

Post-Traumatic Growth in the Context of Forming Volunteers' Positive Experience in the Information Environment

Inessa Vizniuk^{1†}, Valentyn Teslenko^{2††}, Iryna Martyniuk^{3†††}, Nataliia Savinova^{4††††},
Olena Biliuk^{5†††††}, Viktoriia Kyslychenko^{6††††††}, Nina Stelmakh^{7†††††††}

^{1†} Doctor of Psychological Sciences, Associate Professor, Department of Psychology and Social Work,
Vinnitsia Mykhailo Kotsiubynskyi State Pedagogical University, Ukraine

^{2††} Doctor of Pedagogical Sciences, Assistant Professor, Department of Philosophy, National Technical University of Ukraine «Igor Sikorsky
Kyiv Polytechnic Institute», Ukraine

^{3†††} Candidate of Psychological Sciences, Associate Professor, Head of Department of Psychology, National University of Life and
Environmental Sciences of Ukraine, Ukraine

^{4††††} Doctor of Pedagogical Sciences, Professor, Department of Special Education, V.O. Sukhomlynskyi Mykolaiv National University,
Ukraine

^{5†††††} PHD, Lecturer, Department of Special Education, V.O. Sukhomlynskyi Mykolaiv National University, Ukraine

^{6††††††} PHD, Associate Professor, Department of Special Education, V.O. Sukhomlynskyi Mykolaiv National University, Ukraine

^{7†††††††} PHD, Associate Professor, Department of Special Education, V.O. Sukhomlynskyi Mykolaiv National University, Ukraine

Summary

The article is devoted to the study of the relationship between post-traumatic growth and the viability of the individual in the information environment. Theoretical generalization of approaches to the problem of volunteers' post-traumatic growth in the context of positive experience is made. Factors and structure of person's vitality in the conditions of martial law have been revealed. The problem of post-traumatic growth's interrelation and volunteers' psychosomatic health is considered. It has been shown that the preservation of psychosomatic health is possible provided by the physiological, personal and social norms of the man's psychological potential, which is based on vitality. The potential risk of post-traumatic stress disorder related to the destruction of the human psychology has been analyzed. The methods of measuring the post-traumatic growth level have been determined, the corresponding set of methods of psychodiagnostics has been presented and tested. The relationship between the level of post-traumatic stress disorder and viability in the study of the control group and similar indicators in the study of the experimental group has been empirically established. It has been proved that post-traumatic growth in the context of forming a positive experience of volunteers is an urgent problem, the solution of which means achieving personal harmonious development, maintaining optimal mental health in crisis situations. The results of this study are important in establishing international cooperation in the study of programs and projects in the context of transforming the system of social protection, security and peace according to international partnership standards and implementing a cultural exchange program for cooperation and culture.

Keywords:

volunteers, personality resilience, post-traumatic growth, psychological health, reflexive mechanisms, information environment.

1. Introduction

Manifestations of negative mental reactions as a result of mental trauma as a result of the anti-terrorist operation currently underway in the east of the country, associated with the threat to Ukraine's territorial integrity, caused by post-traumatic stress disorder and psychosomatic health, development of chronic psychopathology, the formation of antisocial behavior require the immediate introduction of effective preventive, prognostic and rehabilitation measures.

The maintenance of specific, relevant psychological systems (strengthening morale, self-worth, self-productivity) to overcome post-traumatic stress disorder is currently provided by various volunteer organizations that ensure socio-psychological support in the information environment (mostly online). Among such organizations is the information association "La Strada-Ukraine", which offers free psychological counseling for parents who are trying to understand the condition of their children and get support on the platform Facebook (<https://www.facebook.com/childhotline.ukraine>), Instagram (https://www.instagram.com/childhotline_ua), Telegram (<https://t.me/CHL116111>; the psychological support project «Close» (<https://poruch.me>); psychological help from the Institute of cognitive modeling (<https://tellme.com.ua>); a selection of contacts of Ukrainian psychologists and platforms on the website viyna.net (<https://bit.ly/3LwkNGN>); National hotline for children and youth, that works from 9.00 till 21.00 (Telegram: @CHL116111, Instagram: @childhotline_ua) and others.

Accordingly, the provision of psychological assistance in the information environment for each volunteer is also a short-term, unexpected traumatic event (murder and wandering of people, sexual violence, travel of military equipment, sniper shooting etc.). Such events leave an indelible mark in the mind of the individual (often there are dreams in which there are certain traumatic events, conversations, voices), the imprints of which in human memory are specific and vivid. They lead to the typical symptoms of post-traumatic stress disorder: to the loss of communicative abilities in direct interaction with the involvement of one's own body and feelings, in the inability to realize one's own life scenario, etc. The result is a classic re-experience of a traumatic experience.

