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S T U D I E S



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Distribution of resources and post-traumatic growth in people displaced by military operations

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ABSTRACT

The article presents the results of research conducted under the direction of KUL Professor Iwona Niewiadomska, PhD, and in cooperation with the staff of the Ukrainian Academy of Sciences and also Caritas. The study addressed the question whether resources could influence growth patterns after trauma. It also examined which of the resources may be the most important for shaping positive changes after trauma. Five hypotheses were established to answer these research questions. The hypotheses were verified using Steven Hobfoll's Conservation of Resources-Evaluation (COR-E) questionnaire and Nina Ogińska-Bulik and Zygryd Juczyński's Posttraumatic Growth Inventory. The study group included a total of 36 people (23 women and 13 men) displaced as a result of military operations in Ukraine. Statistical analyses did not confirm the proposed hypotheses. However, there are some tendencies which should be verified on a larger group.

Keywords: distribution of resources, posttraumatic growth, person resettled, military action

Introduction

There are many types of trauma, which can be the result of natural disasters, such as earthquake, or they can be anthropogenic, e.g., car accidents, acts of terrorism, wars. Such trauma can be seemingly imperceptible, but it does affect the lives of people who experience it. It can be accompanied by negative emotions, such as sadness, fear, anxiety, and sense of impending doom. This might seem paradoxical, but trauma can also be beneficial for people. As a result of traumatic experiences, people sometimes change the way they see themselves and the world around them, e.g., by having more trust in themselves and others. This phenomenon is referred to as post-traumatic growth and it shows that, despite the losses it causes, trauma can foster the development of some important values. This is by no means an easy process, since it requires the individual to put in a lot of energy, but, ultimately, it leads to growth and prevents more serious trauma.

The term *post-traumatic growth* (PTG) was coined in 1996 by Richard Tedeschi and Lawren Calhoun. This phenomenon attracted considerable interest among scholars already in mid-1990s. Studies on this topic focused on long-term changes in character and lifestyle resulting from individual adaptation to traumatic situations (Ogińska-Bulik, 2013a). The effectiveness of post-traumatic growth depends on a range of factors. Ogińska-Bulik (2013b) identifies two groups of such factors. The first includes situational factors and comprises elements associated with trauma, i.e., what is the severity and type of the traumatic event, what is the risk associated with the time that has passed from the traumatic event, and what support has the individual received. The second group are individual variables, which include socio-demographic elements, and the individual's personality, beliefs, and stress coping strategies. These factors, from both categories, are diverse and, depending on the individual, only some of them might be involved in post-traumatic growth (Ogińska-Bulik, 2013b).

When faced with trauma, people rely on the available resources. Not only do such resources help reduce the impact of traumatic events, but also contribute to post-traumatic growth (Ogińska-Bulik, 2013a). Jackson (2007) emphasises that the values people hold impact on the positive changes after trauma, thus producing better results than simply working through trauma. Steven Hobfoll is one of the scholars who analyse resources in the context of traumatic events. He developed his Conservation of Resources (COR) theory based on the assumption that individuals strive to obtain, retain, protect, and foster those things that they value (Hobfoll, 2006). He further argues that when people experience circumstances that cause, or can potentially cause, them to lose their resources, they suffer from stress. Individuals want to benefit from the resources available to them, so they continue to foster them. However, when resource investment does not produce positive outcomes, this arouses a feeling of loss and increases stress (Hobfoll, 2006).

In line with the structural classification of resources, there are object resources, which include all tangible items that can be owned by people (house, jewellery); personal resources, meaning people skills, competences, social skills, and specific personality predispositions (hope, optimism); condition resources, which determine the availability of, or ways of acquiring, other necessary resources (health, job security); and energy resources, which can be exchanged for other resources (money, knowledge) (Hobfoll, 2006).

Hobfoll's Conservation of Resources theory is based on several tenets. Its Principle 1 states "*resource loss is disproportionately more salient than resource gain*" (Hobfoll, 2006,

p. 78). This suggests that loss, when its level is comparable to that of gain, will always be more powerful. However, despite their lesser importance, gains, by co-occurring with losses, help reduce the consequences of the latter's impact. Frankl argues that "*gain increases in meaning in the face of loss*" (Frankl, 1963, as cited in: Hobfoll, 2006, p. 85). In addition, gain becomes more important when, having experienced loss, the individual learns a lesson and develops strategies for preventing future loss of valuable resources and seeks to implement them (Hobfoll, 2006).

