


1/2017

psychoprevention

S T U D I E S



Resource distribution and the severity of post-traumatic stress disorder symptoms in people displaced as a result of military operations

Aleksandra Radoń, Iwona Niewiadomska, Joanna Chwaszcz

Distribution of resources and the severity of depression symptoms in people displaced as a result of military operations

Iwona Niewiadomska, Sylwia Kaczmarzyńska, Weronika Augustynowicz

Resource distribution and health problems in people suffering from depression syndrome and consequences of armed conflicts

Justyna Ogar, Iwona Niewiadomska, Weronika Augustynowicz

The psychology aimed at addressing challenges arising during the recent military conflict in Ukraine

Tetiana Mykolaivna Yablonska

JOURNAL: **psychoprevention**
S T U D I E S

Editor-in-Chief:

Michał Chwaszcz
e-mail: sekretariat@ipip.info.pl
www.ipip.info.pl

Editorial Board:

Iwona Niewiadomska, Larisa Didkovska, Robert Laducer, Marc Valleur

Editorial Team:

Joanna Chwaszcz, Weronika Augustynowicz, Agnieszka Palacz-Chrisidis

Reviewers Team:

RAFAŁ BARTCZUK
CHERYL DICKSON
LARISA DIDKOVSKA
LUCYNA GOLIŃSKA
MARIE GRALL-BRONNEC
ELENA HAUGE
JOLANTA JARCZYŃSKA
YASSER KHAZAAL
BERNADETA LELONEK-KULETA
IWONA NIEWIADOMSKA
DANUTA RODE

Statistical Editor:

Rafał Bartczuk
Michał Wiechetek

Picture Editor:

Zbigniew Kowalczyk

English Language Editor:

Mirosław Drozd

Published by:

Natanaelum Association Institute for
Psychoprevention and Psychotherapy
Al. Gen. Wł. Sikorskiego 1/101
20-814 Lublin
www.natanaelum.pl
sekretariat@natanaelum.pl

Copyright © 2017 by **Natanaelum Association Institute**
for Psychoprevention and Psychotherapy

Quarterly Journal

Available on an Open Access basis: Attribution 4.0 International (CC BY 4.0)

Table of Contents

Resource distribution and the severity of post-traumatic stress disorder symptoms in people displaced as a result of military operations	5
<i>Aleksandra Radoń, Iwona Niewiadomska, Joanna Chwaszcz</i>	
Distribution of resources and the severity of depression symptoms in people displaced as a result of military operations	16
<i>Iwona Niewiadomska, Sylwia Kaczmarzyńska, Weronika Augustynowicz</i>	
Resource distribution and health problems in people suffering from depression syndrome and consequences of armed conflicts	26
<i>Justyna Ogar, Iwona Niewiadomska, Weronika Augustynowicz</i>	
The psychology aimed at addressing challenges arising during the recent military conflict in Ukraine	37
<i>Tetiana Mykolaivna Yablonska</i>	

Resource distribution and the severity of post-traumatic stress disorder symptoms in people displaced as a result of military operations

Aleksandra Radoń

Graduated from John Paul II Catholic University of Lublin with the degree of MA in Psychology

Iwona Niewiadomska

KUL Professor, PhD in Psychology, John Paul II Catholic University of Lublin

Joanna Chwaszcz

PhD in Psychology, John Paul II Catholic University of Lublin

ABSTRACT

This article addresses the question *What is the relationship between resource distribution and the severity of post-traumatic stress disorder in people displaced by military operations?* It puts forward 10 research hypotheses. These are then verified using S. Hobfoll's Conservation of Resources-Evaluation questionnaire and Post Traumatic Stress Disorder Checklist – Military Version (PCL-M). The study examined 324 people living in Ukraine, which is being the theatre of an armed conflict. In this group, we identified 36 people who had been displaced as a result of military operations (23 men and 13 women). Study analysis showed significant statistical correlations between the distribution of resources and the severity of PTSD symptoms.

Keywords: Post Traumatic Stress Disorder, resource distribution

Introduction

Armed conflicts represent direct threat to human life and health. Participation in such conflicts, or even being in areas where such conflicts occur, significantly affects human functioning. In psychology, conflicts are considered as situations with mutually contradictory motives, goals and behaviours (Reber, 2000). Individuals who are in conflict try to protect their own, desirable, solutions. As a result of these protection efforts, they continuously draw on their resources, which leads to stress. In consequence, their behaviour patterns change, i.e., coping strategies are employed. Depending on the individual coping style and the characteristics of the difficult situation, they follow a specific course of action to reduce the discomfort associated with the stressor (Endler & Parker, 1994). However, if there is a significant loss of resources and the individual continues to remain in the unfavourable environment, their resources might be depleted. Consequently, their balance is severely disturbed by the stressor. As a result, such individuals might develop Post Traumatic Stress Disorder (PTSD), which is a psychological consequence of prolonged exposure to stress. This study, conducted by the Chair of Social Psychoprevention at the Catholic University of Lublin on a group of people displaced as a result of the recent armed conflict in Ukraine, was designed to find correlations between the distribution of resources and the severity of PTSD symptoms, and provide a basis for practical interventions to protect Ukrainians against the harmful effects of conflict experiences or to alleviate the psychological consequences associated with their going through this ordeal.

The majority of studies on this subject are now led by Stevan Hobfoll, the author of the Conservation of Resources (COR) theory. His research shows strong correlations between resource distribution and many mental health consequences in people who find themselves caught up in military operations. Indeed, it seems that the most profound mental health consequence in people subjected to severe stress is PTSD. It is a disorder that affects human functioning on many different levels.

This article addresses the issue of resource distribution and the severity of Post-Traumatic Stress Disorder in people displaced as a result of the recent military operations in Ukraine. Its purpose is to demonstrate the correlations between these variables in the study group.

Theoretical background

Post Traumatic Stress Disorder (PTSD) develops as a delayed or chronic response to stressful events or situations, both short- and long-lasting, which are exceptionally dangerous or catastrophic in nature and can cause anyone from the affected individual's social milieu to suffer. Risk factors include personality traits (e.g. being compulsive) and a history of previous neurotic disorders. Such factors can reduce one's resilience to PTSD or make the disorder more severe. However, these characteristics are neither necessary nor sufficient to predict whether the individual will suffer from the disorder or not. Typical symptoms that indicate trauma are: obsessional memories (flashbacks), dreams and nightmares, feeling of numbness as a physical symptom of trauma, emotional blunting, sense of detachment from others, not responding to the surroundings, anhedonia, and avoidance of actions and situations that remind the individual of their trauma. Other popular symptoms

include hyperarousal, hypervigilance, heightened startle reaction and difficulty sleeping. The above-mentioned symptoms are often associated with anxiety and depression, and also suicidal thoughts. The onset follows the trauma with a latency period that can range from several weeks to a few months. Its course varies and is unpredictable, but in the majority of cases the symptoms disappear completely. A small proportion of people develop chronic PTSD that can last for many years and lead to permanent personality changes (ICD-10, 1992). A different definition and diagnostic criteria for PTSD were proposed in 2013 by the American Psychiatric Association in the fifth edition of its Diagnostic and Statistical Manual of Mental Disorders (DSM-5). The diagnostic criteria for PTSD cover the history of exposure to traumatic events (directly, as a witness, indirectly, or repeatedly), and presence of four types of symptoms: intrusions, avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity. It is important to take into consideration the duration of symptoms and to examine the individual's functioning to exclude symptoms produced by psychoactive substances or other mental disorders. DSM-5 distinguishes between two PTSD sub-types, namely delayed PTSD and dissociative PTSD. However, both these diagnoses are based on primary diagnostic criteria (DSM-5, 2013).

The Conservation of Resources theory by S. Hobfoll takes a broad approach to understanding both resources and their importance for coping. The theory suggests that individual adaptation and adjustment are closely related to the resources people have at their disposal (Hobfoll, 2006). Hobfoll (2006) distinguished between objects and states that are important for people, and identified four major groups of resources (Hobfoll, 2006), namely

- object resources – physical objects whose value is crucial for survival. Direct object resources include, for example, a house or a car. Indirect object resources include goods that can suggest that the individual enjoys high social status (e.g. historical building, own factory, profitable business);
- personal resources – they serve positive adaptation and include personality traits, i.e., individual sense of self-efficacy, general abilities, temperament, cheerful disposition, etc.; experience-based qualifications that include predispositions for specific roles in various areas of life, such as professional, parental, marital, etc.; and skills learned through education and socialisation, and manifested in various domains of life;
- condition resources – provide access to other means of adjustment. Examples include health, professional experience, seniority, marriage, stable employment, etc. These resources make it possible to discover and obtain other resources;
- energy resources – these are exchanged for resources from other groups. They include money, knowledge, specialist professional skills, etc.

In this theory, adaptation resources include not only social factors but also the way the individual functions. These two elements affect individual adaptation to the environment (Niewiadomska, 2010).

In addition to identifying the above-mentioned categories of resources, Hobfoll formulated two cardinal principles behind resource conservation:

Principle I: Resource loss is disproportionately more salient than resource gain (Hobfoll, 2006)

Hobfoll argues that behaviours focusing on the protection of the available resources have stronger motivation than those aimed at resource gain. This is manifested through actions designed primarily to protect resources. Resource gain is also an important part of resource distribution. It serves two functions, primary and secondary. The primary function can be described as “remedial”. Having experienced a loss, people start a series of compensatory gains. The secondary function can be referred to as “uplifting” because in the event of a perceived loss, people pay special attention to gains. This function helps reduce tension and relieve the stress associated with the experienced situation (Niewiadomska, 2010).

Principle II: People must invest resources in order to protect against resource loss, recover from losses, and gain resources (Hobfoll, 2006)

Principle II suggests that the individual is willing to invest much more than would seem reasonable only to compensate for the likely loss of any goods they consider valuable. Therefore, this distribution mechanism involves motivation to build up resource reserves. This allows the formulation of three important corollaries:

Corollary 1: Those with greater resources are less vulnerable to resource loss and more capable of orchestrating resource gain (Hobfoll, 2006).

Corollary 2: Those who lack resources are more vulnerable to resource loss and initial loss begets future loss, and those who possess resources are more capable of gain, and initial resource gain begets further gain (Hobfoll, 2006).

Corollary 3: Those who lack resources are likely to adopt a defensive posture to conserve their resources (Hobfoll, 2006.)

S. Hobfoll’s Conservation of Resources (COR) is now the most popular theory used for designing studies on various approaches to stress (from its most severe forms, such as involvement in war, to issues common to virtually all people, such as workplace stress or social role stress).

An overview of studies on correlations between the severity of PTSD and resource distribution

S. Hobfoll and his colleagues conducted a study on the relationship between the importance attached to resources and the presence of post-traumatic stress (2003). The team studied 905 adult Jews and Palestinians who lived in Israel. The study was conducted following the uprising (the Al-Aqsa Intifada). The purpose of the study was to examine how terrorism affected the development of PTSD and depression symptoms, with special focus on the role of resource loss, resource gain and social support. The study showed a significant correlation between the importance attached to resources and the development of mental health disorder symptoms (Hobfoll, Hall, Horsey & Lamoureux, 2011), but it did not provide a clear answer to the question about the relationship between the importance

of resources and the development of PTSD symptoms, because it considered social support only as secondary to disorder development.

In their study on the correlation between resource gain and the severity of PTSD symptoms, also conducted on people participating in the Intifada, Hobfoll et al. (2006) proposed on the basis of COR that people were resistant to stress as a result of gaining and retaining resilience resources. This means that when faced with the risk of terrorism, people need such resources as the sense of self-efficacy, safety of loved ones, and economic resources, to counteract the negative effects of psychological stress and, in consequence, reduce the likelihood of developing PTSD. In addition, the study by Hobfoll et al. (2006) shows that gains in psychosocial resources are associated with the severity of PTSD symptoms, so that people with greater, reliable social support show less severe PTSD symptoms (Hobfoll, Canetti-Nisim & Johnson, 2006). In their study on resources, Hobfoll et al. (2011) emphasised that these should be considered and understood in the context of individuals, groups and societies. The characteristics that significantly affect the process of compensating for the psychological stress experienced by the individual are referred to as resiliency resources. This sub-group includes such resources as perceived self-efficacy, optimism, perceived self-worth, social support and high socioeconomic status (Hobfoll, Hall, Horsey & Lamoureux, 2011).

Based on COR, it was found that resource loss is the most important predictor of psychological suffering after a disaster (Freedy, Shaw, Jarrell & Masters, 1992; Ironson et al., 1997). Studies based on this claim, conducted among people affected by the 9/11 terrorist attacks on the World Trade Center, showed that the loss of friends and family, profitability, and social connections, was a critical predictor of PTSD and psychological stress, or even depression (Hobfoll, Canetti-Nisim & Johnson, 2006). The correlation between the development of PTSD symptoms and resource loss was also investigated by Vinkour et al. (2011) in his study on air force crews. The study proposed 2 hypotheses. The first hypothesis, similar to that in the study by Hobfoll et al. (2006), predicted that the development of PTSD symptoms was associated with resource loss. This hypothesis was supported. The study showed that PTSD symptoms predicted resource loss since a moderate correlation was observed between the two. In addition, PTSD and resource loss proved to be closely connected when resource loss was incremental. The second hypothesis predicted that severe PTSD symptoms associated with resource loss could lead to delayed consequences in the form of further resource loss and development of the disorder, which corresponds to Hobfoll's loss spiral assumptions (2006). This hypothesis, too, was confirmed. Evidence showed that severe PTSD symptoms were associated with resource loss, and these two led to negative consequences in the form of disorder development and further resource loss (Vinkour, Pierce, Lewandowski-Romps, Hobfoll & Galea, 2011).