Prolonged and repeated exposure to traumatic stressors (serial trauma or prolonged traumatic event) is characterized by ambiguity and heterogeneity of thought due to the dissociative process. Over time, dissociation can be one of the main ways to overcome a traumatic situation, which can result in a change in the "self-concept" and worldview of the individual, accompanied by feelings of guilt, shame and low self-esteem. Dissociation, alienation, denial, substance abuse and alcohol can act as an attempt to protect against the volunteer's unbearable inner feelings.

2. Analysis of recent research and publications

Well-known psychoanalysts R. Tedeschi and L. Calhoun identify the following main signs of post-traumatic stress disorder: excessive and above-threshold stressor in a particular situation; intrapersonal uncertainty, interpersonal and intergroup conflict, which require prompt resolution due to lack of human experience in solving such problems; powerful dynamic and progressive changes in the situation under martial law; complication of life processes due to human unpreparedness for such changes; personal instability at the limit of its adaptive resources. Crisis of events, as a rule, breaks the usual stereotypes of behavior and strikingly causes a restructuring of the personality structure. Acquadro Maran, D. & Begotti, T. [1] reveal approaches to psycho-emotional burnout of philanthropists who are victims of workplace violence in the context of the constant risk of providing emergency care to the victims. Affleck G. & Tennen H. [2] outline the conceptual foundations of adaptation and disposition regarding positive experiences from accidents. Brown A. V. & Choi J. H. [3] present the features of the organization of care for victims. Calhoun L. G. & Tedeschi R. G. [4] created a guide to increase post-traumatic growth. Dekel, S., Ein-Dor T. & Solomon Z. [5] reveal the concepts of post-traumatic growth and distress: a longitudinal study. Frazier P., Tennen H., Gavian M. et al. [6] state the level of post-traumatic growth in the context of their own positive assessments. O'Leary V. & Ickovics J. R. [12] highlight the importance

of resilience in response to a traumatic stimulus in the context of paradigmatic changes in women's health. Pargament K. I., Koenig H. & Perez, G. L. [13] emphasize psychocorrectional methods of religious overcoming of trauma. Park C. L., Cohen L. H., Murch R. L. [14] disclose estimates in the prediction of post-traumatic stress-related growth. Powell S., Rosner R., Butollo W. et al. [15] show post-traumatic growth after the war: a study of former refugees and displaced persons in Sarajevo. Prati G. & Pietrantonio L. [16] conducted a meta-analysis of the importance of optimism, social support and coping strategies as factors contributing to post-traumatic growth. Schroevers M. J., Helgeson V. S., Sanderman R. & Ranchor A. V. [17] proved that it is social support that is important for predicting post-traumatic growth among cancer patients. Seligman M. E. P. [18] tune their wards to psychological prosperity after trauma in a new sense of the importance of happiness and well-being. Tedeschi R. G., & Calhoun L. G. [19] determine general approaches to post-traumatic growth in defining conceptual frameworks and empirical data from research. Weiss T. & Berger R. [21] highlight post-traumatic growth in the context of culturally competent volunteer practice. Zöllner T., Calhoun L. & Tedeschi R. (2006) highlight the importance of trauma and personal growth in the psychotherapy of post-traumatic stress disorder. Lazos G. P. [10] offers: theoretical models, new perspectives for the practice of post-traumatic growth in victims.

The leading modern psychologist S. Mishchuk defines psychotrauma as a gradual, time-stretched process of experiencing an unnatural violation of established life organization, mental processes, psycho-emotional and psychosomatic balance, which arises due to the sudden influence of personally significant, stressful factors and leads to qualitatively new worldviews, effective ways of inclusion in life processes or causes fixation on traumatic events or progresses, repeating the stage (retraumatization). Psychotraumatic events can block access to some experiences and, consequently, to the free flow of power overcoming the intention of the individual. The scientist claims that people need recovery and active social support in overcoming and solving problems [11].

The role of multimedia education in the formation of the information society is studied by A.I. Kuzminsky, O.V. Kuchai, O.A. Bida believe that the general purpose of continuous training is the training of practitioners, including teachers for professional activities in terms of informatization of society and mass global communication, able to use the whole arsenal of ICT tools to implement the main directions of informatization of education [9].

O. Kuchai lights up the positive and negative aspects of the use of multimedia technologies in primary school [7].

Kuchai, O., Yakovenko, S., Zorochkina, T., Okolnycha, T., Demchenko, I., & Kuchai, T. opens in the article the problems of distance learning in specialists training in

modern terms of the informative society during Covid-19 [8].

