

RESEARCH ARTICLE

Posttraumatic growth and rehabilitative resources of the combatants and demobilized servicemen

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ABSTRACT

The combat experience of military and demobilized persons combines the influence of combat and non-combat stressors with combat conditions and stressors associated with being in the combat zone, which leads to severe personal injury, symptoms of posttraumatic stress disorder and severe stress adaptive capacity. The resource of mastering combat stress is vitality, which is confirmed by the general viable position of the subjects, focused on effective self-development. Combatants show marked signs of maladaptation, but half of them report an increase in the value of life, spiritual growth and a general trend of personal growth, with women significantly exceeding men in terms of increasing personal strength. The aim of the research is to reveal the indicators of posttraumatic growth and personality rehabilitative resources of combatants and demobilized servicemen. Therefore, the posttraumatic growth of combatants goes hand in hand with attempts to adapt to a difficult situation. The main strategies for resisting stress in these conditions are cognition and recourse to physical activity. It is the resource of physical activity that is significantly positively correlated with indicators of posttraumatic personal growth. Personality posttraumatic growth indicators have been substantiated: change in attitude

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toward others, emergence of new opportunities, increase in strength of personality, spiritual changes, increase in the value of life, and general posttraumatic growth. The resource of rehabilitation potential, which is little used, is the appeal to the sphere of imagination and emotional sphere. The military does not sufficiently use the resources of faith and search for social support, which in crisis conditions are productive strategies. Sustainability is an important component of personal rehabilitation potential, but at this stage of a difficult situation, the personal resources involved are a person's activity in overcoming difficulties, his/her desire to act and win, the desire not to lose this meaning, to express their personal potential.

Keywords: resilience; rehabilitation; resistance; resources; posttraumatic personal growth

1. Introduction

Combat activity is a very strong psycho-traumatic situation, in which professional, situational-and psychogenic, personal (direct and indirect) stress factors act on the personality of a serviceman. The high level of psychotraumatization of servicemen and immobilized persons, and the spread of disadaptive posttraumatic mental states cause an acute problem of psychological and social aid to individuals who take part in hostilities. One of its forms is rehabilitation. The modern system of socio and psychological rehabilitation of veterans of military service is based on a complex and systemic approach. It combines medical, psychological, and social components. Mass psychological trauma causes increased attention to use of the rehabilitative potential of the family and the environment, the potential of the rehabilitated, and their mental adaptation reserves, and resources. In the psychological literature, they are described in the terms "stamina", "adaptive capabilities", "tolerance to stress" and so forth. In general, the effective use of resources contributes to counteracting stress, the restoration of functional state, personal development, growth of self-esteem, and personal well-being.

One of the components of the personal potential of effective self-development in stressful situations and extreme living conditions is personal resilience. It helps a person to build an effective social interaction and find optimal ways of self-development and self-realization in difficult life circumstances. Resilience, as a life attitude, allows you to accept, be aware of events that cause fear and anxiety, rather than avoid them. It is mainly associated with the mobilization of personal and social resources for stress coping.

Emotional resilience of military personnel refers to their ability to effectively manage their own emotions and stressful situations, especially when exposed to information that may be negative or potentially traumatic. The main point is to remain calm, focused and determined despite difficult circumstances and the influence of external factors. This is especially important for military personnel who may encounter extreme situations and potentially traumatic events in the course of their duties. Strong emotional resilience can prove vital to their success and safety and the country as a whole. The relevance of rehabilitation resources for combatants is determined by the urgent need to overcome the physical, mental and social consequences of war. Due to the fact that participants in conflicts may face injuries, stress and other severe consequences of war-conflict situations, rehabilitation resources become a key element of ensuring full recovery and integration of these persons into society.

The availability of effective rehabilitation programs helps to ensure the fastest possible recovery of physical health and functionality of combatants, and also provides them with the necessary tools to overcome psychological trauma and stress. In addition, rehabilitation measures contribute to the social reintegration of veterans, creating conditions for their successful inclusion in working and public life. This is important for maintaining psychosocial stability in society and improving the quality of life of the combatants themselves. In general, the relevance of rehabilitation resources lies in their ability to ensure the full recovery and integration of war-affected persons and to contribute to the creation of a sustainable, healthy and harmonious society.