Principle 2, as formulated by Hobfoll, states that "*people must invest resources in order to protect against resource loss, recover from losses, and gain resources*" (Hobfoll, 2006, p. 90). Resources are at the core of this theory and they affect the way individuals go through specific experiences. The available resources exist in so-called *cycles*, and if people do not have considerable resources, they are more likely to lose their resources. As noted by Hobfoll "*at each spin of the cycle, fewer resources are available and greater impact is felt*" (Hobfoll, 2006, p. 98). And individuals with strong resource reservoirs are more likely to enjoy various benefits. As a result, gains build on themselves (Hobfoll, 2006).

In addition, Corollary 4 of COR theory posits that "*those who lack resources are likely to adopt a defensive posture to conserve their resources*" (Hobfoll, 2006, p. 100). According to this corollary, people with fewer resources do not employ their resources to accumulate them, recognising that by employing them, they would deplete them and they would be unable to meet their basic needs (Schönplflug, 1985, as cited in: Hobfoll, 2006).

The available literature shows a significant correlation between resource distribution and post-traumatic growth, and resource gain, loss and significance in traumatic situations have all been subject to analysis. Borys and Majkovicz (2004) demonstrated that the development of PTG is associated with both positive changes and distress. A study on women who have lost their husbands provides evidence that despite many negative consequences of such circumstances, including suffering and lamentation, over time these negative experiences give way to positive change. Those women started to derive benefits by adopting different world views and attitudes to life (Steuden & Kurtyka-Chałas, 2009).

Dudek and Banach (2009) focused on identifying losses and gains in traumatic circumstances and on determining how strongly they correlated with post-traumatic symptoms. The study covered 123 firefighters, 104 of whom had at least one stressful experience. The scholars analysed how strong the correlation between their resource levels and PTSD symptoms was, and found their findings to be consistent with their hypothesis that the more powerful the impact of trauma, the more likely the individual is to seek ways of mitigating the effects of trauma. This was particularly true for people who are bound to face such experiences in their professional careers.

Other studies explored resource gain in the context of post-traumatic growth. Some interesting findings were reported by Ogińska-Bulik (2013b). The most profound impact on post-traumatic growth is exerted by personal resources in the form of a sense of meaning in life, and in particular coming to terms with death. Another valuable part of the development of positive change, according to her study, is spirituality, where a sense of harmony is the dominant aspect. Social support, too, plays a crucial role in promoting post-traumatic growth. Based on her analyses, Ogińska-Bulik argues that "*perceived social support is more likely to produce post-traumatic changes than temperament or personality traits*" (Ogińska-Bulik, 2013b, p. 64). Scientific literature emphasises the role of support for people who have experienced traumatic circumstances in their lives. In addition to facilitating growth,

it helps develop the ability to cope with various negative consequences of trauma. This is not an easy process, as it requires the individual to invest considerable resources, and, consequently, uses a lot of energy (Ogińska-Bulik, 2013b).

Post-traumatic growth can also occur as a result of loss suffered by the individual who has experienced a traumatic situation. The available data show that the proportion of people who achieved growth is between 30% and 90% (Mystakidou, Tsilika, Parpa, Galanos & Vlahos, 2008). This shows that the effectiveness of change largely depends on the specific stressful event and its impact on each person individually. This is confirmed by the findings of a study where participants admitted that they achieved growth as a result of a previous dramatic event (Cambpell, 2007).

Another study showed major change among people who have lost a loved one. The study demonstrated that 74% of respondents reported positive changes in such aspects as self-trust and enjoyment of everyday activities. These values were correlated with depression symptoms, anxiety and aversion to other people and the world in general (Wortman, 2004).

Own research

Problem and hypotheses

The purpose of this study was to determine the role of resources in the face of trauma, taking both resource gain and loss into consideration. In addition, the study looked for correlations between resources and post-traumatic growth. In view of the above, the study raised the following research question – *What is the relationship between resource distribution and post-traumatic growth in people displaced by military operations?*

In order to address this research problem, the study formulated five hypotheses:

- H1:** There is a significant correlation between resource significance and post-traumatic growth in people displaced by military operations.
- H2:** The significance of personal resources shows a positive correlation with post-traumatic growth in people displaced by military operations.
- H3:** There is a significant correlation between resource gain and considerable post-traumatic growth in people displaced by military operations.
- H4:** Resource loss shows a negative correlation with post-traumatic growth in people displaced by military operations.
- H5:** In people displaced by military operations, resource gain is much more important for post-traumatic growth than resource loss.

