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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ
ТБИЛИСИ - НЬЮ-ЙОРК

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3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

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3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).

4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).

5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრაფიების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შედეგების ან იმპრეგნაციის მეთოდი და აღნიშნოთ სურათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფხიხლებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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CLASSIFICATION OF COPING STRATEGIES INFLUENCING MENTAL HEALTH OF MILITARY PERSONNEL HAVING DIFFERENT COMBAT EXPERIENCE

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Over the course of their work the specialists of extreme professions whose members are the National Guard of Ukraine (NGU) military, have to carry out tasks under constant risk to health and life [2,8]. Activities in such conditions may exceed the psychological resources of an individual, resulting in stress. As a result, the performance of military personnel is reduced, the professional life is shortened, and the possibility of developing mental and somatic disorders increases, which negatively affects the effectiveness of their activity and, in general, the combat capability of the unit [3,13].

Determining the relationship between human mental health and coping use (behaviors in difficult situations) began with the development by R. Lazarus of a psychological stress model [11]. The author has shown that coping is one of the central chains of the stabilizing factor, which can help an individual to support psychosocial adaptation when the stress is being developed. Further studies of the transactional model of stress, where stress and emotions experienced by a person, are the result of the interaction of environmental and human processes, allowed R. Lazarus and S. Folkman to introduce the concept of “coping strategies” [12]. Coping is intimately related to the concept of cognitive appraisal and, hence, to the stress relevant person-environment transactions. Most approaches in coping research follow R. Lazarus and S. Folkman, who define coping as «the cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts among them» [12].

This definition contains the following implications [9]. Coping actions are not classified according to their effects (e.g., as reality-distorting), but according to certain characteristics of the coping process. This process encompasses behavioral as well as cognitive reactions in the individual. In most cases, coping consists of different single acts and is organized sequentially, forming a coping episode. In this sense, coping is often characterized by the simultaneous occurrence of different action sequences and, hence, an interconnection of coping episodes. Coping actions can be distinguished by their focus on different elements of a stressful encounter [12]. They can attempt to change the person-environment realities behind negative emotions or stress (problem-focused coping). They can also relate to internal elements and try to reduce a negative emotional state, or change the appraisal of the demanding situation (emotion-focused coping).

In subsequent studies, R. Lazarus has determined that the reaction and the impact on the personality of daily difficulties are even better predicted than reactions to major life events [10]. Stress is not defined as a specific kind of external stimulation nor a specific pattern of physiological, behavioral, or subjective reactions. Instead, stress is considered as a relationship («transaction») between individuals and their environment.

The term “coping”, as a rule, refers to adaptive or constructive strategies that can reduce stress and resolve the situation. However, some coping strategies are maladaptive, leading to further deterioration of physical and mental health. For example, strategies such as taking alcohol, drugs, self-harming reactions (hair removal, nail biting) can temporarily relieve stress, but in the long run, it will lead to increased levels of depression, anxiety, and deterioration of physical and mental health [4]. First of all,

when it comes to somatic symptoms, it refers to the depletion, reduction of the body’s resistance to infectious agents, deterioration of concentration and coordination of movements, which in tactical conditions can lead to the inability to perform a combat task. The most productive coping strategies include proactive coping, strategies for active problem solving, activity planning, social support for others, coping that focuses on finding meaning and humor strategies. Productive strategies include copings aimed at improving one’s physical well-being (addressing the restoration of a full diet, sleep, relaxation, physical activity, relaxation), due to the fact that a healthy body copes better with a stress [4].

According to modern views, coping behaviors are seen as a result of the interaction of coping strategies to overcome stress, which arise as a response of the individual to the perceived threat. They are the means of managing the acting stress factor and coping resources relative to the stable characteristics of a person, which contribute to the development of ways to overcome stress. The theory of coping behavior distinguishes the basic coping strategies, dividing them into active and passive [6]. Active include “problem solving” strategy, which provides all options for human behavior aimed at solving a problem or stressful situation and a “seeking social support” strategy, which includes a behavior aimed at receiving social support from the environment. Passive coping behaviors include behaviors that contain a basic avoidance coping strategy.