Own research methodology

In order to address the research question, the following hypotheses were formulated on the basis of COR and research findings:

H1. There is a correlation between the importance of resources and the severity of PTSD symptoms.

H1.1. Resiliency resources are correlated negatively with the severity of PTSD symptoms.

H2. Resource loss is correlated positively with the severity of PTSD symptoms.

H2.1. Object resource loss is correlated positively with the severity of PTSD symptoms.

H2.2. Personal resource loss is correlated positively with the severity of PTSD symptoms.

H2.3. Condition resource loss is correlated positively with the severity of PTSD symptoms.

H2.4. Energy resource loss is correlated positively with the severity of PTSD symptoms.

H3. Psychosocial resource gains are correlated negatively with the development of PTSD symptoms.

H3.1. Personal resource gains are correlated negatively with the severity of PTSD symptoms.

H3.2. Condition resource gains are correlated negatively with the severity of PTSD symptoms.

In order to test out these hypotheses the study used the following methods: sociodemographic data questionnaire, S. Hobfoll's Conservation of Resources-Evaluation (COR-E) questionnaire and Post Traumatic Stress Disorder Checklist – Military Version (PCL-M).

The study group included 36 people ($n = 36$) who declared that they had migrated or had been displaced as a result of the military conflict. The displaced people included 23 men ($n1 = 23$) and 13 women ($n2 = 13$). All respondents lived in Ukraine during the study. The average age of respondents was 34 ($M = 34, SD = 9$), with the youngest respondent aged 18, and the oldest 53. In the study group, 10 people had experienced the loss of a loved one as a result of the armed conflict (27.8% people in the displaced group). The average distance from the armed conflict theatre was 205 km ($M = 205.28, SD = 281.9$). In terms of education, the study group was characterised as follows: 13.9% – lower-secondary education, 8.3% – vocational education, 11.1% – upper-secondary education, 61.1% – higher education, 5.6% – no data.

Own research results

Research results were calculated using Spearman's rank correlation coefficient (Spearman's ρ). Please refer to the tables below for results corresponding to each research hypothesis – Table 1 for the general group, Table 2 for the male group, and Table 3 for the female group.

Table 1 Spearman's rho for the correlation between PTSD total score and selected resource distribution categories in the study group as a whole (n = 36)

Hypothesis	Category	PTSD Total Score	
		r	p
H1.	Resource importance	-0.02	n.s.
H1.1.	Resiliency resource importance	-0.09	n.s.
H2.	Resource loss	0.45	0.011
H2.1.	Object resource loss	0.41	0.017
H2.2.	Personal resource loss	0.41	0.016
H2.3.	Condition resource loss	0.45	0.010
H2.4.	Energy resource loss	0.234	n.s.
H3.	Psychosocial resource gain	-0.04	n.s.
H3.1.	Personal resource gain	-0.09	n.s.
H3.2.	Condition resource gain	0.01	n.s.

r – Spearman's rho, p – significance level, n.s. – not significant.

Table 2 Spearman's rho for the correlation between PTSD total score and selected resource distribution categories in the male group (n = 36)

Hypothesis	Category	PTSD Total Score	
		r	p
H1.	Resource importance	0.09	n.s.
H1.1.	Resiliency resource importance	-0.05	n.s.
H2.	Resource loss	0.69	0.000
H2.1.	Object resource loss	0.50	0.015
H2.2.	Personal resource loss	0.71	0.000
H2.3.	Condition resource loss	0.70	0.000
H2.4.	Energy resource loss	0.50	0.015
H3.	Psychosocial resource gain	0.23	n.s.
H3.1.	Personal resource gain	0.23	n.s.
H3.2.	Condition resource gain	0.25	n.s.

r – Spearman's rho, p – significance level, n.s. – not significant.

Table 3 Spearman's rho for the correlation between PTSD total score and selected resource distribution categories in the female group (n = 36)

Hypothesis	Category	PTSD Total Score	
		r	p
H1.	Resource importance	0.28	n.s.
H1.1.	Resiliency resource importance	-0.27	n.s.
H2.	Resource loss	-0.02	n.s.
H2.1.	Object resource loss	0.21	n.s.
H2.2.	Personal resource loss	-0.21	n.s.
H2.3.	Condition resource loss	-0.24	n.s.
H2.4.	Energy resource loss	-0.01	n.s.
H3.	Psychosocial resource gain	-0.71	0.032
H3.1.	Personal resource gain	-0.84	0.005
H3.2.	Condition resource gain	-0.55	n.s.

r – Spearman's rho, p – significance level, n.s. – not significant.

Results for the general group show a correlation between resource loss (total score), object resource loss, personal resource loss, condition resource loss, and energy resource loss, and the severity of PTSD symptoms.

Results for the male group indicate a statistically significant correlation between resource loss (total score), object resource loss, personal resource loss, condition resource loss, and energy resource loss, and the severity of PTSD symptoms.

Results for the female group demonstrate a correlation between psychosocial resource gain and personal resource gain, and the severity of PTSD symptoms.

Conclusions

Hypothesis 1, which suggested correlations between resource importance and the severity of PTSD symptoms, was rejected (Table 1, Table 2, Table 3). This is evidenced by the lack of Spearman's rho correlation significance across all the identified groups. Reasons for this lack of correlation might include the misunderstanding of the resource concept, the difficult situation of the respondents, the large number of questionnaires to be completed, and the small number of respondents, all of which affected statistical calculations.

Hypothesis 1.1, which suggested a correlation between the importance of resiliency resources and the severity of PTSD symptoms, was also disproved (Table 1, Table 2, Table 3).

Hypothesis 2, which suggested a correlation between resource loss and the severity of PTSD symptoms, was confirmed (Table 1). It can be concluded that in people displaced as a result of the armed conflict, there is a statistically significant, moderate correlation between resource loss and the severity of PTSD symptoms. This hypothesis is also supported by the literature on the subject. COR argues that resource loss can potentially show a strong correlation with psychological suffering associated with a disaster (Freedy, Shaw,

Jarrell & Masters, 1992; Ironson et al., 1997). Our research results fully corroborate this. In addition, the correlation can also be inverse. PTSD is a disorder that strongly affects human functioning (Levine, 2010).

Statistically significant correlations were also found for Hypothesis 2.1, which suggested a correlation between object resource loss and the severity of PTSD symptoms (Table 1). People who have been displaced as a result of an armed conflict, lost a significant proportion of their possessions (house, car, furnishings, etc.). Corollary 1 in Hobfoll's COR (2006) suggests that resource loss is disproportionately more salient than resource gain. COR Corollary 2 argues that resource loss impairs the individual capacity for preventing, or compensating for, resource loss. In the context of object resource loss, these two corollaries help explain problems with financial recovery, which can undermine self-esteem and, as a result, impair social functioning (Levine, 2010). This might lead to the development of depression symptoms, which, aggravated by the trauma associated with the armed conflict (risk to one's life, health problems), can possibly cause PTSD.

Hypothesis 2.2 suggested a correlation between personal resource loss and the severity of PTSD symptoms. This correlation was confirmed (Table 1). There seems to be a moderate correlation between these two variables. This finding can also be interpreted in the context of the theoretical implications of COR theory. Personal resources integrate personality traits, skills and competences to help the individual successfully adapt to difficult situations. If these are depleted or limited, as suggested by the hypothesis, the individual might experience stress overload associated with maladaptation. This is very likely to aggravate PTSD symptoms (Tyrer, 1983).

Hypothesis 2.3 suggested a correlation between condition resource loss and the severity of PTSD symptoms. A significant, moderate correlation was established between these variables (Table 1). In his COR theory, Hobfoll identified the following elements of condition resources: health, professional experience, seniority, marital status, and employment. All these resources provide a foundation for a stable situation in life and are the determinants of good adaptation. When these are lost, e.g., as a result of displacement, the individual loses their capacity for stable adaptation, which can contribute to increased fear and anxiety (Łukaszewski & Boguszewska, 2008), and if this continues, produce or aggravate PTSD symptoms.

Hypothesis 2.4 suggested a correlation between energy resource loss and the severity of PTSD symptoms. This hypothesis was supported only for the male group. The correlation seems to be moderate. This hypothesis is likely to have been proven only for the male group because in the traditional Ukrainian culture, men are responsible for providing for the household. Male family roles have been examined by family psychology and psychology of education long time ago. In addition to their roles as authorities and mentors, men are also expected to serve as caretakers, who also secure their family's livelihood (Obuchowska, 2009). As a result of losing their energy resources, the displaced men are unable to successfully serve their social roles, which can lead to frustration and tension, and, in consequence, to aggravated PTSD symptoms.

Hypothesis 3, concerning the correlation between psychosocial resource gain and the severity of PTSD symptoms, was confirmed. The results show a significant, strong, negative correlation between the variables (Table 3), but only for the female group. Based on the literature on the subject, this can be explained by the fact that, in difficult situations, women tend to focus more on dealing with negative emotions, while men tend to focus on resolving

the problem at hand (DiGiuseppe & Froh, 2006). Psychosocial resources are the leading predictor of coping with the emotions associated with difficult situations. Therefore, it can be argued that gains in these resources contribute to improved adjustment to displacement resulting from an armed conflict, but only among women, whose adaptation is related to achieving emotional balance. Adjustment reduces the experienced stress, which, in turn, relieves PTSD symptoms. This hypothesis is likely to have been rejected for men due to their problem-focused coping style.

Hypothesis 3.1 was statistically confirmed in the female group. The results indicate a significant, negative, and very strong correlation between personal resource gain and the severity of PTSD symptoms (Table 3). Similarly to H3, reasons supporting this hypothesis can be explained by women's coping styles.

Hypothesis 3.2, concerning the correlation between gains in condition resources and the severity of PTSD symptoms, was rejected (Table 1, Table 2, Table 3). This can be due to a number of factors, such as excessive number of questions, unfavourable circumstances surrounding the study, and cultural differences in relation to the study group which served as the basis for formulating this hypothesis.

Study findings show that resource distribution is significantly correlated with the severity of PTSD symptoms. People who have been displaced as a result of the armed conflict in Ukraine experienced both resource loss and gain, so it can be assumed that these include protective and risk factors in relation to the development of PTSD. However, it is important to be careful about any such claims due to the relatively small size of the study group.

Research shows that the issue of the distribution of resources among people affected by hardships, and in particular those who have found themselves inadvertently in such situations, as was the case for the study group who was caught up in the armed conflict, seems important from the psychological point of view. Such situations seem to make people incapacitated and render them helpless. However, the confirmed hypotheses concerning gains show that even in situations involving an apparent lack of control, people are able to develop certain mechanisms to protect themselves against the negative consequences of the situation in which they are not physically involved. In psychological terms, this phenomenon requires more extensive study in broader social and cultural contexts.

References

- Diagnostic and statistical manual of mental disorders*. Fifth edition (DSM-V) (2013). Washington, DC: American Psychiatric Association.
- Endler, N. S., & Parker, J. D. A. (1994). Assessment of Multidimensional Coping: Task, Emotions, and Avoidance Strategies. *Psychological Assessment*, 6, 50–60.
- Freedy, J. R., Shaw, D. L., Jarrell, M. P., & Masters, C. R. (1992). Towards an understanding of the psychological impact of natural disasters: An application of the conservation resources stress model. *Journal of Traumatic Stress*, 5, 441–454.
- Hobfoll, S. E., Canetti-Nisim, D., & Johnson, R. J. (2006). Exposure to terrorism, stress-related mental health symptoms, and defensive coping among Jews and Arabs in Israel. *Journal of Consulting and Clinical Psychology*, 74, 207–218.
- Hobfoll, S. E., Hall, B. J., Horsey, K. J., & Lamoureux, B. E. (2011). Resilience in the face of terrorism: Linking resource investment with engagement. In M. Friedman, S. Southwick, D. Char-

- ney, B. Litz (eds.), *Resilience and Mental Health Challenges across the lifespan* (pp. 253–263). Cambridge: Cambridge University Press.
- Hobfoll, S. E. (2006). *Stres, kultura i społeczność. Psychologia i filozofia stresu* [Stress, culture and community. The psychology and philosophy of stress]. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- International Statistical Classification of Diseases and Related Health Problems ICD-10* (1992). Geneva: World Health Organization.
- Ironson, G., Wynings, C., Schneiderman, N., Baum, A., Rodriguez, M., & Greenwood, D. (1997). Posttraumatic stress symptoms, intrusive thoughts, loss, and immune function after Hurricane Andrew. *Psychosomatic Medicine*, *59*, 128–141.
- Levine, P. A. (2010). *In An Unspoken Voice: How the Body Releases Trauma and Restores Goodness*. Berkeley, North Atlantic, 80–104.
- Li, C., DiGiuseppe, R., & Froh, J. (2006). The roles of sex, gender, and coping in adolescent depression. *Adolescence*, *41*, 409–415.
- Łukaszewski, W., & Boguszewska, J. (2008). Strategie obrony przed lękiem egzystencjalnym [Strategies of coping with existential anxiety]. *Nauka*, *4*, 23–34.
- Niewiadomska, I. (2010). Zasoby psychospołeczne czynnikiem warunkującym pozytywną adaptację człowieka [Psychosocial resources as the determinant of successful adaptation]. In M. Kalinowski, I. Niewiadomska (eds.), *Skazani na wykluczenie!?* [Doomed to exclusion!?] (pp. 20–39). Lublin: Wydawnictwo KUL.
- Obuchowska, I. (2009). Rodzice i style wychowania [Parents and parenting styles], Part 2. *Remedium*, *9*, 6–10.
- Reber, A. S. (2000). *Słownik Psychologii* [Dictionary of Psychology]. Warsaw: Wydawnictwo Naukowe Scholar, 310.
- Tyrer, P. (1983). Handbook of Stress: Theoretical and Clinical Aspects. *Journal of Neurology Neurosurgery & Psychiatry*, *46*(10), 321–350.
- Vinkour, A. D., Pierce, P. F., Lewandowski-Romps, L., Hobfoll, S. E., & Galea, S. (2011). Effects of War Exposure on Air Force Personnel's Mental Health, Job Burnout and Other Organizational Related Outcomes. *Journal of Occupational Health Psychology*, *16*(1), 3–17.