Methodology and study group

This study was part of a project implemented under the supervision of KUL Professor Iwona Niewiadomska, PhD, and in cooperation with the staff of the National Academy of Sciences of Ukraine and Caritas. The study group comprised people living in Ukraine who reported for psychological help due to problems resulting from the current situation in their

country, and people displaced from areas affected by the recent military conflict. Each respondent was provided with a sealed envelope with a test battery and personal information questionnaire, which were first analysed according to standard procedures, and translated into the Ukrainian language. The study was conducted between April and November 2016. The study was voluntary and anonymous, and respondents were informed about this.

The test battery was completed by 326 people and in this group the study identified 36 persons displaced by military operations, including 23 women and 13 men aged 18 to 53. A substantial majority of respondents had higher education (64%), followed by lower-secondary (15%), upper-secondary (12%) and vocational education (9%). Respondents said they lived within various distances from the armed conflict theatre, with mean distance being $M = 205.28$, and standard deviation equal to $SD = 281.9$. The displaced people were also asked to answer whether they had lost a loved one as a result of the armed conflict. The data show that 29% of respondents had lost a loved one as a result of the recent military operations in Ukraine.

Methodology

In order to test out the proposed research hypotheses, the study used a personal information questionnaire and two research methods, namely Conservation of Resources-Evaluation by S. Hobfoll and Post-Traumatic Growth Inventory by N. Ogińska-Bulik and Z. Juczyński.

The **personal information questionnaire** was developed for the purposes of this study. It included 29 questions concerning sociodemographic data, financial situation, and information about the impact of the armed conflict on the lives of study participants.

Conservation of Resources-Evaluation (COR-E) is a questionnaire developed by Steven Hobfoll on the basis of his Conservation of Resources theory. It comprises 74 statements, which help identify the resources available to the individual, based on four major categories, namely personal resources, object resources, condition resources, and energy resources. Respondents evaluate these statements in relation to three aspects – significance of each resource, resource gain, and resource loss. Answers are provided using a five-point scale, with 1 meaning “not at all”, and 5 meaning “to a great degree”. The reliability of the COR-E, measured using Cronbach’s alpha, is $\alpha = 0.97$ (resource significance), $\alpha = 0.98$ (resource gain), and $\alpha = 0.98$ (resource loss) (Kalinowski, Niewiadomska, Chwaszcz & Augustynowicz, 2010). For the purposes of this study, the questionnaire was modified and evaluated by expert judges. In its revised version the questionnaire comprised 54 items, which were to be evaluated by respondents.

The second questionnaire used in this study was the **Post-Traumatic Growth Inventory** by Ogińska-Bulik and Juczyński. This is a Polish adaptation of the American version of the test (PTGI) developed by Tedeschi and Calhoun, which was prepared in line with standard procedures. Its reliability, measured using Cronbach’s alpha is 0.90 (Ogińska-Bulik & Juczyński, 2010, p. 135). This inventory comprises 21 items concerning various changes in life occurring as a result of difficult experiences. Possible answers to each question on a six-point scale range from 0 “I did not experience this change as a result of the crisis” to 5 “I experienced this change to a great degree”. In addition, there are two questions that help determine the type of trauma experienced by each individual and the time that has passed

since the event. The Inventory includes 4 sub-scales – changes to self-image, changes to relationships with others, greater appreciation for life, and spiritual changes.

Results

In order to examine the proposed hypotheses, the study checked the distribution of the psychological variables used in the study and non-parametric correlations.

The analyses, conducted on the basis of COR-E, show that in the group of people displaced by military operations, personal resources are the most important ($M = 4.1$; $SD = 0.54$), and object resources are the least important ($M = 3.9$; $SD = 0.97$). Resource gain shows the same distribution. Mean resource gain is $M = 3.5$, with standard deviation $SD = 0.47$. Results for object resource gain were as follows – $M = 3.04$, $SD = 0.83$. The largest losses were declared in object resources ($M = 2.53$, $SD = 1.03$), and the smallest in energy resources ($M = 2.39$; $SD = 0.79$).

