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"POSTTRAUMATIC STRESS DIFFERENTIATION QUESTIONNAIRE": MODIFICATION, VALIDATION, PSYCHOMETRIC INDICATORS

The procedure for developing and standardizing the psychodiagnostic technique "Posttraumatic stress differentiation questionnaire" is described. The features of creating the questionnaire and its testing on a sample of Ukrainian military personnel after participation in intensive combat operations are presented. The indicators of the internal consistency of the questionnaire structure (Cronbach's α and intercorrelation) and its validity (correlation with the scales of psychodiagnostic methods) are determined. The questionnaire was standardized for military personnel after participation in intensive combat operations. The use of the questionnaire allows you to identify and differentiate acute stress reactions, signs of post-traumatic stress disorder and moral trauma in a person after the impact of a traumatic event, considering a certain period of time.

Keywords: *posttraumatic stress, acute stress reaction, posttraumatic stress disorder, moral trauma, psychological recovery, military personnel.*

Statement of problem. With the beginning of large-scale hostilities and the involvement of a large number of Ukrainian servicemen in them, the issue of diagnosing and preventing combat stress has become acute. This is due to the fact that almost all combatants experience combat stress [1]. Combat stress manifests itself in the form of acute stress reactions, affective and anxiety disorders, addictive and delinquent behavior, adaptation disorders, and suicide [2]. These manifestations can have immediate, long-term, and delayed mental consequences. Manifestations of combat stress experienced by servicemen have many common features. However, different predictions are known regarding the persistence of negative consequences for the serviceman's personality, so there is a need for different approaches to providing psychological assistance, the starting point of which is differential diagnosis of such manifestations.

Analysis of recent research and publications. After completing basic military training, mobilized servicemen who first enter combat conditions often develop posttraumatic stress with various symptoms [3]. In some cases, to overcome them, servicemen are sent to psychological assistance points or rehabilitation centres for the restoration of combat readiness, which are located directly near the combat zone, with an attitude of inevitability of returning to further combat missions. It is believed that the formation of such an attitude helps the serviceman mobilize internal resources and actualize the ability to self-regulation, increase stress resistance, which was formed during basic military training, but this requires a temporary cessation of the effects of combat stress factors [4].

When analysing the negative mental reactions and states of combatants who enter psychological recovery centres, the first thing that comes to mind is the need to diagnose symptoms of post-traumatic stress reaction. Indeed, for more than 40 years it has been proven that the frequency and intensity of combat operations are linearly related to the risk of developing post-traumatic stress disorder (PTSD) and the mental disorders caused by it in veterans [4]. However, combat operations are not the only source of danger, conflict, or serious stress in a combat zone or a necessary and sufficient cause of PTSD associated with military service. Observations of massive destruction of civilian infrastructure, suffering of civilians, especially women and children, also increase the risk of PTSD [5]. Traumatic losses of fellow service members can be

exceptionally devastating and cause a synergistic syndrome of PTSD [6]. Physical trauma from accidents or violence has been shown to be one of the strongest predictors of chronic PTSD [7]. In addition, loss of limbs, burns, and disfigurement deplete coping resources, compromise functioning, and can significantly impact veterans' ability to recover from psychological trauma experienced in a combat zone [8]. The author of [8] also determined that while physical trauma in a combat zone is a strong predictor of chronic PTSD, the majority of service members who are injured in a combat zone do not develop overt PTSD.

PTSD has been shown to be a distressing condition for active duty service members after combat. However, not all service members who have been in a combat zone will develop chronic PTSD [4]. Studies of trauma adaptation have shown that the trajectory of a service member's reactions to trauma experienced in a combat zone is unstable, and the prevalence rate decreases over time [8]. There is a fairly high percentage of service members who recover from the effects of a near-death experience on their own and do not require professional intervention. Another significant source of mental health disorder is the experience of committing murder in combat: for some, the moral conflict, shame, and guilt that arise from killing, even when committed in combat, can leave a "moral scar" for life [8].

In recent decades, researchers have argued that the clinical community has paid little attention to the long-term impact of psychological trauma that has been tinged with moral conflict in war veterans [9]. At the same time, clinical psychiatrists have reported that moral conflict is an important element of the suffering of many soldiers [10]. It should be noted that some authors do not seek to change the concept of PTSD, and do not even prefer to introduce the category of "moral trauma" into the International Classification of Diseases (ICD) or its American counterpart, the DSM. However, they seek to form a concept that would encompass certain types of suffering in ways that deviate from the dominant clinical understanding of PTSD. These researchers emphasize that although PTSD and moral trauma share common features, moral trauma is otherwise a unique phenomenon, in which feelings of guilt and shame occupy a central place. While PTSD focuses on the threat to life and the impact of violence, moral trauma is the result of moral conflict, which may or may not involve a threat to life [9]. Among the means of preventing the chronic course of PTSD, the most common in the armies of many countries has been the analysis of stress in critical incidents (CISD) or psychological debriefing. This is a single psychoeducational session, which is carried out after the trauma (within 24–72 hours) with components of stress management and shared trauma experience with a group of people with common trauma or professional experience [11]. Thus, CISD is one of the strategies used by combat stress control groups (CSCT) deployed in Iraq and Afghanistan to provide secondary prevention for soldiers who showed signs of potentially severe posttraumatic stress in a combat zone [12]. CSCT teams were mandated by the US Department of Défense to "ensure the prevention and management of combat stress in order to maintain mission and combat effectiveness, and to minimize the short- and long-term adverse effects of combat on the physical, psychological, intellectual, and social health of service members" [11]. However, there are now reasonable doubts about the effectiveness of the CISD methodology, which involved debriefing the traumatic event too soon after its experience. Modern researchers are inclined to believe that psychological first aid should be used as a preventive measure. It involves providing human, empathetic, and non-intrusive support, as well as information about what people who have experienced trauma can expect in the coming days and weeks, and about the fate of other people who have been affected [13, 14]. Therefore, in a combat zone, providing first psychological aid to servicemen who have been seriously injured as a result of combat trauma can be carried out both for their psychological support and assistance, so that they do not feel stigmatized, and to achieve other goals – providing food, rest, etc.

In the case of chronic negative consequences of psychological trauma, it is quite common to resort to the cognitive model of psychological security of the military person [15] and cognitive-behavioral methods of treating PTSD [12]. However, overcoming moral trauma requires a key adjustment of the approach – shifting the moral conflict to the center and considering it as appropriate, not pathological [9]. Military personnel who have experienced moral trauma do not need to be convinced that they acted correctly or under the influence of irresistible circumstances. A bad deed should be considered as such, but it is necessary to help them understand the context and accept the imperfection of their "I". Under such conditions, the ultimate goal of treatment is "to form in the veteran the idea of the ability to do good and the possibility

of self-forgiveness, even if they do not accept this idea at first" [9].

In view of the above, in psychological rehabilitation centres, to which military personnel are sent on the basis of various indications, the issue of differentiation of psychological assistance arises acutely. These are military personnel who need: a) only a switch from combat conditions, rest and restoration of psychological and physical resources with the subsequent performance of combat missions; b) first psychological assistance with the elimination of the traumatic stimulus for a certain time with a wide possibility of receiving group and individual psychological consultations in case of realizing the inevitability of returning to continue performing combat missions; c) more in-depth means of psychological and psychiatric assistance with the possibility of further transfer to support units.

The purpose of the article is to develop a questionnaire for the identification and differentiation of acute stress reaction, post-traumatic stress disorder, and moral trauma and to verify its psychometric characteristics.