Thus, the coping behavior of a military service member is, on the one hand, a wide range of various stress management strategies that a person can use depending on external circumstances, conditions of activity and individual goals. On the other hand, it is an individual stable personal structure, which includes a set of certain variants (methods) of behavior and response in stressful situations that correspond to the individual and personality characteristics as well as to the emotional and dynamic properties of a person. The more active and diversified the choice, the more successful the psychological adaptation of an individual. Therefore, determining the types and factor structure of coping strategies in military personnel having different combat experience to respond adequately to extreme (combat) conditions is important to maintain mental and physical health.

Material and methods. The research was conducted in 2018 based on Scientific Research Centre of Service and Combat Activities of NGU of National Academy of NGU. All procedures performed in studies involving human participants were in accordance with the ethical standards of the National Scientific Centre for Medical and Biotechnical Research (NSCMBR) of National Academy of Science of Ukraine, which is based on the 1964 Helsinki declaration and its later amendments. The permission for research received in the Research Committee of virtue and ethics National Academy of National Guard of Ukraine (protocol № 1 dated 03/01/2018). Informed consent was sought from all the participants. All participants have given consent for their data to be used in this research.

The survey involved 437 NGU military personnel. The sample includes combatants in eastern Ukraine and those with no such experience (51.49% and 48.51%, respectively). Respondents had an even ratio of officers, sergeants, and sol-

diers. The study presented military personnel from all regions of the country who served in military units in five (Southern, North, East, West and Central) NGU Operational Commands.

The NGU military personnel survey for assessing coping strategies was conducted using the COPE Inventory methodology [7]. The study used the Russian version entitled “COPE Methodology”, which was adapted, validated and standardized by E.I. Rasskazova, T.O. Gordeyeva, E.N. Osin [4]. The methodology is designed to measure both situational coping strategies and dispositional styles based on them. Unlike many other methodologies of evaluating coping strategies based on factor analysis data (statistical approach), the authors of the original COPE Inventory methodology, developing it, relied on two concepts: R. Lazarus and on the model of self-regulation behavior proposed by M.F. Scheier, C.S. Carver. The authors believed that R. Lazarus’s distinction between focusing on the problem and focusing on emotions ways of mastering oneself was too simplistic [14]. In this regard, scientists have called not to offer universal groups of coping strategies of the second level, and if necessary, to identify the secondary factor structure corresponding to the data obtained, depending on the characteristics of the sample and the diagnostic situation.

The original version of the COPE Inventory methodology and its Russian-language version consists of 60 statements, aggregated in 15 scales, each containing four statements. The reliability of the original version of the method (Cronbach’s alpha) exceeds 0.70 and varies from 0.92 (“Appeal to Religion”) to 0.62 (“Proactive Coping”), and the only low score (0.45) shows the scale of “Virtual Escape from a Problem”. The reliability indicators of the Russian-language version methodology (Cronbach’s alpha) also exceeds 0.70 and range from 0.92 (“Appeal to Religion”) to 0.58 (“Restraint”) to the lowest rate (0.40) by the scale of “a Virtual Escape from a Problem”.

The study used cluster and factor analysis to determine the types and secondary factor structure of coping strategies to overcome the stress by military personnel having different combat experiences. Mathematical data processing was carried out using SPSS 17.0.

The purpose of the study is to determine the types and secondary factor structure of the coping strategies in the NGU military having different combat experience.

Results and discussion. The first objective of the study was to identify the types of stress overcoming in NGU military and taking into account the possible impact of participation in hostilities to determine these types. The cluster analysis procedure allowed the identification of four types of military service members who differed in ways to overcome stress. Indicators for individual coping strategies of these types are given in Table 1.

We should note that in all selected types the combatants and those who had no experience of participation in the war are evenly represented. Thus, in the first group this ratio is 52.46% by 47.54%, respectively, in the second - 51.66% by 48.34%, in the third and fourth - both categories are equal (50/50%). At a statistically significant level, the selected types differ in almost all indicators of coping strategies, as shown in Table 2.

The adequacy of the second sample of military personnel differing in ways to overcome stress allowed to carry out a factor analysis (with further simplification) and determine the secondary factor structure of coping strategies in the most common type of engagement of coping strategies among NGU military (Table 3).