The research of Denhere et al. presented the interoperability readiness of healthcare practitioners in Zimbabwe considering influence by institutional support and government policy through standards and regulation including personnel training^[1]. The SWOT-analysis usage from the standpoint of comprehensive understanding of prospects for improving public health on the principles of prevention, or reduction of injuries and mortality was performed in the study of Kychko et al.^[2]. The quality of life of the people in the Lam Ta Khong Wind Turbine Project area in Thailand was analyzed using the computer program SPSS (Version 25) in order to study happiness, stress and life quality levels by Ketbumroong et al.^[3].

Some authors investigated the existence of differences in the level of learned disability among abused women in Jordan following the study variables, age, marital status, and educational level^[4]. They build specialized counseling programs based on counseling and psychotherapy theories concerned with rehabilitating abused women of different ages. Nazarko substantiated effective management of the medical institution in the context of health care reform^[5]. Implementation of an effective system to minimize harm from drug use in health and public safety was presented by Kuryliuk et al.^[6].

Dhamra did research on post-Traumatic stress symptoms among a sample of abused women and the results indicated the prevalence of symptoms of anxiety^[7]. Some issues of aging, financing, innovation in the health care system and sustainable development of the regions were discussed by several studies^[8–14]; U.S. Care Infrastructure^[15]; priorities in effective management of health care institutions in Lithuania^[16]; difficulties and countermeasures in performance management of primary health care institutions in China^[17]; satisfaction with Japanese health care^[18]; equity of access to health care services in the UK^[19].

Myshketa et al.^[20] investigated the relationship between socio-demographic variables, such as gender, age, level of education, level of income, and patient satisfaction regarding the quality of private and public hospital service in Albania. Socio-psychological peculiarities of a person who confidentially provides assistance to the operational unit personnel have been substantiated by Khalymon et al.^[21].

Bogic et al.^[22] reviewed the long-term mental health of adult war-refugees after 5 or more years of their resettlement and found that mental disorders remained significant among these war-refugees as a result of pre-migration war traumas. Social capital and chronic post-traumatic stress disorder among survivors of the 2007 earthquake in Pisco, Peru was revealed in the study of Flores et al.^[23]. Posttraumatic stress disorder in the aftermath of a disaster was studied by Hikichi et al.^[24]. Trauma-related dissociation within conceptual clarity lost and found, and concept of psychological trauma was considered by Van der Hart et al.^[25], Van Der Hart and Brown^[26].

Researchers offered a number of constructs describing personal resources for mastering stressful situations: locus of control, optimism, coherence, resilience, and basic beliefs. In general, a fairly wide range of phenomena of human mental life and external variables covering material and immaterial, external and internal variables, mental and physical states, volitional, emotional, and energy characteristics are considered as resources in psychology.

The ability of a person to control his or her own health resources and to use socially acceptable ways for this purpose is described by the notions of “vitality”, “hardiness” and “resilience”^[13]. Vitality is intrinsic to a person as an individual, and resilience is a personal formation that develops at a certain stage of ontogenesis. It characterizes the degree of a person’s ability to withstand a stressful situation to maintain internal balance.

In a person who has experienced a traumatic event, the mechanism of resilience is actualized. This allows for constructive solutions to unfavorable life situations^[13]. The psychological component of resilience affects the nature of relationships between people, causing more openness, interest in people. The activity component of resilience includes actions aimed at mastering the stressful situation. Such as, for example, taking care of

one's health. Both components form a system, which protects a person from exorbitant anxiety.

Such scholars as Overchuk et al. considered fundamental aspects of ensuring the quality of life of persons with disabilities in Ukraine, recognition of their right to a full life in society, and the creation by the state of appropriate conditions for their rehabilitation and social integration. They substantiated some changes in the recognition of their rights to a full life in society and the creation of appropriate conditions for their rehabilitation and social integration^[10].

Individual resources of personality and natural resilience during a crisis describe the Basic Ph, Model of M. Laad. In this model, the author connects resilience with the individual style of stress control—the process of resistance to circumstances. It is an effort that is made to solve interpersonal problems, to minimize, reduce, and endure a stressful or conflict situation. This term describes the ability to self-stabilize and follow socially normative schemes of behavior in a situation, the ability to get out of a crisis without serious psychosomatic and mental symptoms. In general, it is a certain personal, unique style of coping skills that is acquired over a lifetime. It is created by a combination of six basic channels. Each of them “helps” to get out of a crisis: faith (Belief and values), emotions (Affect and emotion), communication (Social), imagination (Imagination), prudence (Cognition and thought) and physical activity (Physiology and activities). In practice, this model helps to establish the strengths of personality and to focus on what the client is lacking to successfully counteract the effects of stress^[27].