The basis for the development of the questionnaire were the psychodiagnostic methods "Mississippi PTSD Scale" (authors T. Keene, J. Caddell, K. Taylor), "Traumatic Stress Questionnaire" (author I. Kotenev), "Maladaptivity" (authors I. Prykhodko, Ya. Matsehora, O. Kolesnichenko, M. Baida), which are all derivatives of the MMRI methodology [16]. When formulating the content of the scales describing the symptoms of acute stress reaction (ASR) and PTSD, the authors of this article also focused on such methods as the "Scale for assessing the impact of traumatic events" (22 items describing "Intrusion", "Avoidance" and "Arousal") and the "Dissociation Scale" (DES). The descriptions of the Depression scale were compared with the "C-screening Depression Self-Assessment Scale" (PHQ-9, consisting of 9 items) [16].

Mississippi PTSD Assessment Scale, due to its compactness. However, although it contains statements for diagnosing symptoms of re-experiencing the event, avoidance, hyperactivity, guilt, and suicidal tendencies, it acts as a single scale and does not allow for a differential assessment of the intensity of individual manifestations of post-traumatic stress (PTS) symptoms. It is also intended for psychodiagnostics of veterans, therefore, the prerequisites necessary for diagnosing PTSD, "traumatic event" and "delayed consequences", are not separately defined in it, but are considered to be a priori inherent in the status of a war veteran. It should be noted that it has high reliability indicators for a sample of military personnel who underwent a psychological recovery program (Cronbach's $\alpha = 0.893$) [17].

Unlike the Mississippi PTSD Scale, the Traumatic Stress Questionnaire is designed to diagnose both PTSD and GSD, which are defined according to the ICD or DSM by a set of symptoms, and to establish the starting point of diagnosis – "Trauma Events". In particular, for PTSD in the Traumatic Stress Questionnaire, it is necessary to establish "Trauma Events", as well as the presence of the following symptoms: "Reexperiencing the trauma", "Avoidance", "Hyperactivation and "Distress and maladjustment". GSD is characterized by the presence of the following symptoms: "Trauma Event", "Dissociative Symptoms", "Reexperiencing the trauma", "Avoidance", "Hyperactivation" and "Distress and maladjustment". In addition, the use of the "Traumatic Stress Questionnaire" provides information about the presence of symptoms of depression, hypervigilance, suppression of emotions, aggressiveness, anxiety, fits of rage, drug and medication abuse, unwanted memories and hallucinatory experiences, feelings of guilt, sleep disturbances, etc. Despite all its advantages, the "Traumatic Stress Questionnaire" is not widely used among military psychologists, who often have to operate in field conditions and monitor the condition of a significant number of servicemen, primarily due to the large volume of the questionnaire, which contains 110 statements. Its disadvantages also include a complex scoring system that involves calculating control scales (sincerity, aggravation, dissimulation) and converting "raw" scores into T-scores to determine the level of PTSD and GSD formation. Moreover, diagnosing PTSD is exclusively the prerogative of psychiatrists after an inpatient examination, and a psychologist can only refer a serviceman who has the corresponding symptoms to an in-depth study and consultation with a psychiatrist.

In addition, in the latest edition of the DSM, "Dissociative Symptoms" are recognized as optional, which shifts the emphasis in the differentiation of PTSD and GSD precisely to the "Traumatic Event", which clearly indicates the time of manifestation of the corresponding symptoms, which must be no less than 1 month after the traumatic event. Unfortunately, the "Traumatic Stress Questionnaire" does not allow taking into account this important aspect of the differentiation

of "Traumatic Events" for GSD and PTSD. Along with this, the proposed "Traumatic Events" scale for a sample of military personnel who underwent a recovery program, as shown by the results of the authors' studies, had a rather low reliability index (Cronbach's α = 0.452).

Regarding other symptoms, it is worth noting that according to the α-Cronbach's coefficients on a sample of military personnel who underwent a psychological recovery program, the "Traumatic Stress Questionnaire" fairly reliably diagnoses "Dissociative Symptoms" (α-Cronbach's coefficient = 0.748), "Reexperiencing Trauma" (α-Cronbach's coefficient = 0.774), has unsatisfactory indicators for the "Avoidance" scale in the case of GSD (the scale includes only 3 statements; α-Cronbach's coefficient = 0.352) and quite acceptable indicators for "Avoidance" for PTSD (α-Cronbach's coefficient = 0.743). The authors also established high reliability indicators for the "Hyperactivation" scale (Cronbach's α = 0.815), while the reliability indicators for "Distress and maladjustment" were less satisfactory (Cronbach's α = 0.572). In addition, this scale included only 4 statements, some of which reduced the reliability of the scale.

In most scales designed to diagnose symptoms, up to 7 common statements could be identified for GSD and PTSD, and therefore, when creating the "Posttraumatic Stress Differentiation Questionnaire". It was decided to take these common statements and the general structure of the "Traumatic Stress Questionnaire" as a basis. The scales were supplemented with statements that reduced reliability and it was advisable to replace them, and the "Distress and maladaptation" scale required a complete revision. The scale describing dissociation, despite satisfactory α-Cronbach's coefficients, was adjusted in accordance with the memories of combatants who described their experiences of dissociative states while working with military psychologists in a psychological rehabilitation centre. Some statements from the "Mississippi PTSD Scale" and "Masadaptation" methods were used as kind of "donors"; the latter was used in the authors' studies to differentiate some aspects of moral trauma [18]. For this purpose, α-Cronbach's coefficients were also calculated for each method as a whole and for their individual scales in the above methods. In addition, Cronbach's α was calculated when statements were excluded from the scale to assess the importance of each statement in determining PTSD, maladaptation, and their individual aspects. Based on the analysis, the best statistical versions of the statements were selected to replace those that were missing. It is worth noting that some statements were directly transferred. For example, this is statement No. 17 of the "Maladaptivity" technique ("Sometimes I have the feeling that I have done something wrong or even something bad") and statement No. 14 of the "Mississippi PTSD Determination Scale" technique ("My dreams are so real that I wake up in a cold sweat and force myself not to sleep anymore"). Also, some statements were partially changed in accordance with the content of the symptoms.

The constructive features of the "Traumatic Stress Questionnaire" include the fact that the same statements can be used to calculate different aspects, for example, to determine the symptoms of the "Intrusion", "Avoidance", "Maladaptation" scales and the "Depression" indicator. This structural feature was preserved in the developed "Posttraumatic Stress Differentiation Questionnaire". Also, in addition to the "Depression" scale, from the set of statements used, it was possible to distinguish the "Value Dissonance" and "Sleep Disturbance" scales, to which 7 statements were also attributed. The selection of the "Value Dissonance" scale corresponds to modern ideas about the need to be careful about the differentiation of PTSD, which arises from the fear of losing life, and "Moral Trauma" (MT) is a consequence of loss of dignity, dissonance of the value sphere. Therefore, the algorithm for calculating the introduced additional scales is important for determining the features of providing psychological assistance in rehabilitation centres for the recovery of servicemen after their participation in combat operations. Given that the concept of "Moral Trauma" has not yet been consolidated in the ICD or DSM, counting according to the scales belonging to it can be considered the formation of PTSD, which is complicated by moral trauma. The allocation of an independent scale "Sleep Disorder" is also important because such a violation leads to the rapid depletion of the resistance capabilities of servicemen, so it should also be considered during recovery. The authors hope that incorporating such features into the methodology will contribute to the development of ideas about the psychological traumatization of a serviceman during combat operations and its consequences. Below is Table 1 with the statements that were used to diagnose individual symptoms of PTS.