Distribution of resources and the severity of depression symptoms in people displaced as a result of military operations

Iwona Niewiadomska

KUL Professor, PhD in Psychology, John Paul II Catholic University of Lublin

Sylwia Kaczmarzyńska

Graduated from John Paul II Catholic University of Lublin with the degree of MA in Psychology

Weronika Augustynowicz

PhD in Psychology, John Paul II Catholic University of Lublin

ABSTRACT

This article demonstrates correlations between resource distribution and the severity of depression symptoms in people displaced as a result of military operations in Eastern Ukraine. The study covered 36 people who had had to leave their homes due to the recent military conflict. Variables were operationalised using Aaron Beck's Depression Inventory and S. E. Hobfoll's Conservation of Resources-Evaluation questionnaire. The study found a statistically significant correlation between resource loss and the severity of depression symptoms in people displaced as a result of the conflict.

Keywords: depression, resource distribution, armed conflict, displaced person

Theoretical background

Resource characteristics

Hobfoll (2006) defines resources as things that people value. They include personal characteristics, energies, conditions and objects. They can be valued for their importance for

survival, or usefulness in obtaining other resources that are crucial for survival. The most popular classifications include (Hobfoll, 2006, pp. 73–76):

- a) A distinction between external and internal resources. The former include all resources that are outside the self, e.g., social support, employment, and economic status. Internal resources, on the other hand, belong to, remain within, the self, e.g., professional skills, sense of competence, self-esteem, and optimism (Hobfoll & Walfisch, 1984). This distinction is simple in principle, yet too general. This makes it difficult to comprehend the differences between each category. In addition, this distinction does not have a theoretical basis.
- b) Structural classification of resources employed by the Conservation of Resources (COR) theory:
 - object resources – physical objects, such as vehicles or houses. Some of them are valuable because they are necessary for survival, while others are associated with high social status;
 - condition resources – such as employment, seniority, health and marriage. Some of them, such as happy marriage, need to be earned, while others are inherited or associated with one's social status;
 - personal resources – personal characteristics, including self-esteem, optimism, hope, self-efficacy, and skills – professional qualifications, and leadership and social skills;
 - energy resources – these include money, credit, and knowledge. They are valuable for people because they can be exchanged for other resources.

This classification is more detailed, as it further divides external and internal resources, identifying specific differences between them and describing each type. The main flaw of this classification is that it has no theoretical basis and not all resources can be assigned to a single category.
- c) Classification of resources based on their importance for survival. This distinction has some theoretical basis. It establishes the following categories:
 - primary resources – all the resources that are directly linked to survival. These include clothing, shelter, food, security-related resources, and ability to negotiate with other people;
 - secondary resources – people need these to obtain primary resources. They include membership of a group, marriage, social support, optimism, and hope;
 - tertiary resources – symbolically connected to the two previous categories of resources. These include money, social status, and social conditions that facilitate access to secondary resources.

In the light of COR theory, the individual is considered a calculating creature who focuses all its attention on losses and threats, and on assessing each situation (Hobfoll, Canetti-Nisim & Johnson, 2006). COR theory makes the following claims:

1. People want to obtain, protect and retain the things that they value (Hobfoll, 1989; as cited in: Hobfoll, 2006, p. 71). Using their resources, individuals regulate their self, function within society, act and adapt to organisations and cultures. Therefore, this becomes their natural objective (Witkowska, 2011).
2. Stressful events in life affect the process of obtaining and protecting resources. A threat of losing, or actual loss of, resources that are crucial for survival, causes stress. People

also experience stress when they have invested some resources and there is a risk they might lose them (Hobfoll, 2006).

3. “*resource loss is disproportionately more salient than resource gain*” (Hobfoll, 2006, p. 78). Threat of loss produces greater stress than actual gain (Witkowska, 2011).
4. “*people must invest resources in order to protect against resource loss, recover from losses, and gain resources*” (Hobfoll, 2006, p. 90). Individuals invest resources based on the resources they have (Hobfoll, 2006).

Characteristics of depression

Today about 350 million people aged 20–40 suffer from depression worldwide. In Poland, there are approx. 1.5 million such patients (Forum against Depression, <http://forum-przeciwd depresji.pl/index.php/depresja/o-chorobie/statystyki>). Depression disorders share some common characteristics, such as sad or irritable mood, or feeling of emptiness, and associated physical and cognitive changes, which significantly affect normal functioning. Differences between such disorders lie in their length and probably distinct aetiology (Łojko, Suwalska & Rybakowski, 2014, pp. 253–254). The literature provides many definitions of depression, e.g., “*experiences, not only mood, but also physical, psychological and behavioural experiences, which create a long-term, harmful, serious state that can be clinically recognized as depression syndrome*” (Hammen, 2006, p. 13). In most general terms, depression can be subdivided into endogenous and exogenous. The former is characterised by the fact that no external factors play a role in its development (Bilikiewicz & Strzyżewski, 1992). People are diagnosed with it when reasons for being susceptible to it are unknown and the person experiences a strong destabilisation of biochemical functions in their brain from time to time. Exogenous, or reactive, depression, on the other hand, which, in most cases, is severe, has physical symptoms, such as poor appetite or weight loss. Affected people experience sleep problems (wake up early), are in low spirits early in the morning, and are not interested in sex (McKenzie, 2001). People are diagnosed with it when symptoms appear after a stressful event, are acute and disrupt their lives. Such experiences are associated with the event that caused them (Koszewska & Habrat-Pragłowska, 2003). Reactive depression can be caused, e.g., by job loss, and usually does not last long. This type of depression also develops as a result of sadness associated with social situations (McKenzie, 2001). Reactive depression can also affect people who experience armed conflicts and their consequences, such as displacement.

The most popular symptoms of reactive depression include the feeling of helplessness, worrying, and anxiety. The individual can be irritable and embittered (Actively against Depression Association, <http://www.depresja.org/nowe.html>). There are many causes of depression. These include social, psychological, environmental and biological factors. Indeed, psychological factors seem crucial. Personality type, and character traits in particular, can be of considerable importance, too. What is important here is the way people respond to difficult situations, the demands they impose on themselves, and the degree to which they are affected by their failures (Koszewska & Habrat-Pragłowska, 2003).

Depression is characterised by a tendency to focus on one’s failures or losses. Depressed people recognise only the negative aspects of life, which results in reduced self-esteem and produces a feeling of hopelessness. Such people experience sadness, worry for no reason,

are virtually unable to make decisions, and everyday responsibilities start to arouse anxiety which makes it impossible to accomplish the tasks they have been entrusted with. Depression periods can last a few months or much longer. This contributes to the emergence of suicidal thoughts or death wish (Papalos & Papalos, 1994). For this reason, depressed people tend to die young (Kramer, 2007).

War victims experience long-term psychological consequences of the conflict. These are difficult to handle by both the affected individuals and their environment. They cause professional problems, hamper personal growth, and prevent the victims from participation in social life. The psychological consequences of war have long been neglected (Crocq, 2002). In their research, Dekel and Hobfoll (2007) show that psychosocial resource loss contributes to the development of PTSD symptoms. In addition, other studies report that armed conflicts have considerable impact on the affected populations. The most frequent symptoms include depression, increased anxiety and PTSD (Galea et al., 2002; as cited in: Dekel & Hobfoll, 2007). The impact of displacement as a factor contributing to the development of depression was proven by studies on children who survived World War II (Strauss, Dapp, Anders, von Renteln-Kruse & Schmidt, 2011; Lis-Turlejska, Szumiał & Okuniewska, 2012).

Methodology

The literature on the subject shows that stressful events lead to the development of reactive depression (Koszewska & Habrat-Pragłowska, 2003). Without doubt, armed conflict can be recognised as such an event. This paper focuses on correlations between resource distribution and aggravated depression symptoms in people affected by the consequences of war or military operations. Therefore, it seeks to address the following research question: *What are the correlations between resource distribution and aggravated depression symptoms in people displaced as a result of military operations?* The following hypotheses were formulated to analyse the above-mentioned correlations:

- H1:** There is a significant correlation between attaching importance to resources and aggravated depression symptoms in people displaced as a result of military operations.
- H2:** There is a correlation between major resource loss and aggravated depression symptoms in people displaced as a result of military operations.
- H3:** There is a statistically significant correlation between major resource gain and low severity of depression symptoms in people displaced as a result of military operations.

The study covered 324 people affected by the armed conflict in Eastern Ukraine, including 36 people – 23 women and 13 men – displaced as a result of the military operations. The average age in the study population was 29. The group was dominated by people with higher education (22 respondents). Respondents were also asked to answer the question whether they had lost a loved one as a result of the conflict – 10 people (27.8%) had lost a loved one, and 24 people (66.7%) had not suffered such a loss.

The study used Aaron Beck's Depression Inventory and S. E. Hobfoll's Conservation of Resources-Evaluation questionnaire.

The Depression Inventory was developed by A. Beck, C. Ward and others (1961; as cited in: Janowski, 2009). It is a self-report inventory and can be used as a screening tool to

evaluate the severity of depression. It comprises 21 items referring to various depression symptoms. Each item has four possible answers reflecting the severity of each symptom. Respondents are asked to choose answers that best correspond to their state. Individual scores range between 0 and 3 points. The maximum possible score is 63 points and the minimum – 0 points (Janowski, 2009).

Conservation of Resources-Evaluation questionnaire by S. E. Hobfoll was developed on the basis of his COR theory. This method identifies 74 types of resources and is designed to measure resource management. Using the expert judges method, these 74 resources were grouped under four categories, namely energy resources, object resources, condition resources, and personal resources. Respondents were asked to assess how important on a scale from 1 (not at all) to 5 (to a great degree) each resource was for them, and then how much of each resource they had gained, and finally, how much of each resource they had lost.

Reliability of this method for a group of 1697 people, measured using Cronbach's alpha, was – 0.97 for resource importance, 0.98 for resource gain, and 0.98 for resource loss (Kalinowski, Niewiadomska, Chwaszcz & Augustynowicz, 2010). This study used the short version of this method with 54 items.

Results

The study involved a detailed analysis of the severity of depression symptoms and resource distribution. Hobfoll's COR-E questionnaire measured resource distribution in displaced people in relation to resource importance, gain and loss. Detailed scores are presented in Table 1.

Table 1 *Characteristics of respondents related to resources among people displaced as a result of military operations*

<i>Resources</i>	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>M</i>	<i>SD</i>
Importance	36	2.3	5.00	3.96	0.60
Gain	33	2.0	3.9	3.21	0.49
Loss	34	1.0	3.9	2.37	0.78

The analysis of the results presented in Table 1 shows that respondents attached the greatest significance to resource importance ($M = 3.96$) and resource gain ($M = 3.21$). Resource loss was considered the least important of the three ($M = 2.37$). This might be due to the situation respondents found themselves in. In the context of displacement, gains in resources, which have been lost to a large extent, seem more crucial. They might initiate gain spirals, which are crucial in such difficult situations.

The other psychological variable that was tested was the severity of depression symptoms, measured using Beck Depression Inventory. The average score achieved by respondents was 13 points. The minimum score, 0 points, was recorded for one person, while the highest score achieved in this study was 38 and was also recorded for one person (Table 2).

Table 2 *Characteristics of respondents related to depression among people displaced as a result of military operations*

<i>BECK_TS</i>	<i>N</i>	<i>%</i>
0	1	2.8
2	3	8.3
3	1	2.8
4	1	2.8
5	1	2.8
7	1	2.8
8	2	5.6
9	3	8.3
10	4	11.1
11	1	2.8
12	1	2.8
13	2	5.6
14	2	5.6
15	1	2.8
16	2	5.6
17	2	5.6
19	1	2.8
20	1	2.8
22	2	5.6
25	1	2.8
26	1	2.8
30	1	2.8
38	1	2.8
<i>M</i>	13.00	
<i>SD</i>	8.42	
Minimum	0	
Maximum	38	

BECK_TS – Beck Depression Inventory Total Score.