The war significantly changes the value-semantic sphere of the individual his/her life priorities. As a result, returning to a peaceful life, the veteran has to adapt to it again. The experience of war causes various types of social and psychological disadaptation of the individual. However, it is impossible not to consider formation of new skills, growth of experience, professionalism, reassessment of values, new priorities, and growth of social status^[28]. They are an indicator of “posttraumatic growth”^[29]. It is necessary to emphasize that these changes are not a direct consequence of the traumatic event and an end in itself, but occur in parallel with the personality's attempts to adjust to difficult circumstances in life. Personal growth occurs against a background of a high level of psychological distress and can even be an unexpected result for the person and occur against the background of use of rehabilitative resources, both social and personal.

The aim of the research is to reveal the indicators of posttraumatic growth and personality rehabilitative resources of combatants and demobilized servicemen.

2. Materials and methods

2.1. Participants

Twenty-seven combatants (17 men and ten women) who had been in the combat zone—from 1 month to 2.5 years—participated in the study. The average age of the men was 32.5 years (23 to 51). Average age of women (23 to 49 years)—33.6 years. The work was conducted on the basis of the 56th Independent Motorized Infantry Brigade (23rd Motorized Infantry Battalion), 57th Independent Motorized Infantry Brigade (1st Motorized Infantry Battalion), 92nd Independent Mechanized Brigade of the Armed Forces of Ukraine.

2.2. Procedure and methods

Considering the topicality of the stated problem, the authors conducted a study aimed at revealing the specifics of the rehabilitative resources of service persons, in particular, the personal component of rehabilitative potential, and its connection with the posttraumatic growth of personality.

At the beginning of the work, the nature of the combat experience of the sample under study and the level of its traumatization were evaluated. Subsequently, the personal rehabilitation resources of the military and

demobilized were investigated and the posttraumatic growth potential of the servicemen was studied. At the last stage, the structure of interrelations between the personal rehabilitative resources of the military and the demobilized (stability strategies, level of resilience) and the possible posttraumatic growth of the military personnel's personality were elucidated. The study paid attention to identifying gender differences.

The "Scale of Combat Experience Intensity Evaluation", Mississippi Scale of Posttraumatic Reactions Evaluation (military version) was applied to evaluate the nature of combat experience of the subjects and the level of their traumatization. To reach the objectives of the research "Resilience Test" (modification of the English version of Muddy's resilience test) questionnaire of resistance strategies developed on the basis of Laad's Basic Ph model; questionnaire of posttraumatic growth developed by Tadeshi and Calhoun were used.

The method of correlation analysis (Pearson's linear correlation method) allowed us to establish the structure of interrelations between the variables and to identify the main correlation pleiades. The reliability of differences was assessed using the nonparametric Mann-Whitney U-criterion. Data processing was performed using Excel statistical data processing package.

3. Results

Combat trauma can be considered a significant life event, encompassing not only physical and psychological aspects, but also a wide range of effects on personality and life direction. This can include being injured, seeing mutilated bodies, losing comrades, and having to be personally involved in difficult situations such as murder or mutilation. However, it is important to consider that traumatic experiences can also arise as a result of solicitation and unexpected challenges, which are an integral part of military conflict. Equipment breakdowns, problems in the chain of command, organizational difficulties, fatigue and breakdowns, troop rotations can create stress and double the workload for participants. Therefore, considering the trauma in a broad context allows us to understand that not only direct combat actions, but also everyday situations on the front line can leave a deep mark on the physical and mental state of individuals, requiring a comprehensive approach to rehabilitation and support of the participants.

Using the Scale for assessing the intensity of combat experience, it was established that the combat experience of the subjects is quite diverse. The sample under study represented a heterogeneous group of combat participants and reflected the heterogeneity of combat conditions. The majority (89%) of the researched returned to military service after participation in hostilities, 11% were demobilized. 51% of those studied had been in the enemy fire zone, with 29% for more than 6 months. 33% of those surveyed had observed wounds and deaths during combat operations, and 43% had themselves been in danger of being killed or wounded (by bullets, shells, and cold steel), ambushes, and other very dangerous situations. Most often (31.7% of those tested) reported being under direct enemy fire (firearms, artillery, rockets or mortars, and sniper fire (31.5%). 22% had experience of being stationed in an observation post on the front lines. 11% have been exposed to mines or mine traps while on patrol or in the duty station and ambushed. 7% had contusions, and 3% were injured and disabled due to combat operations.