Table 1 – Block statements defining individual TCPs

Ref. No.	Content of the statements of the "Traumatic Stress Questionnaire"	Indicator *Cronbach's α in case of exclusion of a statement from the scale
Dissociative symptoms (* Cronbach's α = 0.748)		
6	I eat automatically without feeling any pleasure	0.724
4	I need to try to understand what others are saying	0.719
103	I feel confused	0.715
7	The world around me seems unreal (changed to "There were times when I 'lost time' – an hour or part of a day that I couldn't remember anything about" according to the recollections of combatants)	0.716
34	Sometimes it seems to me that the world around me is losing its colours (changed to "It was like I felt a loss of contact with my body, as if my body was not mine" according to the memories of combatants)	0.700
44	I feel like I'm becoming a different person	0.723
43	I sometimes have difficulty remembering things that happened very recently	0.731
Re-experiencing trauma (*Cronbach's α = 0.774)		
48	My thoughts keep going back to things I don't want to think about	0.729
14	I often have the same terrible dream	0.730
35	I wake up from a sudden fear	0.710
52	They tell me I scream in my sleep	0.762
–	My dreams are so real that I wake up in a cold sweat and force myself not to sleep anymore	–
–	I can't bring myself to do certain things that remind me of what I've experienced	–
90	There are things I can't forgive myself for	0.751
Avoidance (*Cronbach's α = 0.743)		
–	Sometimes I want to fall asleep and never wake up	–
79	In my life I had to go through something that is better not to remember	0.730
43	I sometimes have difficulty remembering things that happened very recently	0.710
26	Many things have lost interest for me	0.691
31	Sometimes it seems to me that even the people closest to me don't understand me	0.693
42	I feel lonely	0.696
81	I feel like I've lost the ability to enjoy life	0.712
Hyperactivation (*Cronbach's α = 0.815)		
41	I have trouble falling asleep	0.803
16	Stupid things annoy me	0.790
32	I need to control my emotions better	0.793
85	Extraneous sounds distract me	0.790
8	I startle at the sudden noise	0.777
12	I often act as if I am in danger	0.790
107	I often act involuntarily in response to an unexpected sound or movement	0.791
Distress and maladjustment (*Cronbach's α = 0.573)		
–	Rest does not give a feeling of renewal	–
36	I have to make a lot of effort to work at the same pace as before	0.418
57	My mood has been getting worse lately	0.411
–	Sometimes I use alcohol (sleeping pills or something else) to help me fall asleep or forget about the things I had to do	–

Ref. No.	Content of the statements of the "Traumatic Stress Questionnaire"	Indicator *Cronbach's α in case of exclusion of a statement from the scale
–	Lately I have been experiencing such strong fits of anger that I want (may) hit or verbally insult someone	–
–	Sometimes I feel like I did something wrong or even bad	–
–	I tend to experience disappointments so much that I can't force myself not to think about them	–
ADDITIONAL CROSS-SECTIONAL SCALES		
Depression (*Cronbach's α = 0.784)		
6	I eat automatically without feeling any pleasure	0.754
26	Many things have lost interest for me	0.762
36	I have to make a lot of effort to work at the same pace as before	0.759
42	I feel lonely	0.751
57	My mood has been getting worse lately	0.738
81	I feel like I've lost the ability to enjoy life	0.743
90	There are things I can't forgive myself for	0.786
Value dissonance		
44	I feel like I'm becoming a different person	–
90	There are things I can't forgive myself for	–
31	Sometimes it seems to me that even the people closest to me don't understand me	–
–	Sometimes I use alcohol (sleeping pills or something else) to help me fall asleep or forget about the things I had to do	–
–	Lately I have been experiencing such strong fits of anger that I want (may) hit or verbally insult someone	–
–	Sometimes I feel like I did something wrong or even bad	–
–	I tend to experience disappointments so much that I can't force myself not to think about them	–
Sleep disturbances		
14	I often have the same terrible dream	–
35	I wake up from a sudden fear	–
52	They tell me I scream in my sleep	–
–	My dreams are so real that I wake up in a cold sweat and force myself not to sleep anymore	–
41	I have trouble falling asleep	–
–	Rest does not give a feeling of renewal	–
–	Sometimes I use alcohol (drugs or sleeping pills) to help me fall asleep or forget about the things I had to do	–

Note. * Cronbach's α is indicated for each scale and in case of exclusion of statements from the scale according to the "Traumatic Stress Questionnaire". Cronbach's α is indicated in case of exclusion of added questions from other methods, but they were not lower than 0.750.

The development of scales for the diagnosis of both individual core symptoms (in particular, "Dissociative Symptoms", "Reexperiencing Trauma", "Avoidance", "Hyperactivation", "Distress and Maladaptation") and additional ones (in particular, "Depression", "Sleep Disturbances" and "Value Dissonance") was carried out during the compilation of the "Posttraumatic Stress Differentiation Questionnaire". Even the introduction of such a scale as "Value Dissonance" falls within these limits, since most of the new scales for it were taken from the "Moral Normativity Violation" scale of the "Maladaptivity" method, which has already been tested as one of the criteria for differentiating moral trauma [18].

Table 2 – Statements of the "Trauma Event – Postponement" block of the "Posttraumatic Stress Differentiation Questionnaire" for differentiating GSD, PTSD, and MT

No.	Indicator	**Trauma Event**
1	Trauma Event	There was an event that completely destroyed my ideas about the possibilities of protecting myself or avoiding danger
2	Trauma Event	I feel like I can't stand the constant stream of dangers anymore, I guess I have no chance of getting out of this hell
3	Trauma Event	There was an event that showed me how little I could do to ensure my own safety, that of my loved ones, or that of my colleagues
4	Trauma Event	There was such a shocking event in my life that I felt like I wasn't myself, like it wasn't my body
5	Trauma Event	There was a situation that shocked me so much that I felt like it wasn't me
Postponement of consequences [more than a month (PM)]		
6	PM-PTSD	More than a month has passed since those events, after which I can't let go of the thought that I could have died
7	PM-PTSD	It's been over a month since the event that made me extremely sensitive to anything that could potentially threaten my life
8	PM-PTSD	In recent months (more than one) I have been constantly thinking about how many dangers there are around, how easily one can lose one's life
9	PM-MT	What I experienced (events that have been going on for over a month) completely destroyed my ideas about myself, about the stability of my moral beliefs
10	PM-MT	A lot of time has passed (more than a month) since those events, after which I lost confidence in the correctness of my actions, their compliance with the goals of my life
11	PM-MT	For quite a long time (over a month) I have been unable to get rid of the feeling of guilt

However, the "Traumatic Stress Questionnaire" does not offer a satisfactory approach to defining the "Traumatic Event" with which it is possible to differentiate PTSD and GSD. In the DSM and ICD, themselves, the only aspect that distinguishes PTSD from GSD is the 1-month time frame. Considering the content of the traumatic event that corresponds to GSD, PTSD, and MT, as described in the scientific literature, a corresponding list of statements was compiled.

Thus, the trauma event was divided into two components: the trauma event itself and the postponement of the consequences for a month. These components help to differentiate GSR and PTSD. This principle was extended to MT and PTSD, which can be complicated by MT. However, this was an "additional burden" during the development of the "Posttraumatic Stress Differentiation Questionnaire", work in anticipation, given the needs of military psychologists in the differentiation of PTSD and MT and a certain unfoundedness of the theoretical paradigm for developing a comprehensive approach to such differentiation.

