy. Oligophrenic pedagogy]. In *Zahal'ni osnovy korektsiynoyi psyhopedahohiky (olihofreno-pedahohiky)*. Ch. 1 [General principles of correctional psychopedagogy (oligophrenic pedagogy). Part 1]. National Pedagogical Dragomanov University.