The analysis of the scores presented in Table 2 shows that 18 respondents achieved scores ranging from 0 to 11 points, which means that they have no depression symptoms. Eleven respondents achieved scores ranging from 12 to 19 points, which corresponds to mild depression. Four respondents had scores between 20 and 25 points, which suggests moderate depression. And 3 people in the study group achieved scores corresponding to severe depression.

The study analysed correlations between attaching importance to resources and aggravated depression symptoms in people displaced as a result of military operations. The achieved statistical analysis results are presented in Table 3 below.

Table 3 *Correlations between resource importance and aggravated depression symptoms in people displaced as a result of military operations*

Resource importance	Spearman's rho	p
Beck Total Score	0.083	0.632

The results shown in Table 3 indicate that there are no statistically significant correlations between attaching importance to resources and aggravated depression symptoms in people displaced as a result of military operations. This means that there is no relationship between the importance respondents attach to individual resources and their depression symptoms. When faced with displacement as a result of an armed conflict, attaching greater or lesser importance to various resources will neither protect the individual from, nor put them at greater risk of, developing depression symptoms. Consequently, Hypothesis 1 was not confirmed.

The next analysis examined correlations between resource loss and the severity of depression symptoms, as predicted by the following hypothesis:

H2: There is a correlation between major resource loss and aggravated depression symptoms in people displaced as a result of military operations.

Table 4 *Correlations between resource loss and the severity of depression symptoms*

Resource loss	Spearman's rho	p
Beck Total Score	0.417*	0.014

*. Correlation is significant at 0.05 (two-tailed).

The results shown in Table 4 indicate that there is a statistically significant correlation between resource loss and aggravated depression symptoms in people displaced as a result of military operations. People faced with armed conflict and displaced because of it, lose many valuable resources, as a result of which they find themselves at risk of developing depression symptoms. This means that the greater the resource loss they suffer, the more aggravated their depression symptoms. Hypothesis 2 was confirmed, which also suggests correlations between the variables in the study group.

The literature on the subject suggests that women tend to be more likely to suffer from depression than men. Consequently, the correlation between resource loss and depression was examined for each gender separately (Tables 5 and 6).

Table 5 *Correlations between resource loss and the severity of depression symptoms – women*

Resource loss	Spearman's rho	p
Beck Total Score	0.608**	0.002

** . Correlation is significant at 0.01 (two-tailed).

The data in Table 5 show that there is a statistically significant correlation between resource loss and the severity of depression symptoms among women who have been displaced as a result of the armed conflict. Resource loss seems to aggravate depression symptoms in such women. However, due to the small size of the study group, these results cannot be generalised to displaced women in general.

Table 6 *Correlations between resource loss and the severity of depression symptoms – men*

Resource loss	Spearman's rho	p
Beck Total Score	0.018	0.957

Table 6 presents scores achieved by male respondents. The analysis of these scores shows no statistically significant correlations between resource loss and aggravated depression symptoms. One of the reasons for this might be the insufficient number of examined men (13). In order to obtain reliable results, the study should be repeated on a larger group of men.

The next stage of data analysis involved the verification of correlations between resource gain and the severity of depression symptoms (Table 7), as predicted by the following hypothesis:

H3: There is a statistically significant correlation between major resource gain and low severity of depression symptoms in people displaced as a result of military operations.

Table 7 *Correlations between resource gain and the severity of depression symptoms*

Resource gain	Spearman's rho	p
Beck Total Score	0.091	0.614

No statistically significant correlations were found between resource gain and the severity of depression symptoms in people displaced as a result of military operations. There are no grounds for making any claims that resource gains correspond to reduced severity of depression symptoms in the study group. Higher resource levels are not related to reduced severity of depression symptoms. During war, resource gain does not protect the individual against the development of depression symptoms. Consequently, Hypothesis 3 was not confirmed.

Conclusions

This article analysed issues concerning correlations between the importance attached to, loss of, and gain in, resources, and the severity of depression symptoms in people displaced as a result of military operations in Eastern Ukraine. These issues seem particularly important from the perspective of providing professional, multi-faceted support to displaced populations. It is important to note that the hypothesis concerning the correlation between resource loss and aggravated depression symptoms among displaced people was confirmed, which is also reflected in the literature on the subject. For instance, a study conducted in the United States (Galea et al., 2002; as cited in: Dekel & Hobfoll, 2007) shows that armed conflicts affect not only the soldiers who fight in them, but also civilian populations. The most frequent symptoms include depression and PTSD. This correlation was also reported by Hobfoll and his colleagues (2003; as cited in: Dekel & Hobfoll, 2007). These authors argue that resource loss can cause depression symptoms. Other authors support the view that depression stems from exhaustion after a stressful experience (Koszevska & Habrat-Pragłowska, 2003). For the study group analysed in this article, the extremely stressful situation was the armed conflict which resulted in their displacement and loss of many important resources. The correlation between resource loss and depression symptoms was also analysed for each gender separately. No significant correlations between these variables were found for men. This might be due to the fact that the study group contained too few men (13). The correlation between resource loss and aggravated depression symptoms was confirmed for women, whose number was slightly greater (23). Due to the insufficient sizes of both groups, the study should be repeated on larger male and female populations.

The above-mentioned findings, and especially those concerning the correlation between resource loss and the severity of depression symptoms, can contribute to improved assistance for people affected by war. The understanding of the underlying psychological mechanisms during such traumatic experiences will support the development of tailored assistance measures. However, above all, it is important to focus on breaking the chain of resource loss and to support people caught up in military operations in the psychological processing of any loss that has already taken place. Only then therapeutic measures can be taken to obtain new resources.

References

- Bilikiewicz, A., & Strzyżewski, W. (1992). *Psychiatria: podręcznik dla studentów medycyny* [Psychiatry: A handbook for students of medicine]. Warsaw: Polski Zakład Wydawnictw Lekarskich.
- Crocq, L. (2002). Zrujnowane losy, przekreślone szanse. Psychologiczne i społeczne konsekwencje wojen [Shattered lives, lost opportunities. Psychological and social consequences of wars]. In E. Rudak (ed.), *Stres wojenny. Skutki i ich łagodzenie* [War stress. Consequences and how to mitigate them] (pp. 21–36). Warsaw: Fundacja Moje Wojenne Dzieciństwo.
- Dekel, R., & Hobfoll, S. (2007). The impact of resource loss on Holocaust survivors facing war and terrorism in Israel. In *Ageing and Mental Health*, <http://www.researchgate.net/publication/6374688> (accessed on 28.11.2015).
- Forum przeciw Depresji, Statystyki [Forum against Depression, Statistics], <http://forumprzeciw-depresji.pl/index.php/depresja/o-chorobie/statystyki> (accessed on 25.04.2017).

- Hammen, C. (2006). *Depresja. Modele kliniczne i techniki terapeutyczne dla praktyków i pacjentów* [Depression. Clinical frameworks and therapeutic techniques for practitioners and patients]. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Hobfoll, S. E. (2006). *Stres, kultura i społeczność. Psychologia i filozofia stresu* [Stress, culture and community. The psychology and philosophy of stress]. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Hobfoll, S. E., Canetti-Nisim, D., & Johnson, R. J. (2006). Exposure to terrorism, stress-related mental health symptoms, and defensive coping among Jews and Arabs in Israel. *Journal of Consulting and Clinical Psychology, 74*(2), 207–218.
- Hobfoll, S. E., & Walfisch, S. (1984). Coping with a threat to life: a longitudinal study of self-concept, social support, and psychological stress. *American Journal of Community Psychology, 12*, 87–100.
- Janowski, K. (2009). Wybrane metody oceny depresji w praktyce lekarskiej [Selected methods of depression assessment in medical practice]. *Medycyna i życie* [Medicine and life], 3, 11–17.
- Kalinowski, M., Niewiadomska, I., Chwaszcz, J., & Augustynowicz, W. (2010). *Więzi społeczne zamiast więzień. Wsparcie pozytywnej readaptacji osób zagrożonych wykluczeniem społecznym z powodu konfliktu z prawem. Raport z badań z rekomendacjami* [Social bonds instead of prisons. Supporting positive rehabilitation of people at risk of social exclusion due to having a criminal record. A report from a study on recommendations]. Lublin: European Social Fund.
- Koszevska, I., & Habrat-Pragłowska, E. (2003). *O depresji, o manii, o nawracających zaburzeniach nastroju* [About depression, about mania, about recurrent mood disorders]. Warsaw: Wydawnictwo Lekarskie Polski Zakład Wydawnictw Lekarskich.
- Kramer, P. D. (2007). *Czym jest depresja* [What is depression?]. Poznań: Dom Wydawniczy Rebis.
- Lis-Turlejska, M., Szumiał, Sz., & Okuniewska, H. (2012). Aktualny poziom objawów stresu potraumatycznego w próbie osób, które w dzieciństwie przeżyły II wojnę światową [Current severity of PTSD symptoms in a sample of people who have survived WW2 during their childhood]. *Psychiatria Polska, 46*(2), 145–156.
- Łojko, D., Suwalska, A., & Rybakowski, J. (2014). Dwubiegunowe zaburzenia nastroju i zaburzenia depresyjne w klasyfikacji DSM-5 [Bipolar depressive disorders in DSM-5]. *Psychiatria Polska, 48*(2), 245–269.
- McKenzie, K. (2001). *Poradnik medyczny. Depresja* [Medical guide. Depression]. Warsaw: Wiedza i Życie.
- Papalos, D. F., & Papalos, J. (1994). *Przewyciężyć depresję* [Overcoming depression]. Poznań: Dom Wydawniczy Rebis.
- Parnowski, T., & Jernajczyk, W. (1977). Inwentarz depresji Beck'a w ocenie nastroju osób zdrowych i chorych na choroby afektywne [Beck Depression Inventory in the assessment of mood among healthy people and patients suffering from affective disorders]. *Psychiatria Polska, 11*, 417–421.
- Stowarzyszenie Aktywnie przeciwko Depresji [‘Actively against Depression’ Association], <http://www.depresja.org/nowe.html> (accessed on 25.04.2016).
- Strauss, K., Dapp, U., Anders, J., von Renteln-Kruse, W., & Schmidt, S. (2011). Range and specificity of war-related trauma to posttraumatic stress; depression and general health perception: Displaced former World War II children in late life. *Journal of Affective Disorders, 128*(3), 267–276.
- Witkowska, J. (2011). Teoria zachowanie zasobów i jej implikacje do problematyki stresu, zdrowia i odporności [Conservation of Resources theory and its implications for the issues of stress, health and resilience]. In E. Bielawska-Batorowicz, B. Dudek (eds.), *Teoria zachowania zasobów Stevana E. Hobfolla. Polskie doświadczenia* [Stevan E. Hobfoll's Conservation of Resources theory. Polish experiences]. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.

Resource distribution and health problems in people suffering from depression syndrome and consequences of armed conflicts

Justyna Ogar

MA in Psychology, John Paul II Catholic University of Lublin

Iwona Niewiadomska

KUL Professor, PhD in Psychology, John Paul II Catholic University of Lublin

Weronika Augustynowicz

PhD in Psychology, John Paul II Catholic University of Lublin

ABSTRACT

One of the key recent socio-political events observed by the global community has been the armed conflict taking place since February 2014 in Ukraine. Although it has been some time since the outbreak of the conflict, Poland in particular has continued to show interest in its neighbour who had to suddenly mobilise as a society and use all its available resources to fight for preserving its *status quo*. From a psychological point of view, the conflict has obviously affected a large group of people who have experienced tension, stress, or even fear for their lives each and every day for several years now. Such experiences, or participation in such events, will undoubtedly leave a mark on their physical and psychological health. But obviously, it is impossible to provide assistance without having at least approximate data on the people who are to be its recipients. Therefore, this study is designed to outline how people who are directly involved in these military operations function at the psychological level. It is an attempt to address the question: *What is the correlation between resource distribution and health problems in people suffering from depression syndrome?*

The article presents its theoretical background which served as the basis for designing the study, and proceeds to discuss its methodology and describe how it was conducted. Finally, it comments on its findings and their implications, both theoretical and those that could be applied in psychological practice.

Keywords: resource distribution, depression, physical symptoms, PTSD, armed conflict

Theoretical background

S. E. Hobfoll's Conservation of Resources (COR) theory serves as the theoretical basis for this study. In a sense, the theory was developed in opposition to Lazarus and Folkman's transactional model of stress and coping. It abandons the purely cognitive approach and refuses to recognise individual cognitive processes as crucial for producing diverse responses to stress. In his theory, Hobfoll agrees that stress has a biological origin, but to a large extent it is later shaped by various cultural experiences. Consequently, he argues that stress is a response to difficult, complicated situations which have been experienced many times. Hobfoll asserts that, for centuries, people have needed certain conditions, factors and characteristics, both personal and situational, that allowed them to survive and function normally, and that, as humans, we are hardwired to obtain and protect these, in order to either achieve success or simply survive. Hobfoll refers to these conditions as resources. Based on this construct, he defined stress as an internal state that can occur in three specific situations. Firstly, when there is a threat of losing resources, secondly, when the individual actually loses their resources, and thirdly, when resource investment does not produce the expected gain (Hobfoll, 1988; 1989). In addition, for the purposes of his theory, Hobfoll developed his own classification of resources by dividing them into four categories (Hobfoll, 2006).