The post-traumatic period is characterized mainly by increased nervousness and sensitivity to unexpected sounds, figures, light or sudden movements. Their actions are always uncontrollable and tense, waiting for negative events. There is apathy, panic and aggression in the situation under description. There is a need to substantiate the factors of self-help and self-support at the stage of post-traumatic growth of the volunteer's personality.

The aim of the article is to study the post-traumatic growth in the context of forming a positive experience of volunteers in the information environment, the role of which should be concomitant rather than mentoring-authoritarian in providing assistance to victims.

Post-traumatic growth is considered as the main result of restoring one's own resilience, which will be a set of psychotechniques in overcoming the effects of stress and returning to the so-called "previous comfort zone". G. Richardson suggests to use a procedural model of resilience in order to explain and clarify the desired end result in overcoming stressors to the client. The author emphasizes the importance of creation a psychotechnological program for the restoration and development of resilience based on psychoeducational procedures, because it is very important for human viability (resilient factors): personal experience and resource memories, confidence in one's intuition, nobility and altruism etc.

Post-traumatic growth involves transformational psychological changes in thinking, in the interpretation of one's own feelings and one's attitude to the world, which promotes personal growth. Information support of the surrounding world and affects the human psychology, changing it beyond recognition.

The encyclopedic dictionary of public administration states that the information environment is a set of technical and software means of storing, processing and transmitting information, as well as political, economic and cultural conditions for the implementation of informatization processes. As a result of the deployment of the informatization process, an information environment is being created that influences the psychology of volunteers in the context of the anti-terrorist operation (ATO) in the East of Ukraine.

A volunteer is a person who is willing to spend their energy, time and talent for the benefit of the society or a particular person, without waiting for a reward. Today, volunteering is finding more and more supporters. Volunteering is a form of charity in which a volunteer invests his/her time. Volunteers are now supporting the Ukrainian military forces. The forefront of the Russian-Ukrainian war is not just the front. They are where the war for Ukraine is taking place: in hospitals, warehouses, landfills, in the media, in offices. They supply and repair equipment, provide immediate assistance, strengthen the

Armed Forces, talk about the war firsthand, and curb the flow of propaganda and disinformation.

The results of hostilities have a negative impact on human health and have a strong influence on the optimal functioning of the body in volunteers. Critical are events that reflect the result of purposeful, often criminal activities (terrorist acts, sabotage, torture, hostilities, mass violence, death of loved ones, getting into a "hostage situation", destruction of their own home, etc.). Therefore, an effective system of prevention, psychological correction and rehabilitation of ATO volunteers is essential. Post-traumatic growth is relevant in the context of forming a positive experience of volunteers in the information environment.

The term "post-traumatic growth" was first suggested in the 1990s by R. Tedeschi and L. Calhoun in order to denote positive psychological changes that arise due to troubles and other problems and contribute to the rise to a higher level of functioning [19].

The circumstances that arise in this case make a serious challenge to both the adaptive resources of the volunteer's personality and her understanding of the world and their place in it. Post-traumatic growth involves transformational psychological changes in thinking and attitudes toward the world, which promotes personal growth. The following areas are among the ones that cause the post-traumatic growth:

1. Increasing the personality's vital importance: the process of development caused by traumatic experiences, determines the change of priorities. The importance of small, everyday things is growing. Material things lose value, but personal relationships begin to be valued much more.
2. Intensification of personal relationships: a traumatic event affects changes in relationships. Some relationships end, others begin in order to be valued much more. The ability to empathize grows. A person is able to feel more compassion for others, especially those who need it.
3. Awareness of one's strengths: along with the adequate assessment of one's own vulnerability, a sense of inner strength grows. There is a growing confidence that can be grasped by the consequences of devastating events.
4. Discovering new opportunities in life: a person manages to find new goals and objectives in her/his own life. This may be due to a change of profession, increased social activity etc.
5. Intensification of spiritual consciousness: borderline experiences caused by a traumatic event raise existential questions. Views on the meaning of life are changing, which can generate greater spirituality and empathy.

A post-traumatic survey of victims was conducted in 1990, and it has been found out that 46% of people changed their outlook on life for the worse, but still, when we speak about 43% - changes for the better have been noted. In 1993, the first tool for measuring both negative and positive

changes after trauma was published, which is now used in both research and psychotherapeutic practice [19].

S. Joseph identifies three dimensions of such growth: relationships (people often describe that their relationships have improved in some way, for example, they began to appreciate them much more and sympathize with others); self-esteem (victims claim to have gained a sense of their own strength and resilience, their self-confidence has increased); philosophy of life (people feel grateful for each new day and try to reconsider what is really important for them).