It should be concluded that the GSR only involves the "Trauma Event" and the absence of positive responses to the statements of the "Delay of Consequences" scale; PTSD involves both the "Trauma Event" and the postponement of specific consequences characteristic of PTSD; MT also involves the "Trauma Event" and the postponed consequences characteristic of MT. At the same time, the consequences characteristic of PTSD was associated with thoughts about one's own mortality, and the consequences characteristic of MT were associated with thoughts about the loss of one's own dignity, internal conflict.

Initially, the idea was to use a complex scoring system, where symptoms indicating a conditionally opposite symptom complex in the dichotomies "GD-PTSD" and "PTSD-MT" were added in reverse scores and, accordingly, for each of the symptom complexes on the scale "Trauma Event – Postponement" from 0 to 11 points could be scored. It was assumed that the differentiation of symptom complexes was carried out by comparing these points: the highest score indicated an existing symptom complex, or rather, a formed starting point of this symptom complex, and all others that scored less points were considered insignificant, that is, such that they should not be considered in the diagnostic plan. Thus, when calculating the starting

point for GD, the indicators of "Trauma Events" were supported by the reverse calculation of the indicators of "Postponement" consequences" (PM-PTSD+MT). PTSD indicators included "Trauma Event", "Yes" responses to "PM-PTSD" and the back count ("No" responses) of "PM-MT". MT indicators included "Trauma Event", "Yes" responses to "PM-MT" and the back count ("No" responses) of "PM-PTSD".

However, psychometric evaluation of the indicators calculated in this way on the scale "Trauma Event – Postponement" showed the inexpediency of this procedure, when unsatisfactory α-Cronbach's coefficients were obtained. Therefore, it was decided to simply add the "necessary" symptomatology and consider the presence of the opposite. Therefore, when calculating the total GSR indicator, indicators are added only on the scales "Trauma Event" + "Dissociative Symptoms" + "Reexperiencing Trauma" + "Avoidance" + "Hyperactivation" + "Distress and Maladaptation". In this regard, the psychologist should consider that all scales "Postponement of Consequences" should have a zero value. If there are positive answers to both "Trauma Event" and "Postponement of Consequences", which are characteristic of PTSD/MT, then PTSD or MT are diagnosed, respectively. Separately, PTSD assumes the absence of positive answers to "PM-MT". Separately, MT assumes the absence of positive responses to "PM-PTSD". However, a variant of PTSD complicated by moral trauma is possible, which is characterized by both "Traumatic event" and "Yes" answers to the statements of the "PM-PTSD" and "PM-MT" scales. The introduction of such conditions, although somewhat simplified the calculation, requires attention from the psychologist when determining the formation of the starting point of the symptom complex as the basis for the presence/absence/differentiation of the symptom complexes of GSD, PTSD, MT or PTSD complicated by MT.

Thus, the final version of the developed "Posttraumatic Stress Differentiation Questionnaire" included 46 statements, with the help of which it is possible to differentiate between GSD, PTSD, "Moral Trauma" and "Depression", as well as the intensity of the corresponding symptoms. Given that the "Posttraumatic Stress Differentiation Questionnaire" was developed for the needs of rehabilitation and recovery centres for military personnel, who, due to fatigue or exhaustion, usually have difficulty following complex instructions, a simplified response scale (Yes/No) was used for the questionnaire, and all statements of the questionnaire are direct, that is, the answer "Yes" is diagnostically significant. With such a structure of the questionnaire, severe cases of psychological trauma will be obvious even without differentiated counting on the scales.

Table 3 shows the content of the "Posttraumatic Stress Differentiation Questionnaire" with question codes regarding their affiliation with the main and additional scales.

Table 3 – Contents of the "Posttraumatic Stress Differentiation Questionnaire" with question codes regarding their affiliation to the main and additional scales

Ref. No.	Main scale code	Additional scale code	Assertion
1	Dissociative symptoms	Depression	I eat automatically without feeling any pleasure
2	Re-experiencing the trauma	Sleep disturbances	I often have the same terrible dream
3	Avoidance	Depression	I feel like I've lost the ability to enjoy life
4	Trauma Event	–	There was an event that showed me how little I could do to ensure my own safety and the safety of those close to me
5	Hyperactivation	Sleep disturbances	I have trouble falling asleep

Ref. No.	Main scale code	Additional scale code	Assertion
6	Distress and maladjustment	Depression	My mood has been getting worse lately
7	Dissociative symptoms	–	I need to try to understand what others are saying
8	PM-PTSD	–	In recent months (more than a month) I have been constantly thinking about how many dangers there are around, how easily one can lose one's life
9	Re-experiencing the trauma	Sleep disturbances	They tell me I scream in my sleep
10	Avoidance	–	I sometimes have difficulty remembering things that happened very recently
11	Hyperactivation	–	Stupid things annoy me
12	Trauma Event	–	There was such a shocking event in my life that I felt like I wasn't myself, like it wasn't my body
13	Distress and maladjustment	Value dissonance	Sometimes I feel like I did something wrong or even bad
14	Dissociative symptoms	–	I feel confused
15	Re-experiencing the trauma	–	My thoughts keep going back to things I don't want to think about
16	Trauma Event	–	I feel like I can't stand the constant stream of dangers anymore, I guess I have no chance of getting out of this hell
17	Avoidance	–	Sometimes I want to fall asleep and never wake up
18	Hyperactivation	–	I often act involuntarily in response to an unexpected sound or movement
19	Distress and maladjustment	Value dissonance	I tend to experience disappointments so much that I can't force myself not to think about them
20	PM-MT	–	A lot of time has passed (more than a month) since those events, after which I lost confidence in the correctness of my actions, their compliance with the goals of my life
21	Dissociative symptoms	–	It was like I felt a loss of contact with my body, as if my body wasn't mine
22	Re-experiencing the trauma	–	I can't bring myself to do certain things that remind me of what I've experienced
23	Avoidance	Depression	I feel lonely
24	Trauma Event	–	There was an event that completely destroyed my ideas about the possibilities of protecting myself or avoiding danger
25	Hyperactivation	–	I need to control my emotions better
26	Distress and maladjustment	Depression	I have to make a lot of effort to work at the same pace as before
27	Dissociative symptoms	–	I sometimes have difficulty remembering things that happened very recently
28	PM-PTSD	–	It's been over a month since the event that made me extremely sensitive to anything that could potentially threaten my life
29	Re-experiencing the trauma	Sleep disturbances	My dreams are so real that I wake up in a cold sweat and force myself not to sleep anymore
30	Avoidance	Depression	Many things have lost interest for me
31	Hyperactivation	–	I startle at the sudden noise

Ref. No.	Main scale code	Additional scale code	Assertion
32	PM-MT	–	What I experienced (events that have been going on for over a month) completely destroyed my ideas about myself, about the stability of my moral beliefs
33	Distress and maladjustment	Sleep disturbances	Rest doesn't make me feel refreshed
34	Dissociative symptoms	–	There were times when I would "lose time" – an hour or part of a day that I couldn't remember anything about
35	Re-experiencing the trauma	Value dissonance / Depression	There are things I can't forgive myself for
36	Avoidance	–	In my life I had to go through something that is better not to remember
37	PM-PTSD	–	More than a month has passed since those events, after which I can't let go of the thought that I could have died
38	Hyperactivation	–	I often act as if I am in danger
39	Distress and maladjustment	Value dissonance	Lately, I've been experiencing such strong bouts of anger that I want (may) hit or verbally insult someone
40	Dissociative symptoms	Value dissonance	I feel like I'm becoming a different person
41	PM-MT	–	For quite a long time (over a month) I have been unable to get rid of the feeling of guilt
42	Re-experiencing the trauma	Sleep disturbances	I wake up from a sudden fear
43	Avoidance	Value dissonance	Sometimes it seems to me that even the people closest to me don't understand me
44	Hyperactivation	–	Extraneous sounds distract me
45	Trauma Event	–	There was a situation that shocked me so much that I felt like it wasn't me
46	Distress and maladjustment	Value dissonance / Sleep disturbance	Sometimes I use alcohol (sleeping pills or something else) to help me fall asleep or forget about the things I had to do

Table 4 provides keys for determining "Trauma Event – Postponement" as the starting point of the differential diagnosis and the results for calculating the manifestation of PTS according to the scales of the "Posttraumatic Stress Differentiation Questionnaire".