Analyzing the indicators of coping strategies in the first selected type, we may note that all the coping strategies of representatives of this type have equal average indicators with a slight increase in “Positive Reformulation and Personal Growth” - 8.03 ± 2.11 , “Active Overcoming” - 8.05 ± 2.15 and “Planning” 8.69 ± 2.44 and the decrease in the “Using Sedatives” - 6.92 ± 2.24 , reflecting their ability to target self-regulation. In general, representatives of the first type are characterized by an impartial, utilitarian attitude towards copings as such that can equally be used to remedy the situation if such a need arises. The leading copings in this homogeneous structure allow suggesting that representatives of the first type are confident in their ability to predict developments, overcome all obstacles to achieving their goals, or, if necessary, revise (change to a more appropriate situation) a plan to achieve them. This attitude to life reduces the

Table 1. Coping-strategies indicators of NSU military personnel using different types of coping strategies (in standard units)

Coping strategy	Types of coping behavior			
	1	2	3	4
Positive Reformulation and Personal Growth	8,03±2,11	12,36±2,52	15,75±0,71	14,20±0,84
Virtual Avoidance of a Problem	7,18±2,00	8,18±2,52	6,75±1,04	13,60±1,52
Concentration on Emotions and Active Expression of Them	7,28±1,86	8,55±2,41	6,75±2,05	11,20±1,79
Using Instrumental Social Support	7,39±1,89	10,72±2,19	10,63±3,58	14,80±1,30
Active Overcoming	8,05±2,15	12,41±2,41	15,00±1,31	14,20±1,64
Denial	7,20±2,04	8,44±2,31	5,50±2,78	12,60±2,19
Appeal to Religion	7,44±2,09	8,26±3,06	6,50±4,28	11,80±2,28
Humor	7,43±2,02	10,94±2,13	13,50±3,21	14,20±1,30
Behavioral Avoidance of a Problem	7,08±1,86	8,14±2,50	4,63±1,19	11,60±3,05
Restraint	7,74±1,93	10,45±2,08	10,25±3,33	14,20±1,30
Using Emotional Social Support	7,28±2,03	9,81±2,07	5,00±1,85	12,80±1,64
Using Sedatives	6,92±2,24	6,27±3,06	4,25±0,71	8,40±4,39
Adoption	7,70±2,10	10,39±2,40	14,63±1,41	13,40±2,07
Suppression of Competing Activity	7,92±1,76	11,77±2,32	14,75±1,28	14,80±1,30
Planning	8,69±2,44	12,52±2,36	14,50±2,07	14,80±0,84

likelihood of frustration, stress, and somatic disorders. This type includes almost 14% of the military personnel who participated in the study. Conditionally it was marked as “pragmatic”.

Opposite to the first is the fourth type, whose representatives have a higher value of all coping strategies. The highest indicators are the coping strategies “Using instrumental social support” - 14.80±1.30), “Suppression of Competing Activities” - 14.80±1.30, and “Planning” - 14.80±0.84, which testify to the involvement of copings in order to create an advantage of the resources available to a military over the requirements of the situation. The next block of coping strategies of representatives of the fourth type indicates the desire to maintain optimism, the belief in the fact that overcoming the stress situation is possible thanks to the coping strategies “Humor” - 14.20±1.30, “Positive Reformulation and Personal Growth” - 14.20±0.84) and “Active Overcoming” - 14.20±1.30. It should be noted that an increase in the indexes for all copings could be evidence of a significant adaptive capacity stress and a careful attitude towards the situations of representatives of this type who themselves «find» stressful situations and involve others in them. It is the least numerical type which includes only a little more than 1% of the

military personnel who participated in the survey. Conditionally it was marked as «adventurous».

Representatives of the second and third types have a pronounced differentiation of coping strategies, which reflects the peculiarities of the adaptation of these types of military to stressors. We point that the structure of the second type of coping strategies can be marked as differentiated, and the third type, to which only 2% of participants of the survey belongs, as fundamental. A peculiarity of the third type is the positive accentuation of coping “Positive Reformulation and Personal Growth” 15.75±0.71 and the negative one, together with the coping “Using Sedatives” - 4.25±0.71 coping “Behavioral Avoidance of a Problem” - 4.63±1.19. It allows describing the behavior of a military service member in difficult life situations, as a principled one, based on his own moral principles. This type was appropriately designated as “principled”.