Today we consider post-traumatic growth as a coping strategy, which is the modern point of view of researchers [6]. It is the interpretation of post-traumatic growth as a kind of survival strategy that is seen in the context of personal growth as an adaptive response to crisis events. Guided by the terminology of the theory of coping, the following coping factors have been distinguished:

- positive reframing (positive coping resource);
- cognitive distraction and switching of attention (beyond the complete avoidance of trauma);
- activation of activities in overcoming problems (search for social support, both emotional and practical; search for "benefits" from a difficult situation, its reassessment);
- restoration of individual and professional competence (occupational therapy);
- positive cognitive assessment of the threat (understanding the current situation; irreversibility of change), etc.

According to C. Jackson, coping can be considered as a function consisting of personal characteristics, cognitive processes and systemic or organizational factors, which are influenced by the post-traumatic growth of the volunteer in the information environment.

3. Research methods

3.1. Participants in the experiment

The experimental bases of the research during 2021 - 2022 were Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University and Vinnytsia Mykola Pyrohov National Medical University. The general sample consisted of students, according to whose potential the features of post-traumatic growth as a factor of sustainable human life in wartime have been revealed. All of them are engaged in volunteer activities. The total number of the sample was 112 people (among them 54 medical students and 58 psychological students) by age category of students from 17 to 22 years old in specialties 222 "Medicine" and 053 "Psychology", who have a tendency to pessimistic views on life in the post-stress period in the context of volunteering. According to the International Classification of Diseases (ICD-10), post-traumatic stress disorder is coded F43.1. and

develops as a result of severe mental trauma. Before the research start, all the participants have been informed about the conditions of participation in the experiment and agreed to participate. The experiment has been conducted by the decision of the specialized academic council of Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University (protocol № 1 dated 25.08.2021). The ethical rights of all the participants have been respected. The study has been conducted in the natural conditions of the educational process of higher educational establishments, with the general conditions of participation in the experiment: the same time and duration of training, the same measuring materials to diagnose post-traumatic growth according to the criteria for assessing the viability of volunteers.

The lack of vitality of the individual indicates its inability to synthesize certain qualities and abilities, to self-organization and self-regulation. The structural components of psychological stability are the following: social factors and personal factors - personality attitudes (including self-esteem), personality spirituality, emotions and feelings, cognitive sphere, behavioral (active) sphere, communicative sphere, self-realization, hope, mental strength (subjectivity), self-knowledge and self-development, readiness for change etc.

According to this approach, we consider vitality as a complex integrative quality of a personality, which provides high productivity and adequate behavior in difficult life circumstances, harmonization of personal and socio-cultural values; as a component of intelligence that contributes to the maintenance of high functional activity in stressful conditions by adapting to them or as a result of a high level of development of emotional and volitional self-regulation; as a feature of temperament that allows a person to reliably perform the objectives of the activity through the optimal use of resources of neuropsychological energy [20].

It should be noted that resilience in overcoming difficulties, maintaining self-confidence, self-confidence, self-sufficiency, perfection of mental self-regulation are considered to be an integral part of mental life. The ability to maintain a constant level of mood, to feel the emotional saturation of life, to have diverse interests, polymotivation of life are considered to be the signs of a harmonious characterological status of a personality, especially of the personality of the volunteer.

3.2. Methods of psycho-pedagogical experiment

During the study, we used the method "Diagnosis of the level of alexithymia (Toronto aleximic scale (TAS))", developed in 1985 in the United States by J. Taylor, adapted from the Psychoneurological Institute NIPNI. by V. Bekhterev (D. Yeresko, G. Isurina, etc.), the questionnaires "The Changes in Outlook Questionnaire" (CiOQ) and "The Posttraumatic Growth Inventory" (PTGI) have been also

used and applied in the context of the author's ideas about post-traumatic growth.

The *TAS clinical questionnaire* has been designed to study such a personal characteristic as alexithymia, which is to determine the reduction or absence of a person's ability to recognize, differentiate, express emotional experiences and bodily sensations. It is determined by identifying the level of emotional sensitivity and involvement of a person in everyday life. This methodology contains 26 questions and one scale.

The *CiOQ questionnaire* contains two versions: *full* (23 points) and *abbreviated* (10 points), which helps to identify two groups of psycho-traumatic consequences of trauma (positive and negative). Its significance in the study lies in the substantiation of such psychometric characteristics that allow to diagnose clinical and research problems of personality resilience in the information environment. The *PTGI questionnaire* contains 5 subscales, including the "attitude to others" scale; scale "new opportunities"; scale "personal strength"; scale "spiritual change"; scale "appreciation of life".

"The Stress-Related Growth Scale" (SRGS) *questionnaire* has been used, according to a newer version of The Revised Stress-Related Growth Scale (RSRGS).