The first category is object resources. These include physical objects. They might be crucial for survival, e.g., access to food, or valued for the boost in self-esteem they give or the higher status associated with them. This category includes household appliances, exclusive cars, etc. Hobfoll (2006) notes that while these are usually not considered the most important or indispensable, many people put in a lot of time, work and energy into obtaining them.

The next group is personal resources. These are generally individual characteristics and skills. Scholars distinguish between two foundations which serve as the basis for the development of these resources. Strelau (1995) argued that these resources stem from temperament, while scholars such as Ainsworth (1979), who explored attachment models, postulated that such resources emerge from permanent and healthy relationships with parents. This category of resources includes leadership and social skills, self-esteem, hope, activity, amicability, etc. (Hobfoll, 2006).

The third category identified by Hobfoll (2006) is condition resources. He considers them important as they provide people with access to the other resources. Therefore, these resources have recently become appreciated in and of themselves. They include such resources as health, marriage and employment, but also social roles, such as being the CEO of a company, which increases self-worth, thus expanding the pool of, or strengthening, the above-mentioned personal resources. While for many people these resources are perhaps the most difficult to recognise, they tend to have the largest impact on our lives, especially if they facilitate the achievement of various objectives the individual considers important, and support the acquisition of other resources. What is also distinct about them is that it usually takes a lot of time to obtain them, unless they are inherited, e.g. family property, and a lot of effort and resource investment, especially energy resources, to maintain them. At the same time, these resources are the easiest to lose, e.g. when we lose our job, we are immediately deprived of our role, and the *status quo* that has been maintained for years is disturbed.

The last group of resources postulated by COR theory are energy resources, whose main purpose is that they can be exchanged for other resources. As a result, they can also be acquired and accumulated to exchange them later for other resources, to prevent the loss of some important resources, or simply to protect the resources we already have. Three most important resources in this category, as identified by Hobfoll himself, are money, knowledge and credit (Hobfoll, 2006). While they can be accumulated and invested, it is important to note that these resources do not have any value in and of themselves unless they can be used in practice, i.e., exchanged for other resources.

In addition, Hobfoll proposes that resources be divided by their importance for survival, thus establishing a distinction between primary resources, such as food, home, and professional qualifications, that are necessary for survival and ensuring safety, and secondary resources, such as family support and hope, whose main purpose is to secure the available, and obtain new, primary resources. There are also tertiary resources which include all kinds of luxury goods that have little connection to primary or secondary resources (Hobfoll, 2006, p. 76).

Apart from this division, Hobfoll also describes the processes associated with such resources, as they can be either gained or lost by people. If any of these mechanisms occurs rapidly and affects a large or growing number of resources, this is referred to as a gain, or loss, spiral. The identification of these mechanisms has ultimately led to the development of rather universal principles, later confirmed by the results of various studies conducted by Hobfoll (Canetti et al., 2009, 2010; Hobfoll, 1991).

The first principle is that resource loss is always more salient than resource gain, and, as a result, people are more motivated to protect themselves against losses than to make gains. Indeed, people attach more importance to each loss in their lives which is difficult to compensate for or balance through resource gain (Hobfoll, 2003, p. 632).

The second principle is that people invest resources to protect themselves against resources loss, not to gain resources. In view of the above, their primary, key motivation seems to be to maintain the *status quo* rather than to become richer in resources. Nevertheless, in order to do this, people need to draw on the resources they already have, or those that are available to them, e.g., ones that can be borrowed or achieved quickly (Hobfoll, 2006).

Finally, the third principle is about initiating gain cycles, i.e., it suggests that individuals should rebuild, as much as possible, the resources they have used up (Hobfoll, 2006, p. 192).

These principles were then used by Hobfoll as the basis for establishing related corollaries, which suggest that people with greater resources are more capable of using and investing them, while people with fewer resources are more likely to protect the *status quo* than to seek to increase their resources, precisely because they have fewer resources and are afraid of losing any of them (Hobfoll, 2002).

Prior to formulating research hypotheses, the authors examined the literature on the subject for potential psychosomatic consequences of stress. Consequently, we decided to focus on the most typical physical symptoms of stress, i.e., muscle pain, stomach ache, chest pain, and difficulty breathing. In addition, we included PTSD and depression syndrome, defined in line with their respective criteria provided in DSM-IV, as psychopathological consequences of stress.

DSM-IV provides a new definition of a traumatic event. It suggests that traumatic events involve threatened death or serious injury, or a threat to the physical integrity of self or others. Such experiences cause the individual to experience intense fear, helplessness, or

horror. This definition provides a deeper understanding of trauma, linking it with the perception of risk. Post Traumatic Stress Disorder (PTSD) produces a host of symptoms. In order to diagnose them, the time criterion needs to be satisfied and the situation has to cause stress and disturb one's functioning in professional, family and other areas. According to DSM-IV, PTSD is diagnosed when:

1. The person has been exposed to a traumatic event in which both of the following have been present: (1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others (2) the person's response involved intense fear, helplessness, or horror – for children this criterion is slightly different.
2. The traumatic event is persistently reexperienced in one (or more) of the following ways:
 - A. Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions.
 - B. Recurrent distressing dreams of the event.
 - C. Acting or feeling as if the traumatic event were recurring (includes a sense of re-living the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur upon awakening or when intoxicated).
 - D. Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
 - E. Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
3. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:
 - A. Efforts to avoid thoughts, feelings, or conversations associated with the trauma.
 - B. Efforts to avoid activities, places, or people that arouse recollections of the trauma.
 - C. Inability to recall an important aspect of the trauma.
 - D. Markedly diminished interest or participation in significant activities.
 - E. Feeling of detachment or estrangement from others.
 - F. Restricted range of affect (e.g., unable to have loving feelings).
 - G. Sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span).
4. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following: difficulty falling or staying asleep, irritability or outbursts of anger, difficulty concentrating, hypervigilance, exaggerated startle response (as cited in: Friedman, 1999, p. 12).

It is also important to note that the duration of the disturbance must be more than one month, and it has to cause significant distress or impairment in important areas of functioning.

In relation to depression, we have also considered Beck's model based on the so-called cognitive triad, cognitive distortions and negative self-schemata (Beck, 1967).

Cognitive, or negative, triad is a concept referring to a way of thinking dominated by negative cognitive processes – memories, observations and interpretations of situations concerning three areas: the self, the world and the future. Such thinking further worsens one's mood while also contributing to the lack of motivation. Consequently, people suffer-

ing from depression will consider not only themselves but also the world in general and the future as inadequate, deficient and unchangeable. In his model, Beck makes an assumption that such thoughts are automatic, involuntary, and unintentional. This mechanism, leading to automatic negative thinking, in a way sets the individual up for chronic depression. Failures and downfalls are often generalised and exaggerated. This is confirmed by research on groups of young adults (Lamberton & Oei, 2008).

The second area in Beck's model are cognitive distortions. Such thinking is often ill-considered, full of logical errors and biases, characterised by selective abstraction, and focusing on negative events. In part it stems from previous life experiences and past beliefs, which are subsequently reinforced by finding information in one's environment to support one's views.

The third part of the model are negative self-schemata. Schema is a concept referring to the representations of one's experiences in one's mind, which then distort one's thinking, affecting one's decision-making and views. They accelerate the process of thinking by making the individual focus only on the key aspects of information and processing the rest in an automatic manner. A self-schema refers to the individual himself/herself and constitutes a set of certain views and "theories" about himself/herself. It is shaped by repetitive experiences. In people suffering from depression, such schemata stop them from accepting any positive information about themselves, leading to fixed, negative, view of themselves. Under this model, such schemata become particularly strong in stressful moments that bring back some earlier, unpleasant memories (Beck, 2002).

The literature provides many examples of correlations between resource distribution and depression, resource distribution and PTSD, and COR and physical symptoms of stress. Some of these have been provided by Hobfoll himself, who, seeking to prove his theory, tested it repeatedly, usually on groups who had experienced wars, disasters or accidents involving many people (Hobfoll, 1991; McFarlane & de Girolamo, 1996), which he believed to be perfect "laboratories" for testing his COR theory (Hobfoll, 2006, p. 194) and expected to explicitly show resource loss mechanisms at work.

Own research methodology

The question raised early on in this article – *What is the correlation between resource distribution and health problems in people suffering from depression syndrome?* – was examined using three research hypotheses:

H1: The group of people with depression will show a stronger positive correlation between resource loss and aggravated PTSD symptoms compared to the group not suffering from depression.

H2: Resource gain will show a stronger negative correlation with aggravated PTSD symptoms in the group of people with depression than in the group not suffering from depression.

Both Hypotheses 1 and 2 stem directly from the corollaries to the COR theory suggesting the existence of gain and loss cycles in people who experience stress.

H3: The group of people with depression will show a stronger positive correlation between resource loss and physical problems than people not suffering from depression.

It was assumed that one disorder is likely to be followed by other disorders. Following Hobfoll's distinction between people with fewer and people with greater resources, the study assumed that people suffering from depression, who, when faced with another very stressful experience, would experience loss spirals, would be those with fewer resources.

The study was conducted using questionnaires, which were completed individually in appropriate conditions. The study was possible thanks to the cooperation between the Chair of Social Psychoprevention at the John Paul II Catholic University of Lublin and G. S. Kostyuk Institute of Psychology at the National Academy of Pedagogical Sciences (NAPS) of Ukraine in Kiev, Oblast Office in Vinnytsia, Ukraine, and volunteers from the Vinnytsia State Pedagogical University and diocesan priests in Zhytomyr, Ukraine.

Respondents included people who sought support in connection with their recent armed conflict experiences.

The study used the following methods:

- Questionnaire on basic sociodemographic data, information concerning previous and current socioeconomic status, and involvement in the recent military operations.
- S. Hobfoll's Conservation of Resources-Evaluation (COR-E) questionnaire, which measures such mechanisms as importance attached to individual resources and resource gain and loss.
- Beck Depression Inventory as a screening tool for depression. Results obtained using this inventory helped identify two groups of respondents, namely people with depression, i.e., those who scored 12 or more points in the inventory; and people not suffering from depression, i.e., with scores below 12 points.
- Post Traumatic Stress Disorder Checklist – Military Version (PCL-M), a method developed by the National Center for PTSD under the aegis of the U.S. Department of Veterans Affairs. It is designed to screen individuals for PTSD on the basis of the PTSD symptoms proposed by DSM-IV. It was developed specifically for people who experience trauma related to armed conflict or war, as a variant of the standard PCL questionnaire.
- Health Functioning Questionnaire – a method used to measure the current health of respondents. It was developed for the purposes of the study as part of a Social Pathology Psychoprevention seminar under the guidance of KUL Professor Iwona Niewiadomska, PhD. It consists of questions prepared using the expert judge method and concerning broadly defined psychosomatic symptoms, and questions about the presence of symptoms associated with psychoactive substance use, and part of the Maudsley Addiction Profile (MAP) by J. Marsden, D. Steward and D. Besta. The study used 4 questions about the frequency of physical symptoms, such as stomach ache, difficulty breathing, chest pain, and muscle pain.

Study group characteristics

The study covered 324 people, all of whom lived in Ukraine and who had experienced the recent armed conflict in their country. The study group included 75 women (23%) and 243 men (75%). No gender data were available for 6 people, who accounted for the remaining 2% of answers. The average age of respondents was 34 years, with standard deviation of 9.85; the youngest person was 18, and the oldest was 74.

The respondents included 1 person with primary education, which corresponds to 0.3% of all answers. As many as 32 people said they had lower-secondary education (9.9%), 72 people had vocational education (22.2%), and 68 people had secondary education (21%). The greatest number of people – 136, accounting for nearly half of the study group (42%) – said they had higher education. No data were available for 15 people (4.6%).

From the perspective of the addressed research problem, it also seemed reasonable to ask respondents whether they had lost a loved one as a result of the war. It turned out that nearly one in five respondents had lost a loved one, with 58 people, i.e., 17.9% of respondents, answering “Yes”, and 255 people (78.7%) answering “No”.

Statistical analyses were carried out using Pearson correlation coefficient (Pearson’s r). Based on an assumption made by the Law of Large Numbers (LLN), which states that after a sufficient number of random attempts, the result can be expected to closer match normal distribution, it was observed that this condition is met for the sample of 324 people (Francuz & Mackiewicz, 2007, p. 215). In addition, the study used Fisher’s z -transformation. This method verifies whether there are statistically significant differences between the identified groups in terms of their scores – correlation coefficients.

Results

Initially, the analyses calculated basic descriptive statistics such as the number of samples (N), mean (M), and standard deviation (SD). These results are presented in Table 1.

Table 1 *Descriptive statistics of the tested variables in a group of people who have experienced armed conflict*

<i>Variable</i>	<i>N</i>	<i>M</i>	<i>SD</i>
Resource importance	311	4.04	0.64
Resource gain	296	3.40	0.67
Resource loss	291	2.50	0.89
Depression – total score	318	10.95	8.43
Physical symptoms	320	2.27	0.83
PTSD – total score	318	36.76	13.10

In order to verify our hypotheses, we identified two subgroups of respondents – people with depression and people who did not report depression symptoms. For this purpose, we used Beck Depression Inventory (BDI), with 12 points as the threshold for diagnosing respondents with depression. This allowed us to identify two subgroups of respondents (Table 2).