The second type of coping behavior is the most widespread - it included 83% of the surveyed NGU military personnel. Therefore, we can talk about it as a typical one for the NGU military. It is characterized by a significant expression of the same copings, as in the first type, but with significantly more indicators: “Posi-

Table 2. Significance of discrepancies between types of coping strategies among NGU military personnel (in standard units)

Coping strategy	Significance of discrepancies					
	t ₁₋₂	t ₁₋₃	t ₁₋₄	t ₂₋₃	t ₂₋₄	t ₃₋₄
Positive Reformulation and Personal Growth	14.39**	20.99**	13.37**	11.99**	4.64**	3.44**
Virtual Avoidance of a Problem	3.54**	0.96	8.85**	3.72**	7.87**	8.89**
Concentration on Emotions and Their Active Expression	4.71**	0.69	4.70**	2.44*	3.27**	4.12**
Using Instrumental Social Support	12.40**	2.51*	11.73**	0.07	6.87**	2.99*
Active Overcoming	14.39**	12.91**	7.84**	5.40**	2.41*	0.92
Denial	4.32**	1.67	5.33**	2.97**	4.21**	5.12**
Appeal to Religion	2.62**	0.61	4.13**	1.16	3.43**	2.91*
Humor	12.45**	5.22**	10.62**	2.25*	5.50**	0.55
Behavioral Avoidance of the Problem	3.89**	5.09**	3.26**	7.99**	2.52*	4.89**
Restraint	10.04**	2.09*	10.20**	0.17	6.32**	3.01*
Using of Emotional Social Support	8.98**	3.23**	7.08**	7.26**	4.02**	7.93**
Using Sedatives	1.96	7.02**	0.75	6.81**	1.08	2.10
Adoption	9.03**	12.23**	5.90**	8.25**	3.22**	1.16
Suppression of Competing Activity	15.00**	13.49**	11.01**	6.36**	5.09**	0.07
Planning	11.40**	7.30**	12.54**	2.67*	5.79**	0.36

note: * p≤0.05, ** p≤0.01

Table 3. Secondary structure in the most common type of using of coping strategies in NGU military personnel with different combat experience (in standard units)

Variables	Factors		
	1	2	3
Concentration on Emotions and Their Active Expression	-0.06	0.74	-0.09
Active Overcoming	0.82	-0.17	0.10
Denial	-0.27	0.70	0.24
Appeal to Religion	0.01	0.78	-0.07
Humor	0.05	-0.09	0.77
Adoption	0.19	0.09	0.76
Suppression of Competing Activity	0.81	0.04	0.11
Planning	0.83	-0.15	0.07

tive Reformulation and Personal Growth" - 12.36 ± 2.52), "Active Overcoming" - 12.41 ± 2.41 and "Planning" - 12.52 ± 2.36). The lowest rates in this type were detected in coping "Using Sedatives" - 6.27 ± 3.06 . Decrease of indicators from the largest to the smallest form certain steps in the hierarchy of coping strategies. Thus, the second hierarchical stage is a coping "Suppression of Competing Activity" - 11.77 ± 2.32 , "Humor" - 10.94 ± 2.13 , "Using Instrumental Social Support" - 10.72 ± 2.19 , "Restraint" - 10.45 ± 2.08 , "Acceptance" - 10.39 ± 2.40 and "Using of Emotional Social Support" - 9.81 ± 2.07 . This indicates the desire to attract additional own and external resources, including those that creates the situation itself. Copings associated with failure to communicate the situation, have the lowest scores - "Focus on Emotions and Their Active Expression" - 8.55 ± 2.41 , "Denial" - 8.44 ± 2.31 , "Appeal to religion" - 8.26 ± 3.06 , "Virtual Avoidance of a Problem" - 8.18 ± 2.52 , "Behavioral Avoidance of a Problem" - 8.14 ± 2.50 . We should note that, despite the smallest indicators, these coping strategies are not ignored (as in principle) and have a corresponding place in the secondary factor structure of the coping strategies. Conditionally, the second type was designated as an "adequately differentiated active" type.