Two more scales have been also used: "*The Perceived Benefit Scales*" (PBS), which is designed to assess the positive effects of critical events and contains seven subscales ("the Lifestyle Change" Scale, "the Material Benefits" Scale, "the Self-efficiency" scale, "Family intimacy" scale, "Community intimacy" scale, "Faith in people" scale, "spirituality" scale and "*The Thriving Scale*" (*TS, Success Scale*), the latter includes 20 questions and serves for estimates of growth from one's own suffering.

At the *first stage* of the study the psychodiagnostics of the consequences of the post-traumatic state has been carried out, focusing on the identified tasks of this stage of work. At the *second stage* a training program on the formation of resilience of volunteers in critical situations has been implemented. At the *third stage* of the research work - the obtained results have been processed, which provided for the implementation of generalizing procedures using methods of quantitative and qualitative information processing, graphical methods of analysis of results.

4. Results

In the process of statistical processing of psychodiagnostic research the method of verifying the probability of sample differences in the distribution of traits using Pearson's criterion χ^2 has been used, which allows to assess the strength and direction of consistency of changes between two traits, and Student's t-test values in two samples.

One of the samples of respondents contained a list of persons who provided assistance to migrants from cities in

the military encirclement zone. The second sample of volunteers are volunteers who directly provided assistance to victims in the field of information environment (via Internet resources). The trauma of events in such cases depended on what they saw and felt, their emotional experience.

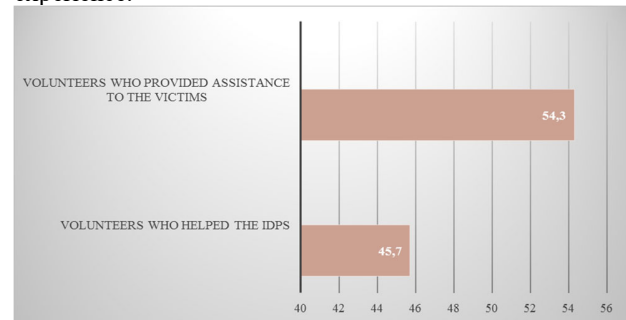


Fig. 1. The level of post-traumatic growth of volunteers in providing assistance to victims

The average for the above mentioned methods of post-traumatic growth (the arithmetic mean of the total score on all 5 scales) among the respondents who provided assistance to IDPs from the combat zone (coordination of evacuation transport, psychological assistance, referral to services on demand), is 45,7 points, and among those who directly participated in the organization of assistance to victims (assistance to the population (collecting things, cooking, medicine)) – 54,3 points (Fig.1).

The analysis of the distribution of averages within these groups according to the criterion of viability, which provided assistance, has the following results: volunteers cared about the problems of migrants, communicating directly with them – 47,3 points; indirectly – 52,7 points, using information and communication tools (Fig. 2).

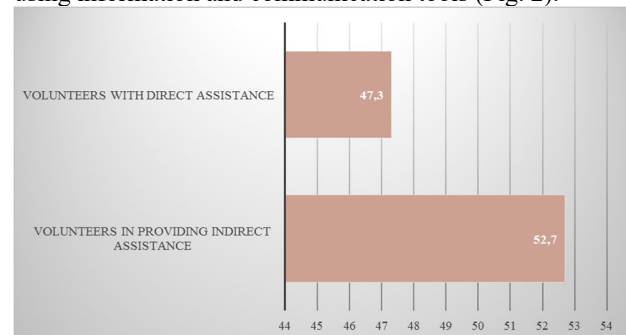


Fig. 2. Comparison of vital signs of volunteers

As a result, we note that people of all the groups were diagnosed with signs of post-traumatic stress in the information environment during volunteering.

The level of post-traumatic stress for those who directly provided psychological assistance to the victims was 51,7 points, and for those who indirectly – 48,3 points (Fig. 3).

Further analysis of stress indicators showed that the highest level of stress among volunteers was 51,7 points, among those who provided assistance during direct communication with victims. Approximately the same level of stress was among those who provided indirect assistance themselves and had acquaintances among the IDPs who were in the war zone (48,3 points). It can be concluded that post-traumatic stress disorders affect the personal sphere of relationships and cause destructive disorders in the field of family relationships, special life scenarios and can affect all subsequent human life.

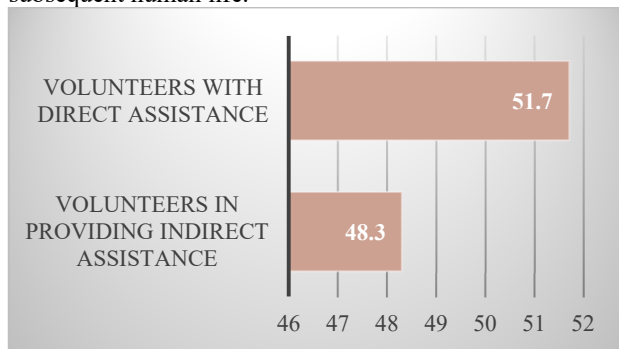


Fig. 3. The level of post-traumatic stress of volunteers while providing assistance to victims

There is some analysis of the correlations in the structural organization of post-traumatic stress and post-traumatic growth.