Consequently, the data obtained are extremely important for understanding the extent and nature of trauma and stress experienced by combatants. This information will influence rehabilitation resources aimed at the physical and mental recovery of these individuals. In general, rehabilitation resources should be adapted to the specific needs and traumatic experiences of combatants, providing a comprehensive approach to their recovery and reorientation to civilian life.

The analysis of the data obtained with the "Mississippi Scale for the Assessment of posttraumatic reactions" recorded the manifestations of posttraumatic stress disorder in the examined people. It was

established that in 24 personalities (89% of the subjects), the scale indicators exceeded 112 points. No adapted personalities were found. In general, this indicates a pronounced prolonged effect of combat trauma on the subjects, the continuation of a strong stressful impact on those who continue to be in the combat zone, and the possibility of them experiencing intrapersonal conflict, deepening the stress. The average scale score in the female sample ($m = 132.6$ points) exceeds the average score in the male sample ($m = 116.9$).

Therefore, the data obtained using the “Mississippi Scale for the Assessment of posttraumatic reactions” are extremely important and provide important insight into the level of post-traumatic stress disorder among combatants, which significantly affects the need and organization of rehabilitation resources. Also, it is important to consider that the absence of adapted personalities in the sample indicates serious difficulties and the need for individualized approaches to rehabilitation. Pronounced intrapersonal conflict and continued stress exposure indicate the need to include psychological and psychotherapeutic interventions in rehabilitation programs. Differentiation by gender is also important, as the mean score in the female sample is higher than the mean score in the male sample. This may show different psychological and emotional needs that require a gender-sensitive approach when formulating rehabilitation strategies. In general, taking into account these it provides an opportunity to adapt rehabilitation resources for effective assistance to participants in military operations and to correct their mental state.

The generalized results of the study of indicators of vitality ($N = 27$) in female and male according to the method of Leontiev are presented in **Table 1**.

Table 1. Vitality indexes (resilience test) ($N = 27$).

Group	Scales			
	Involvement (points)	Control (points)	Risk Taking (points)	Total value (points)
Men	35.1	29.8	15.1	80
Women	42.6	35.7	19.4	97.7
Generalized group	37.9	32	16.7	86.6

The data obtained are within the normal range, except for the scores on the Risk taking scale, which are higher than the average values in the women’s group.

Comparing the data of the groups of men and women, we did not find a statistically significant difference, but we can state a tendency to significant differences between them (**Table 2**) according to the indicators of the scales “Involvement” ($U_{emp} = 43$), “Risk-taking” ($U_{emp} = 40$) and the level of general resilience ($U_{emp} = 44$). It was found interesting because the difference in the vitality indicators of the researched was determined by their age, but not by gender and education.

Table 2. Differences between the studied groups (resilience test).

Scales	Value U_{emp}	Significance of differences
Involvement	43	uncertainty
Control	56	insignificance
Risk taking	40	uncertainty
Overall viability	44	uncertainty

$U_{cr} = 38$ at $p \leq 0.01$ and $U_{cr} = 51$ at $p \leq 0.05$.

Therefore, women of the group under study are somewhat more inclined than men to believe that the experience they received contributes to their development, strive to actively assimilate it and use it further, and

treat it as a chance to find something important, interesting.

All in all, a resilient attitude is characteristic of war participants. This allows them to accept and be aware of events that cause fear and anxiety rather than avoid them, to quickly build optimal assimilation strategies (coping strategies) and to use them productively.

Therefore, the data obtained using the questionnaire of resistance strategies indicate that women of the research group are more inclined to consider the received experience as positive and conducive to their development, can influence rehabilitation resources, providing the possibility of a personalized and gender-sensitive approach to recovery programs. The characterization of the participants in military operations as persons with a stable position who accept and understand the events can influence the formation of rehabilitation strategies. Program design should take into account this willingness to accept challenges and the ability to quickly build optimal strategies for mastering events. This approach can contribute to the effective rehabilitation and recovery of participants, helping them to cope effectively with stress and difficulties. In general, a positive attitude towards the experience and the existence of a life-sustainable position determine a certain readiness for recovery and increase the probability of success in rehabilitation, which should be taken into account when developing and implementing rehabilitation measures for participants in military operations.