Table 2 *Subgroups of respondents identified on the basis of BDI scores*

<i>BDI</i>	<i>N</i>	<i>%</i>	<i>Valid percentage</i>
Without depression	176	54.3	55.3
With depression	142	43.8	44.7
No data	6	1.9	-
Total	318	98.1	100

These results show that this study group is unique in that there is a relatively large number of people who exhibit depression symptoms. Taking only valid samples into consideration, the proportions of both subgroups are 55% (people without depression) and 45% (people with depression). Therefore, the difference in group size is very small.

In order to test out Hypothesis 1, we analysed the correlation between resource loss and the severity of PTSD symptoms in both study subgroups. The results are presented in Table 3.

Table 3 *Correlation between resource loss and PTSD in subgroups with and without depression syndrome*

<i>COR – Loss</i>	<i>BDI</i>	<i>PTSD – TS</i>		
		<i>r</i>	<i>p</i>	<i>N</i>
Resources	Depression	-0.13	0.14	134
	No depression	0.21	0.01	156

Statistical analysis showed a statistically significant correlation ($p = 0.01$) between resource loss and PTSD symptoms only in the subgroup of people without depression. Pearson's r for this correlation is 0.21, so it is a positive, weak correlation. What matters in the context of Hypothesis 1 is the result obtained by the subgroup of people with depression, which shows that, in their case, there is no significant correlation between resource loss and PTSD symptoms ($p > 0.05$).

Due to different sizes of both subgroups, we used Fisher's z-transformation to compare correlation coefficients between the study subgroups. The obtained result showed that correlation coefficients for both subgroups were statistically different: $z = 2.89$, $p = 0.0019$, which means that the correlations between resource loss and the severity of PTSD differ between the subgroups of people with and without depression. A stronger correlation between these variables was found in the subgroup of people who did not suffer from depression syndrome. Consequently, Hypothesis 1 was rejected.

Hypothesis 2 suggested a stronger negative correlation between resource gain and the severity of PTSD symptoms in the subgroup of people suffering from depression, as compared to the subgroup without depression. The corresponding results are presented in Table 4.

Table 4 *Correlation between resource loss and PTSD symptoms in subgroups with and without depression syndrome*

COR – Gain	BDI	PTSD – TS		
		<i>r</i>	<i>p</i>	<i>N</i>
Resources	Depression	–0.29	0.00	134
	No depression	–0.08	0.30	161

The results presented in the table above show that there is a statistically significant negative correlation between resource gain and PTSD symptoms in the subgroup of people with depression ($r = -0.29$, $p = 0.00$). Therefore, the more resource gains the individual with depression makes, the lower their risk of developing PTSD symptoms. In the subgroup of people without depression symptoms the correlation between these variables was statistically insignificant ($r = -0.08$, $p = 0.30$).

Fisher’s z-transformation produced a statistically significant result: $z = -1.85$, $p = 0.03$. Therefore, the correlation between resource gain and PTSD symptoms in the subgroup of people experiencing depression is statistically stronger than in the subgroup of people without depression. As a result, Hypothesis 2, which suggested a stronger negative correlation between resource gain and the severity of PTSD symptoms in the subgroup of people suffering from depression, as compared to the subgroup without depression, was confirmed.

Hypothesis 3 predicted that there was a stronger positive positive correlation between resource loss and physical problems in the subgroup of people with depression, compared to people not suffering from depression. Its test results are presented in Table 5.

Table 5 *Correlation between resource loss and physical symptoms in subgroups with and without depression syndrome*

COR – Loss	BDI	PHYSICAL SYMPTOMS		
		<i>r</i>	<i>p</i>	<i>N</i>
Resources	Depression	0.22	0.01	134
	No depression	0.41	0.00	156

The results presented above show two statistically significant correlations between resource loss and the development of physical symptoms. In both subgroups, the correlation shows that the greater the resource loss, the more severe the physical symptoms ($r = 0.22$, $p = 0.01$ for the subgroup with depression; $r = 0.41$, $p = 0.00$ for the subgroup without depression). In order to examine the differences between the two correlation coefficients, we used Fisher’s z-transformation. It showed significant differences between these correlations ($z = -1.78$, $p = 0.04$). In other words, the subgroups show significant differences between resource loss and physical symptoms. However, this correlation seems to be stronger in the subgroup of people without depression, which disproves Hypothesis 3. These results suggest that there is a linear correlation between resource loss and physical symptoms in the subgroup of people

with depression. But although clear, this correlation is weak ($r = 0.22$). The same correlation is also found in the subgroup of people without depression. But in their case, the correlation is moderate ($r = 0.41$) – much stronger than in the subgroup experiencing depression.

Conclusions

Out of the three hypotheses proposed in this study, our statistical analysis confirmed the one that predicted a stronger negative correlation between resource gain and the severity of PTSD symptoms in the subgroup of people suffering from depression, as compared to the subgroup without depression. This is an important finding in the context of support and prevention measures for people who are affected by war. In order to stop the spiral of the losses they suffer in relation to their mental health, or, in other words, to prevent one dysfunction from leading to another, it is crucial that such people be provided with opportunities for obtaining various categories of resources. Indeed, as shown in this study, the greater the resource gains among people suffering from depression, the less likely they are to develop PTSD symptoms.

The established correlation between resource loss and PTSD symptoms in the subgroup of people without depression shows that in such people resource loss is important from the perspective of potential development of PTSD. Therefore, it can be assumed that resource compensation or restoration to their previous level from before the stressful experience can relieve PTSD symptoms.

The results related to Hypothesis 3 are not typical, since they showed that it was the subgroup of people without depression who showed a stronger correlation between resource loss and health symptoms such as stomach ache, difficulty breathing, chest pain and muscle pain. In fact, in this subgroup, the relationship between the variables was moderate, while in the subgroup with depression, it was much weaker.

To sum up, it seems that this study group was very peculiar and its characteristics could have significantly affected our findings. Indeed, it was a relatively large group (more than three hundred people), and three in four respondents were male. All respondents declared that they had experienced armed conflict, and they had sought psychological help. In addition, this group showed a relatively small difference (10%) between people who exhibited depression symptoms and those who did not. The proportion of people with depression within the study group was as high as 45%, whereas, as reported by the recent World Health Organisation report, there are now approx. 300 million people suffering from depression worldwide, which corresponds to about 4% of the world's population (WHO, 2017). Perhaps some role is played also by the different numbers of male and female respondents – it can be presumed that men could have been more reluctant to disclose all the information, especially if such information concerned difficult issues associated with traumatic experiences or disorder symptoms.

Practical implications of our findings are important for the development of various assistance plans or social prevention projects for people living in Ukraine and other civilian populations affected by armed conflicts. These findings can provide encouragement for a flexible approach to the planning and designing of prevention measures, based on as much data as possible and applicable to as many people as possible, so that these are not limited only to people with diagnosed depression disorders. Our results suggest an interesting correlation

between resource loss and physical symptoms in subgroups with and without depression, which can be used for planning health prevention measures, which should focus first on stopping the spiral of loss, and only then on producing resource gains.

References

- Ainsworth, M. D. S. (1979). Infant-mother attachment. *American Psychologist*, 34, 932–937.
- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th edition). Washington, DC: Author.
- Beck, A. T. (1967). *Depression: Clinical, experimental and theoretical aspects*. Philadelphia: University of Pennsylvania Press.
- Beck, A. T. (2002). Cognitive Models of Depression. In R. L. Leahy, E. T. Dowd *Clinical Advances in Cognitive Psychotherapy. Theory and Application* (pp. 29–61). New York: Springer Publishing Company.
- Canetti, D., Galea, S., Hall, B. J., Johnson, R. J., Palmieri, P. A., & Hobfoll, S. E. (2010). Exposure to prolonged socio-political conflict and the risk of PTSD and depression among Palestinians. *Psychiatry Interpersonal & Biological Processes*, 73(3), 219–231.
- Canetti, D., Halperin, E., Sharvit, K., & Hobfoll, S. E. (2009). A new stress-based model of political extremism: Personal exposure to terrorism, psychological distress and exclusionist political attitudes. *Journal of Conflict Resolution*, 63(3), 363–389.
- Francuz, P., & Mackiewicz, R. (2005). *Liczby nie wiedzą skąd pochodzą* [Numbers don't know where they come from]. Lublin: Wydawnictwo KUL.
- Friedman, M. J. (1999). PTSD – rozpoznawanie i leczenie [PTSD – diagnosis and treatment]. *Psychiatria Praktyczna* [Practical Psychiatry], 2, 11–18.
- Hobfoll, S. E. (1988). *The ecology of stress*. New York: Hemisphere.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513–524.
- Hobfoll, S. E. (1991). Traumatic stress: A theory based on rapid loss of resources. *Anxiety Research: An International Journal*, 4, 187–197.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6, 307–324.
- Hobfoll, S. E., Johnson, R. J., Ennis, N., & Jackson, A. P. (2003). Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of personality and social psychology*, 84(3), 632.
- Hobfoll, S. E. (2006). *Stres, kultura i społeczność. Psychologia i filozofia stresu* [Stress, culture and community. The psychology and philosophy of stress]. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Lamberton, A., & Oei, T. P. S. (2008). A test of the cognitive content specificity hypothesis in depression and anxiety. *Journal of Behavior Therapy and Experimental Psychiatry*, 39(1), 23–31.
- McFarlane, A. C., & deGirolo, G. (1996). The nature of traumatic stressors and the epidemiology of posttraumatic reactions. In B. A. van der Kolk, A. C. McFarlane, L. Weisaeth (eds.), *Traumatic stress: The effects of overwhelming experience on mind, body and society* (pp. 129–153). New York: Guilford.
- Strelau, J. (1995). Temperament risk factor: The contribution of temperament to the consequences of the state of stress. In S. E. Hobfoll, M. W. deVries (eds.), *Extreme stress and communities: Impact and intervention* (pp. 63–82). Dordrecht, The Netherlands: Kluwer Academic Publishers.

The psychology aimed at addressing challenges arising during the recent military conflict in Ukraine

Tetiana Mykolaivna Yablonska

PhD in Psychology, Senior Research Fellow, Associate Professor, Department of Developmental Psychology,
Taras Shevchenko National University of Kyiv

ABSTRACT

The article discusses the basic regulations that determine the content and direction of the psychological rehabilitation of war veterans and internally displaced persons. The areas of psychological research aimed at addressing challenges arising during the recent military conflict are analyzed and include a study of the characteristics of social and psychological adaptation of internally displaced persons that facilitate their integration into host communities; psychological support for troops, improvements in psychological methodologies used for military personnel training; comprehensive medical and psychological studies on the consequences of participation in hostilities and development of effective models and means for war veterans' rehabilitation; studies on psychological and psychosocial problems faced by war veterans after their return to civilian life (adaptation to civilian life, personality changes as a result of combat experience, psychological assistance to war veterans' families); improvements in methodologies and practices of psychological assistance to war veterans and internally displaced people; training of psychologists and social workers in working with anti-terrorist operation participants and victims of the armed conflict; studies on informational and psychological aspects: characteristics of hybrid war, and manipulative techniques in the media. The research results in each area are presented briefly.

Keywords: internally displaced persons, war veterans, psychological rehabilitation, social and psychological adaptation, PTSD

Challenge

Large-scale social and political transformations in Ukraine and its difficult situation are the results of Crimea's annexation, and military aggression in east Ukraine has caused a large number of economic, social and psychological problems that affected great masses of people.

Because of Crimea's occupation and armed conflict in the Donbas region in Ukraine, a new category of people – internally displaced persons (IDPs) – has appeared. According to the Ministry of Social Policy, as at 19 January 2017, the number of internally displaced persons amounted to 1 648 852 individuals, or 1 327 687 families, from Donbas and Crimea¹. Given these numbers, Ukraine has become one of the ten countries with the highest number of IDPs that have received such status because of armed conflict and violence (*Global report on Internal displacement*, 2016), and it now ranks first among European countries. The scale of internal migration has caused significant economic, social, and socio-psychological problems; the last type includes such challenges as migrants' adaptation to new conditions of life, and their integration into local communities, which requires the development of effective programmes of psychological assistance.

The psychological support of war veterans during the armed conflict and social and psychological consequences of participation in hostilities form a separate problem. According to official data, as at 2 April 2017, the number of war veterans was 293 489². The effectiveness of military operations is an acute problem that includes administrative aspects as well as psychological readiness for military service. The problem of war veterans' adaptation to civilian life becomes a large-scale issue, as any war creates immediate and delayed impact on society, including system-of-values and moral deviations, negative mental states in war veterans (maladaptation, lowered immunity, nervous and mental overload) (Topol', 2015), transformation of developed negative mental states into post-traumatic stress disorders (Buryak, Hinevskii & Katerusha, 2015), that may occur months or even years later. Therefore, the development and implementation of effective programmes for war veterans' medical and psychological rehabilitation and their social and psychological adaptation is an urgent issue.

The **aim of this article** is to analyze the main trends and results of psychological studies on the challenging issues arising during the recent military conflict in Ukraine.