Correlation analysis across the entire sample did not reveal significant correlations between these parameters (0,15; $p < 0.016$). The statistical significance of some correlation values is quite high, but does not give reasonable grounds for more sound conclusions, as the sample of respondents is too small (Table 1).

Table 1: Statistical significance of correlation indicators by psychodiagnostic research methods

Correlation relationships		Post-traumatic	Attitude towards others	New Personal	Personal power	Spiritual changes	Valuation life
1	2	3	4	5	6	7	8
Post-traumatic stress	Pearson's criterion	.161*	.214**	.092	-.37	.172*	.272**
	Student's criterion	.018	.003	.119	.321	.013	.001
	N (number)	112	112	112	112	112	112
Repeat	Pearson's criterion	.125	.179**	.055	-.061	.171*	.233**

	Student's criterion	.047	.007	.227	.217	.012	.002
	N (number)	112	112	112	112	112	112
Avoidance	Pearson's criterion	.117	.162*	.003	-.44	.167*	.267**
	Student's criterion	.067	.018	.005	-.043	.167	.268**
	N (number)	112	112	112	112	112	112
Negative changes in thoughts	Pearson's criterion	.145*	.181**	.101	-.031	.142*	.241**
	Student's criterion	.029	.009	.095	.351	.027	.002
	N (number)	112	112	112	112	112	112
Excitability and	Pearson's criterion	.171*	.220**	.112	-.007	.149*	.259**
	Student's criterion	-.013	.004	.071	.473	.025	.001
	N (number)	112	112	112	112	112	112
** The correlation is significant at the level 0,01							
* The correlation is significant at the level 0,05							

The presence of a number of correlations according to the indicators of the components of growth and stress suggests that all stressful constructs are associated with scales "valuing life" and "attitude to others", which shows the greatest contribution to post-traumatic growth. There are also some trends in their interaction on the scale of "spiritual change" ("negative changes in thoughts and moods" and "re-experience"). At the same time, the indicators on the scales "personal strength" and "new opportunities" have weak correlations with almost all the components of post-traumatic stress.

However, such an analysis of the correlations between the research methods for the generalized indicators of post-traumatic growth and stress does not give reasonable grounds for the following assumptions and conclusions – no trends can be observed. It is also worth noting that post-traumatic stress disorder is not due to the most traumatic event, but its information in the awareness of what has already happened. The latent period lasts about 2-6 months from the time of psychological trauma.

Subsequently, a number of psycho-corrective measures have been taken to increase the level of post-traumatic growth of volunteers in the information environment. Psycho-corrective program is based on the following psychotherapeutic principles and techniques: utilization (use of critical events in the context of positive experiences), test therapy, use of humor, focus on resources, acceptance

of unique client identity, use of specific speech patterns, narration of psychotherapeutic stories etc. In general, we consider events of increased complexity as problems that lead to something useful, something that can be used for positive change (reframing technique). Table 2 presents the results of psychocorrection of these changes in the level of increased post-traumatic growth of volunteers.

Table 1: The level of formation of post-traumatic growth of volunteers

Development level	The control group (112 people)	
	Before the experiment	After the experiment
High	26 (23,21%)	86 (76,50%)
Satisfactory	47 (41,96%)	65 (58,03%)
Low	39 (34,82%)	7 (6,25%)

According to Table 2 volunteers have experience of qualitative changes in overcoming critical events that arise in a situation of overcoming extremely difficult tests. Thus, post-traumatic growth of volunteers in the information environment is an increase of self-awareness, recognition and understanding of their own life force, courage, self-understanding, willingness to empathize and feelings of pain, sadness, joy and happiness. Post-traumatic positive experience indicates the quality of interpersonal relationships, increased sensitivity and closeness to the personal environment. After all, the post-traumatic growth of volunteers is based on a wise philosophy of life, awareness of the values of "We will surely cope. We are together".

5. Discussion of results

Nowadays volunteering and volunteerism are considered to be a non-specific form of employment in the information environment, which involves cooperation with volunteer organizations of international associations, associations, centers, etc. In any case, the state is considered to be the warrantor of the protection of the citizens' rights who have expressed a desire to provide their own assistance in the context of community service, taking the position of a customer of volunteer services or, directly, a party in need of selfless assistance. As a social lever, volunteer organizations have an impact on all spheres of human life, giving priority, above all, to social orientation and to the general welfare of all social groups, to protect the environment, to eliminate the manifestations of class in terms of quality education, medicine, science and technical progress, etc. The strategy of the modern information segment of hostilities in eastern Ukraine is aimed at damaging Ukraine's reputation in the international arena.