The obtained results of the use by the most common type of NGU military personnel of the active prosocial coping strategies correlate with records of E.A. Serhienko, who studied the features of coping strategies of the Russian Federation Armed Forces (RF Armed Forces) with a different subjective assessment of their age [5]. It is proved by the author that for the regular soldiers of all groups of surveyed are characteristic "general vectors of coping-behavior: prosocial, active and indirect, that is, they overcome stress in an acceptable way, actively use contacts with other mechanisms of active awareness of the situation, but are prone to indirect problem solving at the expense of others" [5]. In regular soldiers who feel younger, subjective age identity plays a bigger role in the formation of coping behavior. In officers of the RF Armed Forces in all groups of respondents pro-social strategies for coping with stress are also, the most expressed (copings "Assertive Actions", "Introduction to Social Contacts", "Social Support", "and Precautionary Actions"). Correlation analysis allowed the author to find that officers who feel younger largely use antisocial coping strategies to overcome stress situations (copies "Indirect Actions", "Asocial Actions") [5].

The results were also confirmed by the data of G.K. Adamyan [1]. The author has revealed the peculiarities of adaptation resources among police officers of the Republic of Armenia (RA). The results showed that with the increase of professional experience, personal adaptive capacity decreased, productive coping strategies of coping with professional stress were transformed. All this "lead to premature aging of RA police officers, the formation of vicious circles from adaptation to maladaptation", various forms of mental health disorders [1].

Second factorization of the most common type of engagement of coping strategies in NGU military has been carried out (see Table 3). It made possible to distinguish three main factors. The first factor has 26.69% informativeness, its positive pole is determined by the variables "Planning" (0.83), "Active Overcoming" (0.82) and "Suppression of Competing Activity" (0.81), and the negative one - by the variable "Denial" (-0.27). This factor describes the use of coping strategies as active, conscious, deliberate actions aimed at overcoming a stressful situation, and those actions that involve the calculation of forces during long stay in a stressful situation to maintain the necessary activity throughout the period of stay in it.

The content of the second factor (21.51%) defined positive connections with the variables "Appeal to Religion" (0.78), "Concentration on Emotions and Their Active Expression" (0.74), "Denial" (0.70), and specified negative connections with the variable "Active Overcoming" (-0.17). This factor describes the passive protection from stress factors, which is adequate in situations that cannot be overcome by objective reasons or in situations where active actions for some reason cannot be applied.

The third factor has 17.17% informativeness and includes variables "Humor" (0.77) and "Adoption" (0.76). Clarify its content negative links with the variable "Concentration on Emotions and Their Active Expression" (-0.09). This factor describes an important point of success in stressful situations, such as the objectivity of perception of a situation, including the awareness of mismatch of one's capabilities with the conditions and situation.

The selected secondary factor structure of coping strategies in the most common type of coping behavior among the NGU military corresponds to the well-known worldwide prayer of peace: "God, give me the peace to accept what I cannot change; Give me the courage to change what I can change, and give me the wisdom to distinguish one from another". This, in a certain way, is evidence of the validity of the dedicated structure of coping strategies for NGU military personnel having different combat experience.

Conclusions. Thus, the use of cluster analysis allowed us to identify four types of coping strategies used by NGU military personnel having different combat experience to deal with stressful situations: pragmatic, adventurous, principled, and adequately differentiatedly active.

Considering the results of the study, we can draw the following conclusions:

1. The most common type of coping strategies (83%) is an adequately differentiated active type, which is characterized by the use of such coping strategies as "Active Overcoming", "Planning and Positive Reformulation" and "Personal Growth". National Guard service members using these coping strategies are characterized by the ability to use targeted self-regulation, they are confident in their ability to anticipate developments, overcome any obstacles to achieving their goals, or change their plan in a new situation. This type of service members additionally uses prosocial coping strategies ("Using Instrumental Social Support", "Using Emotional Social Support" "Humor", "Restraint", "Acceptance") to demonstrate stress, indicating a desire to attract additional own and external resources, including those that create the situation itself.