The legal principles of psychological assistance for internally displaced persons and anti-terrorist operation participants

In order to ensure that the issues concerning the rights and freedoms of internally displaced persons are addressed properly, between 2014 and 2017 Ukraine adopted a number of key legal documents, including the law "On the granting of the rights and freedoms to internally displaced persons" of 20 October 2014. The issues of IDPs' rights and freedoms

1 <https://ua.112.ua/statji/skilky-sohodni-v-ukraini-zareiestrovano-pereselentsiv-z-donbasu-ta-krymu-informatsiia-po-rehionakh-369259.html>

2 <http://dsvv.gov.ua/pres-tsentr>

are also included in the National Strategy on Human Rights for the period until 2020, as approved by the Decree of the President of Ukraine, “The comprehensive State programme for the support, social adaptation, and reintegration of citizens displaced from the temporarily occupied territory of Ukraine and the zone of the anti-terrorist operations for the period until 2017”, as approved by the Council of Ministers of Ukraine.

As regards participation in anti-terrorist operations (ATO), according to regulations, every combatant, after they acquire the ATO participant status, obtains the right to free psychological counselling, which is governed by the “Regulations on the psychological rehabilitation of the military personnel of the Armed Forces of Ukraine, who took part in anti-terrorist operations, during the rebuilding of combat readiness of their military units”³. According to these regulations, psychological rehabilitation of military personnel includes a set of psychological measures aimed at the preservation, restoration and correction of psycho-physiological and mental functions, maintenance of an optimal level of combat readiness of military personnel who has been exposed to stressful factors and affected by them, and creation of favourable conditions for the further successful performance of their duties.

The purposes of war veterans’ psychological rehabilitation are:

- conservation and restoration of their physical and mental health;
- physical and psychological recovery of their ability and readiness to perform their duties;
- reduction in the frequency and severity of combat traumas in the form of post-traumatic stress states, which reach maximum intensity in the form of post-traumatic stress disorders and chronic psychopathological personal changes.

The regulations prescribe psychological rehabilitation tasks depending on a stage – diagnostic, restorative – and specify a list of psychological diagnostic methods recommended for use:

1. Spielberger State-Trait Anxiety Inventory in its Russian modification by Yu. Khanin.
2. Techniques of Scale-based Self-Estimation of Psychophysiological States (O. M. Kokun).
3. Primary Care PTSD Screen.
4. Beck Depression Inventory.
5. Impact of Event Scale-R (quick evaluation).
6. “Stress-Factors” technique.
7. Traumatic Stress Questionnaire by I. O. Kotyenov.
8. Short Scale of Anxiety, Depression and PTSD.
9. Combat Experiences Scale.
10. “Differential Diagnosis of Depression” technique.
11. Mississippi Scale for Combat-Related PTSD (M-PTSD).
12. Taylor Manifest Anxiety Scale (modified by V. G. Norakidze).
13. MMPI (in the version developed by L. Sobchik).

The psychological rehabilitation of ATO participants provides for mandatory implementation of the following measures: psychological education and counselling; psychological assessment and selection of methods for psychological rehabilitation; psychological help

3 <http://zakon3.rada.gov.ua/laws/show/z0237-16#n11>

(therapy); psychological treatment and planning of personal future; and prevention of critical psychological states. Psychological rehabilitation can be carried out individually or in groups.

Analysis of research and psychological help practices

Today, the issue of psychological and psychosocial rehabilitation of war veterans and internally displaced persons is one of the most important areas of research and practical psychological work in Ukraine. The extreme importance of this issue, the need to develop efficient methodologies for psychological rehabilitation, social and psychological adaptation and rehabilitation of persons exposed to armed conflict stressors, determine the priorities of psychological research in Ukraine.

In recent years, voluntary service has been very popular in Ukraine. It is aimed at helping people and war veterans at the interface between internally displaced people and war veterans returning from the war zone or undergoing treatment or rehabilitation. Ukrainian psychologists – academics as well as practitioners – are actively involved in such help and provide psychological assistance in east Ukraine, in hospitals, rehabilitation centres for war veterans, and communities where migrants live. With international community support, including professional assistance, local professionals have mastered modern effective methods of working with trauma and methodologies of psychological support and rehabilitation of war veterans and people affected by the armed conflict.

The global scientific community organizes conferences to discuss issues related to psychological assistance for IDPs, psychological rehabilitation of war veterans, psychological assessment and support for them, including international and national scientific and practical conferences: “Implementation of modern rehabilitative methodologies for victims during the recent military conflict” (Kyiv, December 2017), “Military psychology during war and peace: problems, experiences and prospects” (Kyiv, February 2017), “Personality in crisis and critical life situations: psychological techniques of personality change” (Sumy, February 2017), and “Psychological rehabilitation of war veterans returning from the ATO zone: theory and practice” (Kyiv, February 2017), where professionals discuss research results and share the best practices.

Therefore, the following research areas should be highlighted:

- studies of the characteristics of the social and psychological adaptation of internally displaced persons to facilitate their integration into host communities; psychological help for displaced families and their children who have witnessed traumatic events;
- psychological support for troops, improvement of psychological methodologies for military personnel preparation, and especially the peculiarities of psychological practice during military operations;
- comprehensive medical and psychological studies of the consequences of participation in military operations and development of effective models and means of war veterans’ rehabilitation, and in particular, studies of PTSD features and development of rehabilitative programmes designed to help people overcome traumas, and prevention of war veterans’ destructive behaviour, such as suicide, alcohol abuse, etc.;
- studies of psychological and psychosocial problems faced by war veterans returning to civilian life: their adaptation to civilian life, personal changes as a result of

- combat experience (from the perspectives of both traumatic experience and personal growth), psychological assistance for war veterans' families after their return;
- improvement of the techniques and practices of psychological assistance for war veterans and internally displaced people;
- training of psychologists and social workers to work with ATO participants and armed conflict victims;
- research of informational and psychological aspects: characteristics of a hybrid war, manipulative techniques in the media.

Let us present briefly the most important results of these studies

The studies of *internally displaced persons* include the following important aspects: social and cultural integration of migrants into local communities, their adaptation, forced migration as a victimization factor, the practice of psychological support provision.

Social and cultural integration of migrants into local communities is seen as a gradual process that depends on the integration capacity of IDPs and relevant qualities of their host communities that are manifested in their attitudes, values, interests and activities (Leonova, 2017). Integration is supported by such factors as consensus between interacting persons regarding their ideals, and integration goals that promote the reconciliation of social and cultural differences, are important for this process. Building of relationships between IDPs and local population is very important for successful integration, because, at this level, actual processes of communication and interaction are unfolded, various forms of “friend or foe” relationships are defined, and the need for cooperation and solidarity is recognized.

O. Blinova (2016) describes individual and group factors involved in the adaptation of internally displaced persons (Blinova, 2016). The individual factors include demographic and individual differences (age – children are the most adaptable, education – people with higher education experience less “cultural shock”); personal characteristics: people who are authoritarian, rigid, and intolerant to uncertainty find it more difficult to conform to new social norms and values, and to learn a new language; personal life experience, and willingness to change. The group factors include the extent of similarities or differences between cultures; peculiarities of the culture to which IDPs belong; and characteristics of their host communities.

According to N. Didyk, IDPs tend to face the following problems: separation from their native land and family, bureaucracy and misunderstanding of officials, different attitudes of the local population, lack of personal savings and the need to help those who were left at home. At the initial stage of adaptation, IDPs often feel insecurity, isolation, helplessness, fear of harassment, uncertainty about their future, and sorrow for those who have died (Didyk, 2017).

O. Bodnar (2017) has revealed that forced migrants are characterized by high victimhood that may indicate a fairly low level of vitality, pessimism, excessive psycho-emotional tension, dissatisfaction with life, self-blame and accusation against others, self-pity, susceptibility to irritation, and aggression directed at others. A significant number of migrants show high rates of victim playing – difficult life circumstances were such a traumatic situation that they have led to decreased life meaningfulness, lowered overall satisfaction, loss of interest and a sense of control over their own destiny and development of willingness to get profit from their difficult present situation (Bodnar, 2017).

The issues related to *psychological support for the armed forces during the recent military conflict*, improvement of the psychological methodologies used during military training, and the psychological practice during military operations are examined broadly. For example, a study conducted by S. Hryluk (2017) reveals peculiarities of military personnel's motivation, including the motives behind service in the army reserve, with the leading reason being patriotic motives associated with homeland defence (25%). At the same time, there are economic motives (18%), the desire not to lose military skills (13%), to have social security (9%), to build both one's civil and military career (8%) and not to lose touch with the fellow soldiers and commanders they served with during mobilization (6%), to acquire new qualifications (5%), to develop further their physical and professional skills (5%) (Hryluk, 2017).

Psychosocial adaptation of conscripts was investigated by V. Mozgovyi (2017). His study shows that 90.4% of army conscripts are generally well adapted to their service, and 9.6% are maladapted and require attention and professional psychological assistance. There are interesting findings obtained from the evaluation by the respondents of the factors that affect their adaptation to duties within their military units. The following rank the highest among such factors: "support from relatives", "own money", "support from fellow soldiers", "support from officers", and "daily regimen". The lowest rankings were obtained by such factors as "meetings with priests", "work of psychologists", "cultural events", "occupational training", and "sport events". The obtained results show, on the one hand, the significant potential for the provision of psychological support for military activities, spiritual and cultural work, and on the other, the need for a more extensive information campaign among conscripts (Mozgovyj, 2017).

Psychological ways to prevent non-combat losses of troops in the ATO zone have been examined by V. Kudrya (2017). The urgent need for such research and corresponding psychological assistance has been created by the increase in non-combat losses in the Armed Forces of Ukraine – during the two years of the ATO, non-combat losses have amounted to 1 294 military personnel, which is a third of all losses. The available data show that 112 cases of death were because of road accidents, 96 cases were due to poisoning, including drug and alcohol abuse; there were 259 cases of suicide, 121 cases of fragging; as for death accidents, there were 148 cases because of fire accidents, 111 cases of violation of safety rules for handling weapons and ammunition, 40 cases of general safety violation, 405 deaths caused by illness or chronic diseases, and 2 deaths due to other reasons. As noted by Kudrya, these sad statistics show a number of unsolved organizational, professional, psychological and medical problems. In particular, many of these cases are psychological in nature (suicide, homicide motivated by conflicts, tendency to risky behaviour). The author stresses the need for more careful vocational and psychological screening to discover not only obvious psychiatric contraindications, but latent mental abnormalities and deviations from the normal range, which can become worse as a result of traumatic military experiences; quality professional psychological training aimed at the formation of psychological readiness for duty in risky conditions; and the improvement of the psychological services of the Armed Forces of Ukraine (Kudrya, 2017).

The issue of war veterans' psychological rehabilitation and adaptation to civilian life is a separate line of research. Participation in military operations and traumatic combat experiences undoubtedly have a huge impact on war veterans' future life. Ukrainian scholars study the problems of war veterans' rehabilitation (Buryak, Hinevskyi & Katerusha, 2015; Biala & Novak, 2016); personal qualitative changes, changes in consciousness as the core of

meaning (Tytarenko, 2016); and war veterans' social and psychological adaptation to civilian life (Yablonska & Dembytska, 2017 and other researchers).

The models of psychological rehabilitation used for working with war veterans are based on the best global practices and their effectiveness has been demonstrated. At the conference entitled "Using modern rehabilitative methodologies with victims during the recent military conflict", M. Biala and O. Novak presented the results of their diagnostic and rehabilitation work, carried out between 2015 and 2016 in the trauma therapy centres "Return" (Kyiv) and "Horizon" (Severodonetsk) (Biala & Novak, 2016).

The PCL-scale of self-evaluation of PTSD presence (PCL-m, PCL-c, PCL-5), Impact of Event Scale-R (IES-R), the Beck Anxiety Inventory (BAI), the Beck Depression Inventory (BDI), the Dissociative Experiences Scale (DES), and resource and resilience assessment (BASIC Ph) were used at the psychodiagnostic testing phase. It needs to be noted that the necessary conditions for success are the creation of a multidisciplinary team of specialists, the system to refer a person to a necessary professional, and systematic supervision and support.

The above-mentioned authors present data for the period from March 2015 to November 2016 – a survey of 500 people, including war veterans and their families, IDPs, volunteers, and residents of east Ukraine. The following disorders have been diagnosed (Table 1).

Table 1 *Statistics concerning disorders identified during psychological examination*

<i>Number of persons</i>	<i>Disorder type</i>	<i>%</i>
84	Adaptation problems	16.8
40	Acute stress reactions	8
42	PTSD	8.4
97	Anxiety	19.4
19	Depression	3.8
12	Somatoform disorders	2.4
68	Other mood disorders	13.6
106	Other manifestations that do not pass for any specific disorder, such as difficulties in communication, family conflicts, sleep disorders, irritability, poor control of emotions, aggressiveness, stuttering, etc.	21.2

Combatant's psychological rehabilitation includes the following steps (as identified by Janet): stabilization, trauma analysis, adaptation to changes in life. The rehabilitative work consists of relationship-building and interviews in combination with psychological traumatic disorder diagnostic assessments; presentation of psychological information about the nature of PTSD and its symptoms, and opportunities for psychological assistance; joint decision to initiate the support; use of a variety of techniques and methods aimed at relaxation, creating a "safe place", distancing, refocusing; testing of avoidance reactions, managing "triggers"; and assessment of results. The study showed that the most positive trends were reported for anxiety, irritability, excessive vigilance, control over emotions, aggression; sleep disorders, sensitivity to triggering stimuli, symptoms of avoidance of thoughts or

conversations about past traumatic situations; a sense of alienation from others decreased; capacity for concentration and planning for the future increased. The symptoms associated with the emotional and value areas – emotional numbness, negative attitude towards oneself and the world, reduced stress tolerance, loss of interest in what was previously enjoyable – were more persistent.