Today's volunteer movement in Ukraine is enthusiastically discussed in many countries all over the

world, recognizing that it as unique. Volunteering flourished during the Revolution of Dignity and at the beginning of the war in Donbass. It has been an extremely difficult period, but it was this movement that united Ukrainian society, created effective organizations, public organizations, social groups of people who are ready to take responsibility for solving the most painful and urgent problems of the state.

The subject of the volunteer movement on the world stage are international organizations, which are divided into international governmental and non-governmental organizations. The most important actors in international volunteering are those who provide voluntary assistance. These are volunteers, people who also, in turn, need help to coordinate the work of volunteer projects and groups. It is their legal status, rights and responsibilities that form the basis of the system of volunteers' active participation in solving the problems of today, in particular, within the military conflict. Representatives of different age and ethnic groups, religions, nationalities, statesmen, and even the unemployed take part in the volunteer movement, in the context of which racial, political, economic, cultural hostility is being smoothed, the principles of altruism are being promoted, voluntary forces are being mobilized among individual representatives. The creation of an interethnic society and a clear example of the implementation of existing constitutional rights and freedoms, the evolution of universal human values, increasing post-traumatic growth are becoming more and more important [20].

That is why, due to the diversity of the subjects of the international volunteer movement, there are problems in the process of their activities, which relate to the lack of legal status of volunteers, as a result, volunteers are treated as employees who comply with labor laws; they are often deprived of benefits and unemployment benefits; unreasonable tax imposition. Today's problems of volunteers are due to the lack of military equipment and weapons: bulletproof vests, Kevlar helmets, protective vests, camouflage, underwear, medicines, personal care products, vitamins and food, binoculars, thermal imagers, ankle boots, sneakers, T-shirts, socks, etc. Therefore, the rules of international law concerning the regulation of volunteering must be based on the procedure for ensuring the protection of volunteers and obtaining international visas. Awareness of such problems poses challenges to the urgency of their elimination.

The representation of the volunteer mission before the citizens in public authorities and other volunteer organizations needs to be settled. Among the key issues that need to be addressed are the implementation of the volunteer program and the organization of the creation process; coordination of volunteer groups in wartime; informing the public about the creation of an active response group on hostilities, as well as the results of the

mission; mediation in volunteer activities to help victims and find charitable funds to finance urgent projects; providing a place for volunteer camps; strengthening the role of voluntarism at the international and national levels, creating an effective system of voluntary assistance etc.

The results of this study are very important in establishing international cooperation in the organization of charitable programs and projects in the system of human health safety's transformation according to international law and partnership in the implementation of cultural exchange programs for peace and cultural development between countries as well as in the context of public space improvement.

Conclusions

Thus, working with post-traumatic growth, which is quite effective now, in terms of using the practice of mutual assistance to victims and migrants from the area of encirclement and hostilities in eastern Ukraine, there is socio-psychological support or facilitation. They provide the creation of conditions and opportunities in the situation of uncertainty, expectations and hopes for increased post-traumatic growth in the wards and makes it impossible to force them to do so. Conceptually, this support for post-traumatic growth can be seen as providing an experience of the positive changes that result from the trauma experienced by volunteers in the information environment in wartime. The structural and central part of such facilitation should be focused on more stable aspects of the volunteer's personality, resilience, readiness for change, ability to mentally harden and adapt, resolve the consequences of injuries and their early transformation into a positive experience of change in perception of one's environment and other events.