Analyses conducted using Post-Traumatic Growth Inventory produced data indicating that the mean result for each variable among the group of people displaced by armed conflict ($N = 35$) was $M = 68.54$, with standard deviation $SD = 14.97$. The median was equal to $Me = 71$. The minimum score was $min = 31$, and the maximum score was $max = 105$.

The study group showed a significant range of post-traumatic growth levels. Compared to overall post-traumatic growth level, the mean result among the displaced people can be considered to correspond to 65% of the maximum post-traumatic growth.

Next, the study calculated non-parametric correlations, as presented in the table below (Table 1). Based on these data, Hypothesis 1 was rejected. Object resource importance is $\rho = -0.026$, with $p = 0.881$; personal resource importance is $\rho = 0.267$, $p = 0.121$; energy resource importance is $\rho = 0.070$, $p = 0.689$; and condition resource importance is $\rho = 0.185$, $p = 0.287$.

Table 1 *Non-parametric correlations between resource distribution and post-traumatic growth*

<i>Spearman's rho</i>			
	<i>Correlation coefficient</i>	<i>Significance (two-tailed)</i>	<i>N</i>
PTG_TS	1.000		35
Object resources (importance)	-0.026	0.881	35
Personal resources (importance)	0.267	0.121	35
Energy resources (importance)	0.070	0.689	35
Condition resources (importance)	0.185	0.287	35
Object resources (gain)	0.155	0.397	32
Personal resources (gain)	0.310	0.089	31
Energy resources (gain)	0.271	0.140	31
Condition resources (gain)	0.294	0.108	31
Object resources (loss)	0.168	0.358	32
Personal resources (loss)	0.227	0.212	32

<i>Spearman's rho</i>			
	<i>Correlation coefficient</i>	<i>Significance (two-tailed)</i>	<i>N</i>
Energy resources (loss)	0.174	0.341	32
Condition resources (loss)	0.288	0.117	31
Resources (importance)	0.103	0.554	35
Resources (gain)	0.253	0.162	32
Resources (loss)	0.204	0.254	33

*. Correlation is significant at 0.05 (two-tailed). **. Correlation is significant at 0.01 (two-tailed).

The study also explored the relationship between the importance of personal resources and post-traumatic growth, but this hypothesis was rejected, too. The correlation coefficient is $\rho = 0.267$, $p = 0.121$ (Table 1).

Non-parametric correlations did not support Hypothesis 3. However, the study observed a statistical trend indicating that the greater the personal resource gain, the more dramatic the post-traumatic growth. Personal resource gain has $\rho = 0.310$, with $p = 0.089$ (assuming that $p > 0.05$ and $p < 0.1$) (Table 1).

Two non-parametric correlations were tested to verify Hypothesis 4. The first non-parametric correlation (Table 2) referred to the group of respondents who had lost a loved one as a result of the armed conflict. The conducted statistical analyses did not prove a correlation between resource loss and post-traumatic growth.

Table 2 *Non-parametric correlation between resource loss and post-traumatic growth in displaced people who have lost a loved one as a result of the armed conflict*

<i>Spearman's rho</i>			
	<i>Correlation coefficient</i>	<i>Significance (two-tailed)</i>	<i>N</i>
PTG_TS	1.000		10
Object resources (gain)	0.021	0.957	9
Personal resources (gain)	0.630	0.069	9
Energy resources (gain)	.672*	0.047	9
Condition resources (gain)	0.335	0.379	9
Object resources (loss)	-0.055	0.879	10
Personal resources (loss)	0.460	0.181	10
Energy resources (loss)	0.402	0.284	9
Condition resources (loss)	0.580	0.102	9
Resources (gain)	0.351	0.354	9
Resources (loss)	0.353	0.318	10

However, the study observed that people who had lost a loved one as a result of the armed conflict ($N = 9$) showed greater post-traumatic growth. Table 2 presents this significant correlation between energy resource gain and post-traumatic growth – $\rho = 0.672^*$, $p = 0.047$.

Calculations were also made for displaced people who had not lost anyone as a result of military operations. Data show that, in this group, resource loss does not correlate with post-traumatic growth (Table 3).