Table 4 – Keys for determining differentiation and results for calculating the manifestation of PTSD according to the scales of the "Posttraumatic Stress Differentiation Questionnaire"

Scales of the "Posttraumatic Stress Differentiation Questionnaire"	Counting numbers if the answer is "Yes"
"Trauma Event"*	4, 12, 16, 24, 45
"PM-PTSD"*	8, 28, 37
"PM-MT"*	20, 32, 41
"PM-PTSD+MT"*	8, 20, 28, 32, 37, 41
Main symptom scales of ADHD and PTSD	
"Dissociative symptomatology"	1, 7, 14, 21, 27, 34, 40
"Re-experiencing trauma"	2, 9, 15, 22, 29, 35, 42
"Avoidance"	3, 10, 17, 23, 30, 36, 43

Scales of the "Posttraumatic Stress Differentiation Questionnaire"	Counting numbers if the answer is "Yes"
"Hyperactivation"	5, 11, 18, 25, 31, 38, 44
"Distress and maladjustment"	6, 13, 19, 26, 33, 39, 46
Additional cross scales	
"Depression"	1, 3, 6, 23, 26, 30, 35
"Sleep disturbance"	2, 5, 9, 29, 33, 42, 46
"Value dissonance"	13, 19, 35, 39, 40, 43, 46

Note. *It is based on the indicators "Trauma Event" and "PM-…" that differentiates between GSD, PTSD, MT, and PTSD complicated by MT.

Calculating the total score for the intensity of PTS symptoms:

GSR = "Trauma Event" + "Dissociative Symptoms" + "Reexperiencing Trauma" + "Avoidance" + "Hyperactivation" + "Distress and Maladaptation", if "Trauma Event" > 0 and "PM-PTSD+MT" = 0.

PTSD = "Traumatic Event" + "PM-PTSD" + "Reexperiencing Trauma" + "Avoidance" + "Hyperactivation" + "Distress and Maladaptation", if "Traumatic Event" > 0, "PM-PTSD" > 0 and "PM-MT" = 0.

MT = "Trauma Event" + "PM-MT" + "Value Dissonance" + "Re-experiencing Trauma" + "Avoidance" + "Hyperactivation" + "Distress and Maladaptation", if "Trauma Event" > 0, "PM-MT" > 0, "Value Dissonance" > 0 and "PM-PTSD" = 0.

PTSD complicated by MT = "Traumatic Event" + "PM-PTSD+MT" + "Value dissonance" + "Reexperiencing trauma" + "Avoidance" + "Hyperactivation" + "Distress and maladjustment", if "Traumatic Event" > 0, "PM-MT" > 0 and "PM-PTSD" > 0.

Determining the psychometric characteristics of the "Posttraumatic Stress Differentiation Questionnaire"

The psychometric characteristics of the developed method were determined on a sample of servicemen who were undergoing a psychological rehabilitation program and were the target sample. For ethical and professional-psychological reasons, it was impossible to increase the workload on servicemen who were in psychological rehabilitation centres, and therefore the establishment of psychometric characteristics was carried out in several stages. At each stage, an average of 150 servicemen were involved, to whom 2–4 additional psychodiagnostic methods were added to the general psychodiagnostic battery. The total number of study participants was 484 servicemen.

The results of the study showed that the developed methodology has satisfactory reliability indicators (Table 5).

The exclusion of any item from individual scales or the total score did not increase Cronbach's α. This indicates that there is no need to adjust or replace any statements in the developed questionnaire.

The correlation coefficients of the scales of the "Posttraumatic Stress Differentiation Questionnaire" are given in Table 6, and the correlation coefficients of the scales of the developed questionnaire and the "Traumatic Stress Questionnaire" are given in Table 7.

Table 5 – Reliability indicators of the "Posttraumatic Stress Differentiation Questionnaire" (n = 242 servicemen)

Questionnaire scale blocks	Questionnaire scales and general indicators of the PTS	Cronbach's α-index
"Trauma Event – Postponement"	"Trauma Event"	0.720
	"PM-PTSD"	0.753
	"PM-MT"	0.713
	"PM-PTSD+MT"	0.749
Main symptom scales of ADHD and PTSD	"Dissociative symptomatology"	0.729
	"Re-experiencing trauma"	0.737
	"Avoidance"	0.726
	"Hyperactivation"	0.749

Questionnaire scale blocks	Questionnaire scales and general indicators of the PTS	Cronbach's α-index
	"Distress and maladjustment"	0.730
Additional cross scales	"Depression"	0.722
	"Sleep disturbance"	0.724
	"Value dissonance"	0.741
General indicators of the PTS	"Total GSR"	0.939
	"Total PTSD Score"	0.933
	"Total MT indicator"	0.944
	"Total PTSD score, which is complicated byMT"	0.948

The exclusion of any item from individual scales or the total score did not increase Cronbach's α. This indicates that there is no need to adjust or replace any statements in the developed questionnaire.

The correlation coefficients of the scales of the "Posttraumatic Stress Differentiation Questionnaire" are given in Table 6, and the correlation coefficients of the scales of the developed questionnaire and the "Traumatic Stress Questionnaire" are given in Table 7.

As we can see from Table 6, all scales have satisfactory correlation coefficients, which indicate both the internal consistency of the methodology and their differential ability.

The scales "General GSR Index", "General PTSD Index", "General MT Index" and "General PTSD Index Complicated by MT" have too dense correlation indices, which should indicate a low differential ability of the method (r = 0.99 for all intercorrelations of the "General Scales" block). However, the questionnaire is designed in such a way that the decision on the existing symptom complex (differentiation) is made at the stage of calculating the "starting point" – "Trauma Events – Postponement". Therefore, during the implementation of the developed methodology, only one general index is calculated for each specific respondent, which meets the additional conditions specified for calculating the general index. Other general scales are not calculated, since they cannot meet alternative conditions.

Another indicator of reliability is retests reliability. However, the developed methodology is intended for the diagnosis of conditions that are characterized by certain dynamics. In addition, in rehabilitation centres, all servicemen undergo individual and group psychological recovery programs, respectively, it was not possible to conduct a retest reliability procedure with the specified target group. However, it is planned that the use of the questionnaire will undergo further testing on a sample of servicemen who have been withdrawn from the combat zone to restore combat readiness or rotation, which will allow further clarification of some psychometric characteristics of the methodology.