References

- [1] Acquadro Maran, D., & Begotti, T. (2020). A Circle of Violence: Are Burnout, Disengagement and Self-Efficacy in Non-University Teacher Victims of Workplace Violence New and Emergent Risks?. *Applied Sciences*, 10(13), 4595. DOI: 10.3390/app10134595
- [2] Affleck, G. & Tennen, H. (1996). Constructing Benefits from Adversity: Adaptation Significance and Dispositional 5. Underpinnings. *Journal of Personality*, 64, 899-922. DOI: 10.1111/j.14676494.1996.tb00948.x
- [3] Brown, A. V. & Choi, J. H. (2017). Towards Care-based Design. *Proceedings of the 8th International Conference on Communities and Technologies*. C&T, 17, 131-145. DOI:10.1145/3083671.3083703
- [4] Calhoun, L. G. & Tedeschi, R. G. (1999). Facilitating posttraumatic growth: A clinician's guide, Mahwah. *NJ: Lawrence Erlbaum Associates. Inc.*, 184.
- [5] Dekel, S., Ein-Dor, T. & Solomon Z. (2012). Posttraumatic growth and posttraumatic distress: A longitudinal study. *Psychological Trauma: Theory, Research, Practice and Policy*, 4(1), 94-101. DOI:10.1037/a0021865
- [6] Frazier, P., Tennen, H., Gavian, M. et al. (2009). Does Self-Reported Posttraumatic Growth Reflect Genuine Positive Change? *Psychological Science*, 20 (7), 912-925. DOI: 10.1111/j.1467-9280.2009.02381.x.
- [7] Kuchai, O. (2014). Conceptual principles of training future teachers by means of multimedia technologies: a textbook. Cherkasy: publisher Chabanenko Yu. A. 61.
- [8] Kuchai, O., Yakovenko, S., Zorochkina, T., Okolnycha, T., Demchenko, I., & Kuchai, T. (2021). Problems of Distance Learning in Specialists Training in Modern Terms of the Informative Society During COVID-19. *IJCSNS International Journal of Computer Science and Network Security*, 21(12), 143-148. <https://doi.org/10.22937/IJCSNS.2021.21.12.21>
- [9] Kuzminskyi, A., Kuchai, O. & Bida, O. (2018). Use of polish experience in training computer science specialists in the pedagogical education system of Ukraine. *Information technologies and learning tools*, 68(6), 206-217. DOI:10.33407/itlt.v68i6.2636
- [10] Lazos, G. P. (2016). Post-traumatic growth: theoretical models, new perspectives for practice. *Current issues of psychology: Organizational psychology. Economic psychology. Social Psychology*, 1, 45,120-127.
- [11] Mischuk, S.S. (2015). Tilesna terapiia yak zasib opratsiuvannia dytiachykh psykotravm. Psykholohichna dopomoha ditiam u kryzovykh sytuatsiiah: metody i tekhniki – Psychological assistance to children in crisis situations: methods and techniques. Z.G. Klsarchuk (Ed.). *Kiyv.: TOV «Vidavnistvo «Logos»*, 33-58.
- [12] O'Leary, V. & Ickovics J. R. (1995). Resilience and thriving in response to challenge: An opportunity for a paradigm shift in women's health. *Women's Health: Research on Gender, Behavior and Policy*, 1, 121-142.
- [13] Pargament, K. I., Koenig, H. & Perez, G. L. (2000). The many methods of religious coping: Development and initial validation of the RCOPE. *Journal of Clinical Psychology*, 56, 519-543.
- [14] Park, C. L., Cohen, L. H., Murch, R. L. (1996). Assessment and prediction of stress-related growth. *Journal of Personality*, 64(1), 71-105. DOI:10.1111/j.1467-6494.1996.tb00815.x
- [15] Powell, S., Rosner, R., Butollo W. et al. (2003). Posttraumatic growth after war: A study with former refugees and displaced people in Sarajevo. *Journal of Clinical Psychology*, 59, 71-83.

- [16] Prati, G. & Pietrantonio, L. (2009). Optimism, Social Support, and Coping Strategies As Factors Contributing to Posttraumatic Growth: A Meta-Analysis. *Journal of Loss and Trauma*, 14(5), 364-388. DOI:10.1080/15325020902724271
- [17] Schroevers, M. J., Helgeson, V. S., Sanderman, R. & Ranchor A. V. (2010). Type of social support matters for prediction of posttraumatic growth among cancer survivors. *Psycho-Oncology*, 19(1), 46-53. DOI:10.1002/pon.1501
- [18] Seligman M. E. P. (2012). *Flourish: A Visionary New Understanding of Happiness and Well-Being*. Atria Books, New York, 234-276.
- [19] Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic Growth: conceptual foundations and empirical evidence. *Psychological Inquiry*, 15 (1), 1-18.
- [20] Viznyuk, I., Rokosovyyk, N., Vytrykhovska, O., Paslavska, A., Bielikova, O., & Radziievska, I. (2022). Information Support of the Educational Process in the Development of Leadership Potential of Modern University in the Conditions of Distance Learning. *IJCSNS International Journal of Computer Science and Network Security*, 22, 4, April 209-216. Retrieved from http://paper.ijcsns.org/07_book/202204/20220426.pdf
- [21] Weiss, T. & Berger, R. (2010). Posttraumatic Growth and Culturally Competent Practice. *Lessons Learned from Around the Globe Wiley*, Hoboken, NJ, 73-85.
- [22] Zöllner, T., Calhoun, L. & Tedeschi R. (2006). Trauma und persönliches Wachstum. In: Andreas Maercker, Rita Rosner (Hrsg.): *Psychotherapie der posttraumatischen Belastungsstörungen*. Thieme Verlag, Stuttgart, 36-45.