War veterans' adaptation to civilian life was addressed in a study conducted by T. Yablonska and N. Dembicka (2017) as part of a complex dialectical process to find a dynamic equilibrium in the system of war veterans' relations with the civil social environment (Yablonska & Dembicka, 2017). In fact, this is an individual process of review and reconsideration with partial or complete rejection of norms and behavioural patterns, social roles, some adaptive mechanisms of personal systems and strategies that were effective in the special circumstances of military service, but make it difficult to live a peaceful life. This process is accompanied by transformations at all levels of individual (war veteran's personality) and group functioning (civil environment) of interacting people and by creation of an adaptive psychosocial space between people. The degree of harmony/conflict in the adaptation process is determined by specific stress conditions experienced by war veterans, characteristics of their self-awareness and self-regulation efficiency with which he returns to civilian life. The research showed that a significant number of war veterans were maladapted – 20–25% of respondents were under heavy stress and assessed their physiological states, self-efficacy, and self-actualisation as low. War veterans' adaptation is characterized by contradictory trends: on the one hand, the desire to actively, effectively regulate their lives, relying mainly on their own powers, and on the other, seeking support from their environment.

The problem of war veterans' adaptation to civilian life is also addressed from the perspective of their attitudes to (Matsehora, 2017), and motivations behind, professional activities (Karachinskyj, 2017).

The problem of psychological maladaptation of wounded war veterans and its prevention has been studied by L. Volnova, who defines maladaptation as absence of harmony in interactions between the individual and society and in their relationship with themselves, manifested in internal discomfort, behavioural problems, and disorders in terms of relationships and activities. This situation demonstrates the utter exhaustion of both physical and mental personal powers, or, in fact, the loss of "former self". Different forms of addiction are developed as a result of war veterans' maladaptation, allowing them to enter into an altered state of consciousness, "to escape" from reality into the illusory, or virtual, world through alcohol, drugs, games, etc. (Volnova, 2017). In particular, according to various sources, about 37.5% of wounded war veterans abuse alcohol (Topol', 2015), and face a high risk of pain-killing drug abuse, especially during treatment, when war veterans experience the so-called phantom pain (Muskevych, 2016).

In addition to the traumatic effects of participation in military operations, attention of national scholars focuses on the phenomenon of posttraumatic growth as a positive personality change resulting from the overcoming of a significant life crisis (Osedlo & Zubovsky, 2017), but these studies do not have enough empirical data.

An important aspect are family problems related to war veterans' adaptation, including psychological distance, or proximity, between family members as a factor destroying, or supporting, respectively, family relationships during the military conflict; and characteristics of family functioning after war veterans' return home (Hubeladze, 2017). Researchers show clearly that families are crucial for war veterans' social and psychological readaptation

to civilian life; a family can become either a resource for successful adaptation based on the integration of their experience and family support, or aggravate the existing negative states and internal conflicts.

Psychological help for people experiencing critical traumatic events, and the effectiveness of various methodologies and practices are studied by Z. Kisarchuk, Ya. Omelchenko, H. Lazos, L. Lytvynenko, A. Hrys and other psychologists. The analysis of recent publications and psychological practice shows that psychological debriefing is used mainly as a group method for overcoming trauma consequences, together with art therapy and narrative techniques, as well as psychosomatic and relaxation techniques.

Training for psychologists and social workers in working with war veterans and armed conflict victims is also extremely important today (Melnychuk, 2017; Homych, 2017). The requirements for psychologists' training have been made stricter, including psychologists' competence to use innovative forms and methods of working with people suffering from the consequences of war, and to provide psychological support and assistance to the general population, who witnessed these events (internally displaced persons, ATO war veterans, community activists and volunteers experiencing the effects of emotional burnout, etc.). The current situation requires a flexible response to the professional requirements from the social service training system, as well as a multidisciplinary and integrated approach to the training content.

An important challenge for the scientific understanding of the current situation in Ukraine is to identify the *characteristics of the so-called hybrid warfare and the role of information-psychological technologies in it*. On the basis of research on the new mass-media as technologies for information and psychological warfare, A. Dilay (2017) concludes that society is the most vulnerable to the information-psychological warfare challenges if it is under the influence of a State that skilfully manages the new mass-media. Social media are increasingly seeking to influence the information picture of the world, thus creating a new reality where modern people have to live (Dilay, 2017).

I. Klymenko (2017) examines the basic characteristics of training aimed at the recognition of misinformation and manipulative techniques in mass-media news with a view to counteracting information and psychological influencing technologies (Klymenko, 2017). The author shows that manipulative techniques related to misinformation in mass-media news are based on information flow control (frequency, completeness) and injection into the information stream of false information that could mislead people and induce them to take certain actions. Control over information involves the removal of specific topics and biased coverage of others. The most common methods of information distortion are: tailored true facts (partial omission, carefully selected people, experts, event locations) – bits of information presented with ever-increasing tension; apparently false information; mixing of true and false information; use of emotional impact (visuals, sounds), semantic and linguistic techniques (selection of vocabulary, artistic means, changes in the information field). Resistance to manipulative mass-media influence requires the development of special methods for recognising misinformation and manipulative techniques in mass-media news.

To sum up this overview of the main trends and results of psychological studies on challenges faced by the Ukrainian society during the recent crisis, it is important to note that national psychologists, supported by the international professional community, have been actively involved in addressing this urgent problem, e.g., by providing psychological support to military operations, war veterans' psychological rehabilitation and reintegration,

psychological assistance for IDPs and other groups. Many results have been obtained, including the development of theoretical approaches as well as practical guidelines, techniques, and programmes whose implementation allows psychologists to improve military personnel training to enable them to better fulfil their duties under special conditions, to provide armed conflict victims with effective assistance, and to train professionals while taking into consideration the specific nature of work during the recent military conflict. However, there are many other problems that require further study and implementation of practical projects in cooperation with the international scientific and professional communities.

References

- Biala, M., & Novak, O. (2016). Experience of Traumatherapy Center “Return” in the context of the model of psychosocial support of the population affected during the military conflict in Ukraine. Speech at the scientific conference “Implementation of modern methodologies of restorative treatment of victims in the context of the recent military conflict” (Kyiv, 9 December 2016). Electronic resource, <https://www.pss.org.ua>.
- Blinova, A. E. (2016). Socio-psychological adaptation of forced migrants: approaches and problems of studying the phenomenon of acculturation. *Scientific Bulletin of Kherson State University. Series: Psychological science*, 3(1), 111–117.
- Bodnar, A. V. (2017). Forced migration as a factor of victimization of the personality. *Military psychology in dimensions of war and peace: problems, experience, prospects: Materials of II International Scientific-Practical Conference* (Kyiv, 10–11 February 2017), 38–45.
- Buryak, A. A., Hinevskii, M. S., & Katerusha, G. L. (2015). A Military syndrome “ATO”: the urgency and solutions at the state level. *Collection of scientific works of Kharkiv Air Force University*, 2(43), 176–181.
- Dilay, A. Yu. (2017). New media as the technology of information-psychological war. *Military psychology in dimensions of war and peace: problems, experience, prospects: Materials of II International Scientific-Practical Conference* (Kyiv, 10–11 February 2017), 63–64.
- Didyk, N. M. (2017). Socio-psychological adaptation of internally displaced persons. *Actual problems of psychology: Collection of scientific papers of the Psychology Institute named G. S. Kostyuk of National Academy of pedagogical Sciences of Ukraine*, 11(15) 157–167.
- Homych, H. O. (2017). Some aspects of psychologists’ training in giving psychological support to combatants. *Actual problems of psychology: Collection of scientific papers of the Psychology Institute named G. S. Kostyuk of National Academy of pedagogical Sciences of Ukraine*, 11(15), 639–348.
- Hryluk, S. M. (2017). Motivation sphere of the individual member of the Armed Forces of Ukraine. *Military psychology in dimensions of war and peace: problems, experience, prospects: Materials of II International Scientific-Practical Conference* (Kyiv, 10–11 February 2017), 52–56.
- <http://dsvv.gov.ua/pres-tsentr>
- <https://ua.112.ua/statji/skilky-sohodni-v-ukraini-zareiestrovano-pereselentsiv-z-donbasu-ta-krymu-informatsiia-po-rehionakh-369259.html>
- <http://zakon3.rada.gov.ua/laws/show/z0237-16#n11>
- Hubeladze, I. G. (2017). Psychological distance between family members as a factor in maintaining family relations in terms of military conflict. *Military psychology in dimensions of war and peace: problems, experience, prospects: Materials of II International Scientific-Practical Conference* (Kyiv, 10–11 February 2017), 52–56.

- Internal displacement Monitoring centre under Norwegian refugee Council (Ministry of Foreign Affairs) (2016). *Global report on Internal displacement*. www.internal-displacement.org/assets/publications/2016/2016-global-report-internal-displacement-IDMC.pdf.
- Karachinskyj, A. A. (2017). Semantic forming motives of professional activity of war veterans. *Military psychology in dimensions of war and peace: problems, experience, prospects: Materials of II International Scientific-Practical Conference* (Kyiv, 10–11 February 2017), 81–83.
- Kisarchuk, S. G., Omelchenko, J. M., Lazos, G. P. et al. (2015). *Psychological assistance to aggrieved people due crisis and traumatic events: study book*. Publishing House “Logos”.
- Klymenko, I. V. (2017). Theoretical and methodological basis of trainings on recognition of misinformation and methods of manipulative influence in the news stories of media. *Military psychology in dimensions of war and peace: problems, experience, prospects: Materials of II International Scientific-Practical Conference* (Kyiv, 10–11 February 2017), 83–87.
- Kudrya, V. V. (2017). Psychological ways of prevention of non-combat losses of military personnel in the ATO area. *Military psychology in dimensions of war and peace: problems, experience, prospects: Materials of II International Scientific-Practical Conference* (Kyiv, 10–11 February 2017), 107–110.
- Leonova, I. M. (2017). Social and cultural integration of internally displaced persons into the local community. *Military psychology in dimensions of war and peace: problems, experience, prospects: Materials of II International Scientific-Practical Conference* (Kyiv, 10–11 February 2017), 112–117.
- Matsehora, Ya. V. (2017). Typology of values of military men – participants of antiterrorist operation. *Military psychology in dimensions of war and peace: problems, experience, prospects: Materials of II International Scientific-Practical Conference* (Kyiv, 10–11 February 2017), 94–98.
- Melnychuk, O. B. (2017). Current problems of future social workers’ professional intelligence formation in the context of their training for combatants’ social and psychological rehabilitation. *Actual problems of psychology: Collection of scientific papers of the Psychology Institute named G. S. Kostyuk of National Academy of pedagogical Sciences of Ukraine*, 11(15), 393–403.
- Mikhailov, B. V., Serdyuk, E. I., Galchenko, A. A., Galatenko, V. V., & Washkete, I. D. (2016). Peculiarities of post-traumatic stress disorder of demobilized members of ATO, who is on rehabilitation in sanatorium-resort conditions. *Ukrainian Bulletin of Psychoneurology*, 2(87), 69–73.
- Mozgovyj, V. I. (2017). Research integrated programme of socio-psychological adaptation of conscripts. *Military psychology in dimensions of war and peace: problems, experience, prospects: Materials of II International Scientific-Practical Conference* (Kyiv, 10–11 February 2017), 121–124.
- Muskevych, N. I. (2016). Practical psychology in work with the participants of the ATO. *Psychology: reality and prospects*, 6, 136–142.
- Osedlo, V. I., & Zubovsky, D. S. (2017). Posttraumatic growth among the war veterans: the current state and prospects. *Military psychology in dimensions of war and peace: problems, experience, prospects: Materials of II International Scientific-Practical Conference* (Kyiv, 10–11 February 2017), 136–140.
- Topol’, A. V. (2015). Socio-psychological rehabilitation of ATO participants. *Bulletin of Cherkasy National Pedagogical University. Series: Pedagogical science*, 124, 230–233.
- Tytarenko, T. M. (2015). Directions of the psychological rehabilitation of the person, who is experiencing events of war. In T. M. Tytarenko *Psychological support of the person, who is suffering the consequences of traumatic events: Collection of articles* (pp. 3–13). Institute of social and political psychology, Representation of the Polish Academy of Sciences in Kiev; Socio-Psychological and Methodical Rehabilitation Center. Kiev: Millennium.

- Volnova, L. M. (2017). Preventing psychological maladjustment of the wounded within the system for the psychosocial rehabilitation of military personnel. *Actual problems of psychology: Collection of scientific papers of the Psychology Institute named G. S. Kostyuk of National Academy of pedagogical Sciences of Ukraine*, 11(15), 91–101.
- Yablonska, T. M., & Dembicka, N. M. (2017). Adaptation to civilian life of military personnel who returned from the zone of military operations. *Military psychology in dimensions of war and peace: problems, experience, prospects: Materials of II International Scientific-Practical Conference* (Kyiv, 10–11 February 2017), 193–200.