2. The secondary factorization of the most widespread type of involvement of coping strategies among NGU service members allowed distinguishing three main factors:

- the first factor (26.69%) describes the use of coping strategies as active, conscious, deliberate actions aimed at overcoming stressful situations, and those actions that involve the calculation of forces during prolonged stay in a stressful situation to maintain the required activity throughout the stay in it;

- the second factor (21.51%) describes passive protection against the effects of stress factors, which is adequate in situations that cannot be overcome for objective reasons, or in situations where active actions cannot be applied for any reason;

- the third factor (17.17%) describes such an important point of successful action in stressful situations as the objectivity of perception of the situation, including the awareness of the mismatch of their capabilities to the conditions and situation.

3. The use of proactive and procial coping strategies by NGU

military personnel to overcome occupational stress will help to maintain mental health and reduce the risk of mental disorders, in particular, post-traumatic stress disorder.

4. The active use of coping strategies by military personnel will prevent the occurrence of combat fatigue and combat stress, which entails disturbance in the psycho-emotional as well as in the physical sphere, which causes the occurrence of somatic symptoms.

5. Training effective coping strategies for military personnel without combat experience will help to maintain mental and physical health, quality of life, reduce disability, and reduce combat and non-combat personnel losses during and after combat operations.

REFERENCES

1. Адамьян Г.К. Некоторые вопросы адаптации сотрудников полиции. // *Georgian Medical News*. 2019; 2(287): 140-146.
2. Приходько І.І., Колесніченко О.С., Мацегора Я.В. та ін. Психологічний супровід службово-бойової діяльності військовослужбовців Національної гвардії України в екстремальних умовах. *Честь і закон*. 2014; 3: 68-74.
3. Приходько І.І., Мацегора Я.В., Пенькова Н.Є. Типізація адаптаційних ресурсів особистості у військовослужбовців, які приймали участь у проведенні антитерористичної операції. // *Збірник наукових праць Національної академії Державної прикордонної служби України. Серія: педагогічні та психологічні науки*. 2015; 1(74): 469-483.
4. Рассказова Е.И., Гордеева Т.О., Осин, Е.Н. Копинг-стратегии в структуре деятельности и саморегуляции: психометрические характеристики и возможности применения методики COPE. *Психология*. // *Журнал высшей школы экономики*. 2013; 10. 1: 82-118.
5. Сергиенко Е.А., Тарабрина Н.В., Харламенкова Н.Е., Журавлев А.Л. Роль субъективного возраста в регуляции жизнедеятельности. *Психология повседневного и травматического стресса: угрозы, последствия, совладание*. Москва: Издательство «Институт психологи РАН», 2016: 50-83.
6. Ткачук Т.А. Ефективне використання копінг-стратегій як складових копінг-поведінки молоді особистості. // *Практична психологія та соціальна робота*. 2012; 6: 63-67.
7. Carver C.S., Scheier M.F., Weintraub J.K. Assessing coping strategies: A theoretically based approach. // *Journal of Personality and Social Psychology*. 1989; 56(2): 267-283.
8. Hrynzovskiy A.M., Bielai S.V., Tkachenko O.V., Reshetnyk S.M., Kalashchenko S.I., Koliushova O.S. Legal basis of professionals' competence formation of emergency and medical specialists in the first aid approaches. // *Wiadomości Lekarskie*. 2019; 72 (7). 1371-1379. http://wl.medlist.org/2019_07_26/.
9. Krohne H.W. Stress and Coping Theories. // *The International Encyclopedia of the Social and Behavioral Sciences*. 22. 2001. 15163-15170. <https://doi.org/10.1016/B0-08-043076-7/03817-1>.
10. Lazarus, R.S. *Emotion and Adaptation*. New York: Oxford University Press. 1991.
11. Lazarus, R.S. *Psychological Stress and the Coping Process*. New York: McGraw-Hill. 1966.
12. Lazarus R.S., Folkman S. *Stress, Appraisal, and Coping*. New York: Springer. 1984.
13. Prykhodko I., Matsehora Y., Lipatov I., Tovma I., Kostikova I. Servicemen's motivation in the National Guard of Ukraine: transformation after the "Revolution of Dignity". // *The Journal of Slavic Military Studies*. 2019; 32(3): 1-20. <https://doi.org/10.1080/13518046.2019.1645930>.
14. Scheier M.F., Carver C.S. A model of behavioral self-regulation: translating intentions into actions. *Advances in experimental social psychology*. L. Berkowitz (ed.). N.Y.: Academic Press. 1988; 21: 303-346.