To determine the validity of the method, its data were compared with the data of the "Traumatic Stress Questionnaire", the structure of which was taken as the basis of the "Posttraumatic Stress Differentiation Questionnaire", as well as with the data of the methods "Mississippi PTSD Determination Scale", "Maladaptivity", "Scale for Assessing the Impact of Traumatic Events", PHQ-9, "Combat Experience Intensity Scale" and "Assessment of Negative Mental Reactions and States in Military Personnel".

As can be seen from the data in Table 7, the developed methodology has high and statistically significant ($p \leq 0.01$) correlation coefficients with similar scales of the "Traumatic Stress Questionnaire". Thus, the "Dissociation" scale correlates with the "Dissociative Symptoms of PTSD" scale at the level of r = 0.79; the "Reexperiencing Trauma" scale correlates with the "Intrusion of PTSD" (r = 0.73) and "Intrusion of PTSD" (r = 0.72); the "Avoidance" scale correlates with the "Avoidance of PTSD" (r = 0.72) and "Avoidance of PTSD" (r = 0.49) scales. Note that, as indicated above, the "Avoidance" scale had low α-Cronbach's alpha values for the sample of servicemen who underwent a psychological recovery program. Also, the "Hyperactivation" scale correlates with the "Hyperactivation of GSD" scales (r = 0.72) and "Hyperactivation of PTSD" scales (r = 0.74); the "Distress and maladjustment" scale correlates with the "Distress and maladjustment of GSD" scales (r = 0.65) and "Distress and maladjustment of PTSD" scales (r = 0.69). The general indicators of GSD correlate at a very high level (r = 0.85), the general indicators of PTSD – at a level of r = 0.84, additional scales also have high correlation indicators.

Table 6 – Correlation indicators of the scales of the "Posttraumatic Stress Differentiation Questionnaire" (n = 242 servicemen)

Scales	"Trauma Event"	"PM-PTSD"	"PM-MT"	"PM-PTSD+MT"	"Dissociative symptoms"	"Re-experiencing trauma"	"Avoidance"	"Hyperactivation"	"Distress and maladiustment"	"Depression"	"Sleep disturbance"	"Value dissonance"	Total GSR indicator	Total PTSD score	Total MT score	Overall PTSD score complicated by MT
"Trauma Event"	1.00**	0.55**	0.59**	0.66**	0.72**	0.62**	0.68**	0.65**	0.68**	0.66**	0.57**	0.67**	0.82**	0.82**	0.81**	0.81**
"PM-PTSD"		1.00**	0.51**	0.87**	0.60**	0.55**	0.58**	0.63**	0.59**	0.52**	0.54**	0.58**	0.67**	0.73**	0.67**	0.72**
"PM-MT"			1.00**	0.86**	0.62**	0.65**	0.53**	0.58**	0.61**	0.57**	0.60**	0.58**	0.69**	0.69**	0.73**	0.73**
"PM-PTSD+MT"				1.00**	0.70**	0.69**	0.64**	0.70**	0.69**	0.63**	0.65**	0.67**	0.78**	0.82**	0.81**	0.83**
"Dissociative symptomatology"					1.00**	0.73**	0.75**	0.73**	0.77**	0.78**	0.73**	0.78**	0.90**	0.86**	0.86**	0.86**
"Re-experiencing trauma"						1.00**	0.67**	0.68**	0.70**	0.71**	0.86**	0.70**	0.85**	0.85**	0.85**	0.84**
"Avoidance"							1.00**	0.69**	0.74**	0.87**	0.64**	0.76**	0.87**	0.87**	0.86**	0.86**
"Hyperactivation"								1.00**	0.75**	0.71**	0.73**	0.70**	0.87**	0.88**	0.86**	0.86**
"Distress and maladjustment"									1.00**	0.82**	0.77**	0.89**	0.89**	0.89**	0.91**	0.91**
"Depression"										1.00**	0.69**	0.76**	0.87**	0.86**	0.87**	0.86**
"Sleep disturbance"											1.00**	0.67**	0.83**	0.82**	0.82**	0.82**
"Value dissonance"												1.00**	0.86**	0.86**	0.90**	0.90**
Total GSR indicator													1.00**	0.99**	0.99**	0.99**
Total PTSD score														1.00**	0.99**	0.99**
Total MT score															1.00**	0.99**
Overall PTSD score complicated by MT																1.00**

Note. *p ≤ 0.05; **p ≤ 0.01.

Table 7 – Correlation indicators of the scales of the "Posttraumatic Stress Differentiation Questionnaire" and the "Traumatic Stress Questionnaire" (n = 133 servicemen)

Questionnaire scales		"Traumatic Stress Questionnaire"														
		"Trauma Event"	"Dissociative symptoms of ADHD"	"GSR Invasion"	"Avoiding GSR"	"Hyperactivation of the GSR"	"Distress and maladaptation of GSR"	Total GSR indicator	"PTSD Invasion"	"Avoiding PTSD"	"PTSD Hyperactivation "	"Distress and maladjustment of PTSD"	Total PTSD score	"Sleep disturbance"	"Survivor's guilt"	"Depression"
"Posttraumatic Stress Differentiation Questionnaire"	"Trauma Event"	0.36**	0.59**	0.47**	0.41**	0.53**	0.48**	0.60**	0.46**	0.58**	0.55**	0.46**	0.61**	0.36**	0.38**	0.55**
	"PM-PTSD"	0.25**	0.43**	0.47**	0.37**	0.45**	0.35**	0.51**	0.47**	0.40**	0.47**	0.32**	0.50**	0.41**	0.38**	0.34**
	"PM-MT"	0.16*	0.49**	0.51**	0.31**	0.50**	0.39**	0.54**	0.49**	0.39**	0.51**	0.33**	0.51**	0.41**	0.47**	0.36**
	"PM-PTSD+MT"	0.24**	0.54**	0.58**	0.40**	0.56**	0.43**	0.62**	0.56**	0.46**	0.57**	0.38**	0.59**	0.48**	0.50**	0.41**
	"Dissociation"	0.25**	0.79**	0.62**	0.46**	0.64**	0.56**	0.73**	0.63**	0.63**	0.66**	0.53**	0.72**	0.56**	0.47**	0.63**
	"Re-experiencing trauma"	0.27**	0.58**	0.73**	0.48**	0.63**	0.56**	0.73**	0.72**	0.55**	0.65**	0.50**	0.71**	0.63**	0.51**	0.54**
	"Avoidance"	0.33**	0.66**	0.58**	0.49**	0.58**	0.61**	0.69**	0.59**	0.72**	0.61**	0.64**	0.73**	0.47**	0.45**	0.73**
	"Hyperactivation"	0.23**	0.59**	0.59**	0.45**	0.72**	0.62**	0.73**	0.62**	0.59**	0.74**	0.60**	0.74**	0.61**	0.39**	0.57**
	"Distress and maladjustment"	0.28**	0.58**	0.54**	0.40**	0.64**	0.65**	0.66**	0.56**	0.69**	0.65**	0.69**	0.72**	0.49**	0.42**	0.68**
	"Depression"	0.31**	0.65**	0.57**	0.48**	0.61**	0.70**	0.71**	0.58**	0.74**	0.62**	0.70**	0.75**	0.48**	0.50**	0.80**
	"Sleep disturbance"	0.24**	0.59**	0.70**	0.43**	0.72**	0.55**	0.74**	0.70**	0.60**	0.73**	0.52**	0.75**	0.73**	0.38**	0.59**
	"Value dissonance"	0.29**	0.56**	0.51**	0.37**	0.54**	0.48**	0.60**	0.52**	0.63**	0.55**	0.47**	0.64**	0.39**	0.48**	0.59**
	Total GSR indicator	0.34**	0.76**	0.71**	0.53**	0.75**	0.68**	0.85**	0.72**	0.75**	0.77**	0.66**	0.83**	0.63**	0.52**	0.74**
	Total PTSD score	0.35**	0.72**	0.71**	0.54**	0.75**	0.67**	0.82**	0.72**	0.74**	0.77**	0.66**	0.84**	0.63**	0.52**	0.73**
	Total MT score	0.34**	0.71**	0.69**	0.51**	0.73**	0.66**	0.81**	0.70**	0.74**	0.75**	0.64**	0.83**	0.60**	0.54**	0.72**
	Overall PTSD score complicated by MT	0.35**	0.71**	0.70**	0.52**	0.73**	0.65**	0.81**	0.71**	0.74**	0.76**	0.64**	0.83**	0.60**	0.54**	0.71**

Note. *$p \le 0.05$; **$p \le 0.01$.