Experiencing triggers not only negative reactions, but also positive personality transformations. According to Tadeshy and Calhoun, they manifest themselves in a change of attitude toward others, the emergence of new opportunities, growth of personal strength, spiritual changes, and a feeling of increased value of life. The results of the study of the manifestations of posttraumatic growth in the studied group of military personnel are presented in **Table 3**.

Table 3. Scale scores of the Tadeshy and Calhoun posttraumatic growth scale (compiled by the authors) ($N = 27$).

Groups	Changing Attitudes toward Others (CA)	New Opportunities (NO)	Personal Strength (PS)	Spiritual Change (SC)	Values of life (VL)	Total Score of TPG
Men	16.1	13.6	11.7	4.8	8.6	54.5
Women	22.1	17.6	16.7	4.4	11.3	78
Average	19.1	15.6	14.2	4.6	9.95	66.25

In analyzing the data, we found that the women group exceeded the average scores on the New Opportunity (NO) ($m = 17.6$), Personality Strength (PS) ($m = 16.7$), Increased Value of Life (IVL) scales ($m = 11.3$). The scores of the men's group did not fall outside of the average values. However, statistical differences between the groups were not established. We can state only a tendency for differences in the "Personality Strength" indicator " $(U_{emp} = 44$ with $U_{cr} = 38$ for $p \leq 0.01$ and $U_{cr} = 51$ for $p \leq 0.05$).

It is likely that women try to change things that require change, with better understanding that they can cope with difficulties and accept things as they are. They feel an increase in their own power, have a better understanding of spiritual issues, are more committed to religion, and are more appreciative of their own life and every day of it.

The highest cumulative score on the Total Post-Traumatic Growth (TPG) scale ($m = 78$) for military women shows a change in attitude toward other people with more openness, positivity, and empathy. There appears a sense of new opportunities, new interests, and a desire for change. They begin to feel more confidence and strength in overcoming difficulties, and they understand the spiritual problems of other people. In general, the data obtained are consistent with the general resilient attitude characteristic of the studied and it's slightly more pronounced among women.

The indicators of the generalized group for all scales do not exceed the average values, but the analysis

of their percentage distribution (**Table 4**) shows that high values on the scale “Increasing the value of life” have 48.1% of the examinees. About half of the respondents showed significant spiritual growth. A high cumulative score, showing overall posttraumatic growth, had 55.7% of the subjects.

Table 4. Scale scores of the Tadeshy and Calhoun posttraumatic growth methodology (percentage distribution) (Compiled by the authors) (*N* = 27).

Scales	Level					
	Low	Percentage (%)	Average	Percentage (%)	High	Percentage (%)
Attitudes toward others (AO)	9	33.3	10	37	8	29.7
New opportunities (HO)	4	14.8	11	40.7	12	44.4
Personality Strength (PS)	4	14.8	11	40.7	12	44.7
Spiritual change (SC)	7	25.9	13	48.1	7	25.9
Increasing the Value of Life (IVL)	7	25.9	7	25.9	13	48.1
Total TPG score	5	18.5	7	25.8	15	55.7

Such results indicate the formation of a variety of styles to master the situation, all tending to mastery transformation of the situation, rather than disadaptation and disintegration. The most problematic point of change is the attitude toward life.

On the basis of the material presented above, we can note that one of the key aspects is a positive orientation towards mastering and transforming situations, which indicates an active approach of the participants to solving problems. Rehabilitation resources can be aimed at supporting this active attitude by providing tools to develop and strengthen positive coping strategies. This may include psychological approaches that support self-awareness, the development of resources, and the ability to use internal and external reserves.

It is also important to consider that attitude to life is defined as a problematic aspect. Rehabilitation interventions may include psychotherapeutic interventions aimed at working with this point of change, providing support in addressing the mental aspects that may affect the attitude towards life. Group or individual therapy can be aimed at developing positive mental models and coping strategies. In general, taking into account an active approach to mastering situations and a problematic attitude to life, rehabilitation resources should be aimed at strengthening positive aspects, developing mental stability and stimulating personal growth of combatants.