SUMMARY

CLASSIFICATION OF COPING STRATEGIES INFLUENCING MENTAL HEALTH OF MILITARY PERSONNEL HAVING DIFFERENT COMBAT EXPERIENCE

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The purpose of the study is to determine the types and secondary factor structure of the coping strategies of the National Guard of Ukraine military personnel having different combat experience.

The survey involved 437 NGU military personnel who participated in hostilities (51.49%) in eastern Ukraine and those with no such experience (48.51%). For assessing coping strategies of the military, the COPE Inventory methodology (Carver, Scheier, Weintraub, 1989) was used to adapt the Russian version of «COPE Methodology» (Rasskazova, Hordeeva, Osin, 2013).

There are four types of coping strategies used by NGU military personnel having different combat experience to deal with stressful situations: pragmatic, adventurous, principled, and adequately differentiated active. As the most common type of coping strategies (83%) was identified an adequately differentiated active type, which is characterized by the use of proactive and prosocial coping strategies. Secondary factorization of the most comprehensive type of coping strategies allowed highlighting three main factors. The first factor (26.69%) described the use of copying strategies as active, self-reliant, thoughtful actions aimed at overcoming stressful situations. The second factor (21.51%) described passive protection against stress factors that were adequate in situations that could not be overcome for objective reasons or in situations where active actions could not be applied. The third factor (17.17%) described the objectivity of perception of a stressful situation and the awareness of the mismatch of one's resources to these conditions.

Keywords: mental health, stress, coping strategies, coping behavior, military personnel.

РЕЗЮМЕ

ТИПИЗАЦІЯ КОПІНГ-СТРАТЕГІЙ, ВЛИЯЮЩИХ НА ПСИХИЧЕСКОЕ ЗДОРОВЬЕ ВОЕННОСЛУЖАЩИХ С РАЗНЫМ БОЕВЫМ ОПЫТОМ

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Целью исследования явилось определение типов и вторичной факторной структуры копинг-стратегий, влияющих

на психическое здоровье военнослужащих Национальной гвардии Украины с разным боевым опытом.

В исследовании принимали участие 437 военнослужащих Национальной гвардии Украины (НГУ): 225 (51,49%) участников боевых действий на востоке Украины и 212 (48,51%) не имеющих боевого опыта. Для определения копинг-стратегий у военнослужащих использовалась методика COPE Inventory (Карвер, Шер, Вентрауб, 1989) в адаптации русскоязычной версии «Методика COPE» (Рассказова, Гордеева, Осин, 2013).

Определены четыре типа копинг-стратегий, используемых военнослужащими НГУ с разным боевым опытом для овладения стрессовыми ситуациями: прагматический, авантюрный, принципиальный, адекватно дифференцированно активный. Наиболее распространенным типом копинг-

стратегий (83%) является адекватно-дифференцированно активный тип, для которого характерно использование проактивных и просоциальных копинг-стратегий. Вторичная факторизация наиболее распространенного типа копинг-стратегий позволила выделить 3 основных фактора: первый фактор (26,69%) описывает использование копинг-стратегий как активных, сознательных, обдуманых действий, направленных на овладение стрессовой ситуацией; второй фактор (21,51%) подразумевает пассивную защиту от действия стресс-факторов, являющуюся адекватной в ситуациях, которые по объективным причинам невозможно преодолеть или активные действия неприменимы. Третий фактор (17,17%) описывает объективность восприятия стрессовой ситуации и осознания несоответствия своих ресурсов этим условиям.