Thus, the "Depression" scale correlates at a level of r = 0.80, and "Sleep disturbance" – at a level of r = 0.73. The "Value Dissonance" scale correlates with the "Survivor Guilt" scale at a statistically significant level of r = 0.48.

Compared to the above, the correlations of the "Trauma Event" scales are significantly lower (r = 0.36). This is a consequence of the fact that in the "Traumatic Stress Questionnaire" the specified scale has low α-Cronbach's coefficients, as a result of which for the questionnaire developed by the authors it was significantly changed and divided into two components: "Trauma Event – Procrastination". However, the "Trauma Event" and "Procrastination" scales have quite high correlations with the general indicators of GSD and PTSD of the "Traumatic Stress Questionnaire" (r is from 0.50 to 0.62), which allows us to consider them as sufficiently reliable "starting points" for the formation of these symptom complexes.

Of course, unlike the "Traumatic Stress Questionnaire", the developed "Posttraumatic Stress Differentiation Questionnaire" does not allow considering the specifics of the symptoms of the "Intrusion", "Avoidance", "Hyperactivation", "Distress and maladjustment" scales in GSD and PTSD, however, for express methods and screenings this is quite acceptable.

As already indicated, in addition to the "Traumatic Stress Questionnaire", the developed "Posttraumatic Stress Differentiation Questionnaire" was also compared with other psychodiagnostic methods. Thus, to determine the validity of the scales of the "Trauma Events – Postponement" block, correlation with the "Combat Experience Intensity Assessment Scale" was used [16]. 109 servicemen participated in the study of the correlation between the "Combat Experience Intensity Assessment Scale" and the "Posttraumatic Stress Differentiation Questionnaire". The correlation indicators turned out to be weak and once again confirmed the data that for servicemen, participation in combat operations in itself, their intensity is not necessarily a traumatic event. Back in 1999, D. King and colleagues have shown that the impact of trauma is a necessary but insufficient cause of PTSD, and it is important to consider the personality, its development, and the changing environments of post-traumatic recovery [4].

The authors-developers established correlation indices between the "Combat Experience Intensity Assessment Scale" and the scales "Trauma Event" ($r = 0.18, p \leq 0.05$), "PM-PTSD" ($r = 0.22, p \leq 0.05$), "PM-MT" ($r = 0.07, p > 0.05$), "PM-PTSD+MT" ($r = 0.19, p \leq 0.05$). The correlation also showed that participation in combat operations itself is not a sufficient condition for the development of symptoms of GSD, PTSD and MT. In particular, the "Combat Experience Intensity Assessment Scale" has the following correlation indices with the general indices of the developed questionnaire: "General GSD index" $r = 0.19, p \leq 0.05$; "Total PTSD score" $r = 0.21, p \leq 0.05$; "Total MT score" $r = 0.19, p \leq 0.05$; "Total PTSD score complicated by MT" $r = 0.20, p \leq 0.05$. For comparison: "Mississippi PTSD scale" has almost the same level of correlation with "Combat Experience Intensity Rating Scale" ($r = 0.23, p \leq 0.05$).

It is worth noting that when developing the scale "Trauma Event – Postponement", the authors proceeded not so much from the fact of the event, but from the attitude towards it as something irresistible, such that destroys the idea of oneself, one's capabilities and values. In this context, the interrelationships of the scales "Trauma Event – Postponement" with the scales of the methodology "Assessment of Negative Mental Reactions and States in Military Personnel" [19] are of interest. Thus, "Trauma Event" has the closest connections with the scale" Feeling of Powerlessness" ($r = 0.59, p \leq 0.01$); the scale "PM-PTSD" – with the scale "Desolation" ($r = 0.53, p \leq 0.01$); "PM-MT" – with the scale "Self-doubt" ($r = 0.50, p \leq 0.01$). The general scale "PM-PTSD+MT" is more closely related to the scales "Desolation" ($r = 0.56, p \leq 0.01$) and "Self-doubt" ($r = 0.58, p \leq 0.01$). These relationships are fully consistent with the well-known ideas about self-perception (self-perception) in a traumatic event and its emotional assessment as a source of negative consequences for further self-realization.

To determine the ability of the developed methodology to describe individual symptoms associated with the impact of traumatic events, a comparison with the "Scale for Assessing the Impact of Traumatic Events" [16] was used. In particular, the following statistically significant relationships were established: 6 between the scale "Reexperiencing Trauma" and the scales "Intrusion" ($r = 0.69, p \leq 0.01$) and "Avoidance" ($r = 0.60, p \leq 0.01$); between the scale "Hyperactivation" and the scale "Excitability" ($r = 0.60, p \leq 0.01$). Therefore, the developed questionnaire is quite capable of determining this symptomatology regardless of PTSD and GSD.

The scale "Distress and maladjustment" correlates at a statistically significant level with the scale "Behavioural regulation disorders" of the

"Maladaptivity" method ($r = 0.72$, $p \leq 0.01$) and its "General indicator" ($r = 0.75$, $p \leq 0.01$). Statistically significant relationships have also been established between the additional scale "Value dissonance" and the scale "Moral norm violations" of the "Maladaptivity" method ($r = 0.50$, $p \leq 0.01$). In addition, the scale "Violation of moral normativity" of the "Maladaptiveness" technique has close correlations with the "Total MT index" ($r = 0.55$, $p \leq 0.01$) and the "Total PTSD index complicated by MT" ($r = 0.54$, $p \leq 0.01$).

The additional scale "Depression" is statistically significantly correlated with the scale "Depression" PHQ-9 ($r = 0.59$, $p \leq 0.01$). The additional scale "Depression" is also most closely related to such scales of the methodology "Assessment of negative mental reactions and states in military personnel" as "Desolation" ($r = 0.61$, $p \leq 0.01$), "Self-doubt" ($r = 0.56$, $p \leq 0.01$), "Apathy" ($r = 0.54$, $p \leq 0.01$), "Anxiety" ($r = 0.54$, $p \leq 0.01$), "Feeling of powerlessness" ($r = 0.52$, $p \leq 0.01$) and "Unwillingness to communicate" ($r = 0.51$, $p \leq 0.01$).

"Mississippi PTSD Scale" correlates with all general indicators of the developed questionnaire at the level of $r = 0.62–0.63$, $p \leq 0.01$. The general indicator of the method "Maladaptiveness" correlates with all general indicators of the developed questionnaire at the level of $r = 0.76–0.77$, $p \leq 0.01$.