The combination of individual personality resources and natural resilience in times of crisis, according to the Basic Ph model of Laad, creates a unique coping style. The results of establishing the combination of the main channels of stress mastery in the generalized group and the groups of men and women are presented in **Table 5**.

Table 5. Combination of resistance channels (Basic Ph, M. Laad model of struggle and resistance) (Compiled by the authors) (*N* = 27).

Group	Channels of Resistance					
	Faith (F) (scores)	Affect (A) (scores)	Sociality (S) (scores)	Imagination (I) (scores)	Cognitivity (C) (scores)	Physical activity (PhA) (scores)
Men	16.7	13.8	15.9	13.4	21.7	15.4
Women	18.9	12.6	16	15.3	19.2	22.2
Average for the group	17.6	13.4	16.1	14	21.1	17.9

The most used resilience strategies for the military were cognitive (C) (21.1 score) and recourse to physical activity (PhA) (17.9 scores).

We conclude that cognitive strategies are key to resilience, indicating the importance of psychological aspects of recovery. Rehabilitation programs may include cognitive techniques such as cognitive behavioral therapy or training in mental resilience strategies. Tools to develop understanding and ownership of one's thoughts and emotions can help overcome trauma and stress. Physical activity is known for its positive impact on physical and mental health. Rehabilitation programs may include exercise and training to help restore fitness, reduce stress, and improve mood. Physical activity can also be an element of group or individual activities, promoting social integration and interaction. We believe that rehabilitation programs must be individualized, taking into account the military's use of different resilience strategies, in order to effectively facilitate their full recovery and inner growth.

At the same time, strategies associated with reliance on imagination (I) (14 scores) and emotion (A) (13.4 scores) were less used. Since the use of strategies related to reliance on imagination and emotions is low, it may be effective to include psychotherapeutic approaches that aim to develop these skills. For example, creative therapy techniques such as art or music therapy can facilitate the expression of emotions and the development of positive imagination strategies. Interaction with other participants of rehabilitation programs can be a support for the development of emotional and social adaptation. Group sessions may include discussions of emotions, stress management skills and imagination techniques. Given that some military personnel may have a low propensity for strategies related to imagination and emotion, it is important to develop individualized approaches to rehabilitation. Such approaches can take into account the specific personality, needs and preferences of participants. Rehabilitation resources may include training to develop imagination and emotional regulation skills. This can be an important element in overcoming challenges and stresses. Working with a psychologist, participants can receive individual support and learn to effectively use strategies related to imagination and emotions.

There is no doubt that the strengths of the subjects, which represent the basis of resilience, are cognitive and physical activity. This cognitive-and behavioral type of response consists of actively accumulating and analyzing information, finding practical solutions to problems, trying to find a way out of internal dialogue and discussions, creating lists of important things to do and more. Responding to a crisis also occurs with action, body movements, relaxation, and the use of desensitization, physical exercise, and practical activities.

The findings confirm the propensity of military and demobilized people to use the coping "Reassessment", "Control", and "Plan to solve the problem", which they prefer. However, for a successful long-term counteraction of stress, there is not enough work of imagination and freedom of manifestation of emotions: immersion in dreams, memories of happy moments of life, search of "magic solution of a problem" through controlled imagination, which can sometimes be carried out contrary to the real circumstances. As mentioned by Prokofieva et al.^[24], it is not peculiar to also use coping strategies focused on avoidance, which can be effective, especially in short-term, acute stressful situations. Emotional ways of counteracting stress are also poorly used: open expression of emotions, discussion of the experience, nonverbal expression of feelings through artistic activity, reading, and writing texts.

An important rehabilitative potential of the military is faith and search for social support. Namely, realization of the need to join a certain group, to act in it, to assume a certain social role, to feel a part of the social organization. Beliefs, convictions, and values are important in the search for a way out of a difficult situation; they are found in religious views, political attitudes, in a person's conviction that life is full of meaning, in the desire not to lose that meaning. On the whole, it seems that when selecting resources for

resisting stress, the influence of well-known stereotypes is strong: tolerate, fight, do not show weakness, do not cry, and do not tell. In other words, courageously endure the circumstances, thinking over the experience and using physical activity.

Comparing the subgroups of men and women (Table 6), we found a greater tendency of the female sample to use physical strategies and cognitive and an attraction of the male sample to cognitive strategies and the use of the faith resource. Therefore, as mentioned above, both men and women were least likely to use imaginative resources and emotionally focused strategies.