რეზიუმე

სხვადასხვა საომარი გამოცდილების მქონე სამხედრო მოსამსახურეების ფსიქიკურ ჯანმრთელობაზე მოქმედი კოპინგ-სტრატეგიების ტიპიზაცია

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უკრაინის ეროვნული გვარდიის ეროვნული აკადემია, ხარკოვი;
ო.ბოგომოლეცის სახ. ეროვნული სამედიცინო უნივერსიტეტი, კიევი, უკრაინა

კვლევის მიზანს წარმოადგენს სხვადასხვა საომარი გამოცდილებით უკრაინის ეროვნული გვარდიის სამხედრო მოსამსახურეების კოპინგ-სტრატეგიების ტიპების და მეორადი ფაქტორული სტრუქტურების დადგენა.

გამოკვლევაში მონაწილეობა მიიღო 437 უკრაინის ეროვნული გვარდიის (უეგ) სამხედრო მოსამსახურე, მათგან აღმოსავლეთ უკრაინაში სამხედრო მოქმედებებში მონაწილეობდა 225 (51,49%); 212 (48,51%) კი ასეთი გამოცდილების გარეშე. სამხედრო მოსამსახურეების კოპინგ-სტრატეგიების განსაზღვრაში გამოყენებული იყო COPE Inventory (კარვერი, შვერი, ვენტრაუბი, 1989) მეთოდის რუსულენოვანი ვერსია "მეთოდის კოპინგ-სტრატეგია" (რასკაზოვა, გორდევა, ოსინი, 2013).

დადგენილია კოპინგ-სტრატეგიის ოთხი ტიპი, რომლებსაც სხვადასხვა საბრძოლო გამოცდილების მქონე უეგ-ის სამხედრო მოსამსახურეები სტრესული სიტუაციების დაუფლების მიზნით იყენებდნენ: პრაგმატული, ავანტიურული, პრინციპული და ადეკვატურ-დიფერენციალური აქტიური.

ყველაზე გავრცელებული კოპინგ-სტრატეგიების ტიპად (83%) გამოვლინდა ადეკვატურ დიფერენცირებული აქტიური ტიპი, რომლისთვის დამახასიათებელია პროაქტიური და პროსოციალური კოპინგ-სტრატეგიების გამოყენება.

ყველაზე გავრცელებულ კოპინგ-სტრატეგიების ტიპებს წარმოადგენს 3 ძირითადი ფაქტორი.

პირველი ფაქტორი (26,69%) აღწერს კოპინგ-სტრატეგიების გამოყენებას, როგორც აქტიურ, წინასწარ მოფიქრებულ ქმედებას სტრესული სიტუაციების დაუფლების მიზნით.

მეორე ფაქტორი (21,51%) გულისხმობს პასიურ დაცვას სტრეს ფაქტორების მოქმედებისაგან იმ შემთხვევაში თუ ობიექტური მიზეზების გამო შეუძლებელია ამ სიტუაციების დაძლევა ან აქტიური მოქმედების გამოყენება.

მესამე ფაქტორი (17,17%) აღწერს სტრესული სიტუაციის აღქმას და საკუთარი რესურსების აღნიშნული პირობებისადმი შეუთავსებლობის გააზრებას.

ИССЛЕДОВАНИЕ ОСНОВНОГО ПРОТЕИНА МИЕЛИНА В ТКАНИ ГОЛОВНОГО МОЗГА МЫШЕЙ BALB/C ПРИ ЭКСПЕРИМЕНТАЛЬНОМ АНТИФОСФОЛИПИДНОМ СИНДРОМЕ И ДЕЙСТВИИ МОДУЛЯТОРОВ СИНТЕЗА ОКСИДА АЗОТА

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Антифосфолипидный синдром (АФС) – аутоиммунное заболевание, характеризующееся сосудистыми тромбозами, патологией беременности, наличием в крови антифосфолипидных антител к отрицательно заряженным фосфолипидам мембран клеток [3-5]. Первичный АФС развивается у лиц без аутоиммунных заболеваний (тромбоэмболии, моло-

дой возраст с инсультом, акушерская патология, привычное невынашивание беременности, аллергия к лекарственным препаратам). Вторичный АФС имеет симптомы как основного заболевания, так и АФС. Развивается при аутоиммунных и инфекционных заболеваниях, которые влияют на иммунный статус организма, на фоне злокачественных