As we can see from the presented data, the content of the scales of the "Posttraumatic Stress Differentiation Questionnaire" corresponds to the specified one, and the developed methodology can be used as an initial screening (assessment) of the presence/absence of symptoms of ASD, PTSD, MT, and PTSD complicated by MT, depression, and their differentiation.

It should be noted that this study did not establish external validity indicators, since the military personnel of the psychological rehabilitation centres, who were the target sample, mostly had some signs of psychological trauma, which was usually the reason for their referral to these centres. Thus, only less than 20 % of the military personnel who underwent the psychological recovery program were not aware of the presence of a traumatic event and its destructive impact. However, it is planned to establish external validity indicators on a sample of military personnel who were withdrawn from the combat zone to restore combat readiness or for rotation.

An important task in establishing the psychometric indicators of the "Posttraumatic Stress Differentiation Questionnaire" was its normalization for a sample of military personnel who underwent a psychological recovery program. To do this, the authors correlated the general PTSD indicators of the developed methodology with the general indicators of the "Traumatic Stress Questionnaire" and the "Mississippi PTSD Definition Scale". They managed to identify a threshold value that allows differentiating military personnel without symptoms of GSD/PTSD and those who have such symptoms. For both the "General GSD Indicator" and the "General PTSD Indicator", this threshold was a value of 17 points. Therefore, determining in servicemen a range from 0 to 17 points according to the "General GSR Index" in case of compliance with the conditions of "Trauma Event – Postponement" allows us to decide about the absence (insignificant intensity) of GSR symptoms, which corresponds to the range from 0 to 64 T-scores according to the "Traumatic Stress Questionnaire" method with a probability of 91 %. Establishing in servicemen a range from 0 to 17 points according to the "General PTSD Index" in case of compliance with the conditions of "Traumatic Stress Questionnaire" allows us to make a decision about the absence (insignificant intensity) of PTSD symptoms, which corresponds to the range from 0 to 64 T-scores according to the "Traumatic Stress Questionnaire" method with a probability of 95 % and the range from 0 to 78 points according to the "Mississippi PTSD Determination Scale" with a probability of 80.5 %.

Unfortunately, it was not possible to establish the same clear correlation for the second threshold, which separates individual symptoms from clinically formed PTSD, primarily due to the fact that these thresholds do not coincide in the "Traumatic Stress Questionnaire" and the "Mississippi PTSD Definition Scale". However, positioning the author's methodology as a screening method that provides an initial assessment, and considering that it is not within the competence of a psychologist to establish a diagnosis of PTSD, we note that it is more important to clearly define the first threshold as one that indicates the need for psychological assistance.

Interestingly, for the general indicator of MT, the critical threshold was set at 18 points, and for the "General indicator of PTSD complicated by MT" at 20 points. This critical level was determined by the ratio of the average value and above of the scale "Violation of moral normativity" of the "Maladaptiveness" methodology.

When analysing the normalization of other scales, it is worth paying attention to the fact that for the scales "Trauma Event" or "PM-…" even 1 choice is considered diagnostically significant. For other scales, the traditional allocation of intensity levels is provided (Table 8).

The average indicators on the general and additional scales allow us to introduce a single scale for assessing the intensity of PTSD: 0-2 points – low level; 3-5 points – medium level; 6-7 points – high level, where the only exception is the indicators of "Hyperactivation". It should be noted that servicemen who were withdrawn from the combat zone maintained high indicators of arousal in the first week of psychological recovery, which, however, decreased by the end of the second week. Presumably, this will allow us to use the general scale for "Hyperactivation", for example, on a sample of servicemen who were withdrawn for rotation for a period of more than a month. These data will be specified during further testing of the developed questionnaire.

Table 8 – Norms for the main, additional and general scales of the "Posttraumatic Stress Differentiation Questionnaire" for military personnel undergoing psychological recovery

Scales	Level of intensity of PTS		
	low	average	high
For the main scales of the questionnaire			
Dissociative symptoms	0-2	3-5	6-7
Re-experiencing the trauma	0-2	3-5	6-7
Avoidance	0-2	3-5	6-7
Hyperactivation	0-3	4-6	7
Distress and maladjustment	0-2	3-5	6-7
For additional questionnaire scales			
Depression	0-2	3-5	6-7
Sleep disturbances	0-2	3-5	6-7
Value dissonance	0-2	3-5	6-7
For general questionnaire scales			
Indicators	No symptoms or insignificant	Partially formed symptom complex	The formed symptom complex requires clarification of the diagnosis by a doctor
Total GSR indicator	0-17	18-31	32-40
Total PTSD score	0-17	18-29	30-36
Total MT score	0-18	19-34	35-43
Overall PTSD score complicated by MT	0-20	21-36	37-46

Conclusion

The developed "Questionnaire for Differentiation of Posttraumatic Stress" retains the general features of the structure of the "Questionnaire for Traumatic Stress", however, it is a simpler psychodiagnostic tool for differentiating the signs of acute stress reaction and post-traumatic stress disorder. In addition, the developed questionnaire allows you to form an idea of the presence of symptoms of moral trauma, which, unlike post-traumatic stress disorder, does not arise on the basis of a life-threatening situation experienced, but on the basis of destroyed ideas about one's own morality. The method has satisfactory indicators of reliability and internal validity for a sample of military personnel who underwent a psychological recovery program. Work in psychological recovery rehabilitation centres imposes a number of restrictions on conducting empirical research for ethical reasons.

Further testing of the methodology and refinement of its psychometric characteristics are planned for a sample of military personnel who have been withdrawn from the combat zone to restore combat readiness. The authors of the article invite interested psychologists of the security and defines forces of Ukraine to cooperate.

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«ОПИТУВАЛЬНИК ДИФЕРЕНЦІАЦІЇ ПОСТТРАВМАТИЧНОГО СТРЕСУ»: МОДИФІКАЦІЯ, АПРОБАЦІЯ, ПСИХОМЕТРИЧНІ ПОКАЗНИКИ

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З початком широкомасштабних бойових дій і залученням до них великої кількості українських військовослужбовців гостро постало питання діагностики і профілактики бойового стресу. Прояви бойового стресу, які переживають військовослужбовці, мають багато спільних рис. Проте є різні прогнози щодо стійкості негативних наслідків для особистості військовослужбовців, і тому необхідні різні підходи до надання психологічної допомоги, вихідною точкою якої є диференційна діагностика таких проявів.

У статті описано процедуру розроблення і стандартизації психодіагностичного інструменту «Опитувальник диференціації посттравматичного стресу». Наведено особливості створення опитувальника та його апробації на вибірці українських військовослужбовців після участі в інтенсивних бойових діях. Визначено показники внутрішньої погодженості структури опитувальника (α-Кронбаха та взаємокореляції) та його валідності (кореляція зі шкалами психодіагностичних методик). Здійснено нормування опитувальника для військовослужбовців після інтенсивних бойових дій. Використання опитувальника дає змогу виявити і диференціювати гострі стресові реакції та ознаки посттравматичного стресового розладу в особистості після впливу психотравмівної події з урахуванням певного періоду. Крім того, розроблений опитувальник дає змогу сформувати уявлення про наявність симптомів моральної травми, яка, на відміну від посттравматичного стресового розладу, виникає не на підґрунті пережитої загрозливої для життя ситуації, а на підґрунті зруйнованих уявлень про свою моральність.

Ключові слова: *посттравматичний стрес, гостра стресова реакція, посттравматичний стресовий розлад, моральна травма, психологічне відновлення, військовослужбовці.*

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