Table 6. “Code” resilience of subjects (groups) (Compiled by the authors) (*N* = 27).

Groups	Stress Resistance Resources (scores)					
	C	B	S	PH	A	I
Men	21.7	16.7	15.9	15.4	13.8	13.4
Women	22.2	19.2	18.9	16	15.3	12.6
Average score in a generalized group	21.1	17.9	17.6	16.1	14	13.4

As part of our study, it is important to establish not only the totality of resources, but also their relationship to the posttraumatic growth opportunities of military participants. The results of the study are presented in a correlation matrix (Table 7). At a significance level of 0.05, the critical value reaches 0.37, and for a significance level of 0.01, the critical value is 0.47.

Table 7. Correlation coefficients of indicators of posttraumatic growth of personality and resilience resources, indicators of resilience.

Indicators	Scales	Post-Traumatic Growth of Personality					
		Change in Attitudes towards Others (CA)	New Opportunities (HO)	Strength of Personality (SP)	Spiritual Changes (Sc)	Value of life (VL)	Total Post-Traumatic Growth (TPPG)
Stress Resistance Resources	Faith (F)	0.5	0.3	0.18	0.28	0.18	0.26
	Affect (A)	0.16	0.21	0.17	0,04	0.176	0.20
	Sociality (S)	0.25	0.33	0.26	0.39*	0.26	0.3
	Imagination (I)	0.34	0.29	0.26	0.28	0.26	0.33
	Cognitivity (C)	0.14	0.194	0.04	0.086	0.04	0.08
	Physical Activity (PhA)	0.46*	0.55**	0.58**	0.35	0.58**	0.55**
Vitality	Involvement	0.11	0.22	0.25	-0.15	0.26	0.18
	Control	0.17	0.21	0.21	0.31	0.18	0.2
	Risk taking	0.13	0.18	0.26	-0.01	0.22	0.19
	Total resilience score	0.16	0.23	0.26	-0.05	0.24	0.21

* Correlations are statistically significant ($p \leq 0.05$).

** Correlations are statistically significant ($p \leq 0.01$).

A set of high significant (level of statistical significance $p \leq 0.01$) and significant correlations ($p \leq 0.05$) between the scores of the Tadeshy and Calhoun posttraumatic growth scales and stress coping styles (M. Laad’s model) present: change of attitude towards others—physical resources (+0.46), emergence of new opportunities—physical resources (+0.55) growth of strength of personality—physical resources (+0.58)

spiritual changes—sociality (+0.39) increased value of life - physical resources (+0.58), general posttraumatic growth—physical resources (+0.55).

The absence of significant correlations between the resource of cognitivity and indicators of posttraumatic growth also draws attention, although this resource is given the advantage. The revealed relations form two correlation pleiades: with the center uniting 5 indicators and a linear connection between 2 variables (**Figure 1**). Therefore, physical resources can be seen as contributing to posttraumatic growth, at least at this stage of the experience, and social resources for coping are important to the spiritual growth of the individual.

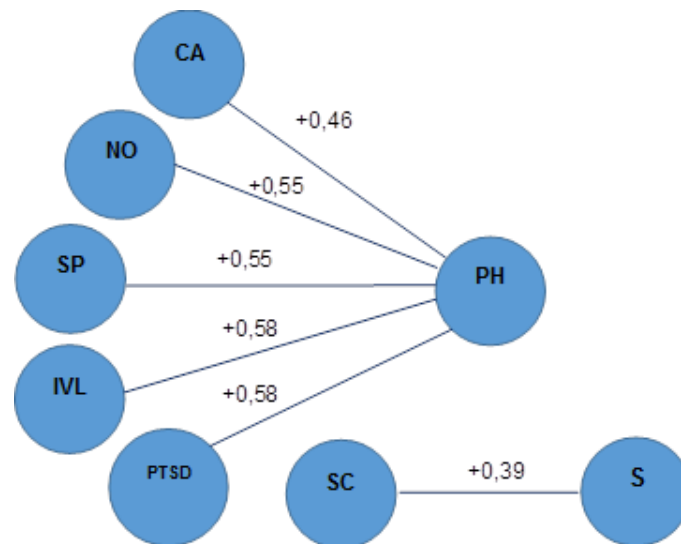


Figure 1. Correlation pleiades of indicators of posttraumatic growth of personality, resistance, resources, resilience.

Symbols:

Resilience resources: physical resilience resource (PH), social stress resilience resource (S);

Personality posttraumatic growth indicators: change in attitude toward others (CA), emergence of new opportunities (NO), increase in strength of personality (SP), spiritual changes (SC), increase in the value of life (IVL), and general posttraumatic growth (PTSD).

4. Conclusion

The study of post-traumatic growth and rehabilitation resources of combatants and demobilized servicemen is a relevant and important field of scientific research. We conclude that the combat experience of the military and the demobilized servicemen, which was very heterogeneous, led to the appearance of TPG symptoms in 89% of the examined people and manifested itself as a tension of adaptation potential in a borderline or close to maladaptation state.

The military are oriented to mastery, i.e., transformation of stressful circumstances which is confirmed by their resilient position, the general tendency of posttraumatic personal growth.

Preferred strategies of resilience to the stress of the military and demobilized servicemen are cognitivity and appeal to physical activity. The importance of physical resources in stress control is confirmed by their connection with posttraumatic personal growth. Physical resources of stress coping significantly correlate with indicators of posttraumatic personal growth: “change of attitude”, “emergence of new opportunities”, “growth of strength of personality”, “increase of value of life”, “general indicator of posttraumatic growth”, and “spiritual changes” correlate with a resource “sociality”.

Therefore, physical resources can be considered as important for work with psychotraumatic experiences, at least at this stage of the experience of events. Traumatized individuals usually try to “get rid” of a number of physical symptoms of TPG by breaking the connection between body and mind, but getting free of symptoms can be done by focusing on them, rather than avoiding them. This reduces the intensity of the sensations and increases self-control.

However, as we have found, it is worth addressing personal rehabilitative resources such as imagination, work, and emotionality for successful rehabilitation. Avoidance coping strategies are known to be effective in brief, acute stressful situations. This coping in the form of escapism, fantasizing, attempts at denial, distraction from the situation under certain conditions provides an opportunity to rest from the constant pressure of the stressful situation.

An important rehabilitative potential is faith and the search for social support, changing the nature of relationships between people. Faith beliefs and values are important for finding a way out of a difficult situation. They appear not only in religious views, political attitudes, but also in the conviction of the person that his/her life is filled with meaning, the desire not to lose this meaning, to express her personal potential. Social support is significant for the use of this type of resource. It is the social resources of overcoming that prove to be important for the spiritual growth of an individual.

We also found some gender peculiarities, so military women, to a greater extent than men, consider the experience they have gained to be positive, contributing to their development and getting pleasure from their own activities, rather than from confronting stress. They believe that their attitude toward people has become positive and transparent. They feel the emergence of new opportunities, the desire for change, and the growth of the value of life in general. Female military personnel tend to use physical strategies and cognitivity to master stress. Men tend to use cognitive strategies and beliefs. The data we obtained point to the actualization of the resilience mechanism in the military and demobilized servicemen. Psychological resources and reliance on them are the basis of self-regulation and rehabilitation in extreme conditions. Belief in one’s own ability to control the situation, actively act and overcome difficulties is an important component, but it is important to find other psychological resources to restore and maintain self-confidence and self-control. Reliance on one’s own psychological resources and reserves on one’s own existence, when a person accepts responsibility for what is happening to him or her, is a constructive way out.

During the analysis of these aspects, several key findings were revealed. First, the importance of studying posttraumatic growth indicates that some individuals who have experienced severe traumatic situations can develop new levels of psychological resilience and inner growth. This is an important aspect because understanding this process could contribute to more effective psychological care and rehabilitation for combatants and veterans. Secondly, the study of rehabilitation resources indicates the need to develop and implement comprehensive support programs for demobilized persons. It is important to create accessible and effective resources for physical, psychological and social rehabilitation. Third, addressing both aspects in this study, a comprehensive approach should be implemented to support combatants and demobilized servicemen. Combining knowledge on post-traumatic growth and the availability of rehabilitation resources allows creating effective and individualized approaches to help target groups.

Author contributions

Conceptualization, OP and IK; methodology, VS and OK; formal analysis, LO and IC; investigation, LM and IC; resources, IB and VD; writing-original draft preparation, OP and IK; writing-review and editing, VS and OK; visualization, LO and LM; supervision, VD and IB. All authors have read and agreed to the published version of the manuscript.

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Conflict of interest

The authors declare no conflict of interest.

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