Table 3 *Non-parametric correlations between resource loss and post-traumatic growth in displaced people who have not lost a loved one as a result of the armed conflict*

<i>Spearman's rho</i>			
	<i>Correlation coefficient</i>	<i>Significance (two-tailed)</i>	<i>N</i>
PTG_TS	1.000		23
Object resources (loss)	0.302	0.172	22
Personal resources (loss)	0.128	0.569	22
Energy resources (loss)	0.189	0.387	23
Condition resources (loss)	0.247	0.268	22
Resources (loss)	0.165	0.451	23

*. Correlation is significant at 0.05 (two-tailed). **. Correlation is significant at 0.01 (two-tailed).

Moreover, the study examined whether resource gain was more important than resource loss for post-traumatic growth in people displaced by military operations, but these psychological variables also did not correlate (Table 4).

Table 4 *Non-parametric correlation – resource loss and gain and post-traumatic growth in people displaced by military operations*

<i>Spearman's rho</i>			
	<i>Correlation coefficient</i>	<i>Significance (two-tailed)</i>	<i>N</i>
PTG_TS	1.000		35
Object resources (gain)	0.155	0.397	32
Personal resources (gain)	0.310	0.089	31
Energy resources (gain)	0.271	0.140	31
Condition resources (gain)	0.294	0.108	31
Object resources (loss)	0.168	0.358	32
Personal resources (loss)	0.227	0.212	32
Energy resources (loss)	0.174	0.341	32
Condition resources (loss)	0.288	0.117	31
Resources (gain)	0.253	0.162	32
Resources (loss)	0.204	0.254	33

Additional statistical analyses were conducted to identify correlations between resource distribution and individual statements from the Post-Traumatic Growth Inventory. The non-parametric correlations show that there are correlations between individual items in the Post-Traumatic Growth Inventory and importance of personal, energy, condition and object resources.

The importance of personal resources in the study group ($N = 35$) correlates with two items from the Post-Traumatic Growth Inventory: Item 15: "I have more compassion for other people" and Item 18: "I have become more religious".

Importance of object resources in the study group ($N = 34$) is significantly correlated with Item 21: "I am more ready to accept that I need other people".

The statistical calculations show that the importance of energy resources in this group ($N = 34$) also correlates with Item 21.

Non-parametric correlations showed that importance of object resources is significantly correlated with Item 20: "I have seen on many occasions how wonderful people can be" and Item 21: "I am more ready to accept that I need other people".

The above-mentioned statistical analyses show correlations between these psychological variables. In addition, it can be concluded that people displaced by military operations generally show changes in their relationships with others and spiritual changes.

Discussion of findings

These statistical analyses were to address the research question about the relationship between resource distribution and post-traumatic growth, and to examine the proposed research hypotheses. Although the hypotheses were disproved, it can be concluded that people displaced by military operations might be likely to experience significant changes, especially in relation to their personal values. Individuals who have been displaced must adapt to the new circumstances. Hobfoll (2006) argues in his ecological congruence model that resources contribute to improved adaptation but only when emotional and biological needs are satisfied.

Research on post-traumatic growth emphasises the considerable importance of personal resources, such as optimism, resilience and hope, which make the individual more likely to recognise the positive effects of difficult situations in their life (Tedeschi & Calhoun, 2007; Ogińska-Bulik, 2013b). In his corollaries, Hobfoll (2006) argues that individuals with greater resources are more likely to experience positive changes, and, consequently, to continue to grow. Even in situations when individuals lose some valuable resources, they tend to recognise the benefits of the situation, such as improved self-esteem.

Respondents in this study were likely to attach considerable significance to the importance of resources, and especially personal resources. Additional analyses of resources and individual items in the Post-Traumatic Growth Inventory showed that displaced people declared changes in their emotional responses, attitudes towards other people, and religiosity. Moreover, they emphasised the importance of relationships with other people and their support. However, the obtained data are insufficient to reliably confirm the correlation between resource importance and post-traumatic growth. These hypotheses should be tested on a larger study group.

It is also important to note the correlation between resource loss and the post-traumatic growth. This study and the available literature do not provide a clear answer to the question whether considerable resource loss is associated with high or low levels of post-traumatic growth. On the one hand, some studies actually support the claim that loss can produce some positive outcomes (Zięba, 2015; Ogińska-Bulik & Juczyński, 2012a). Campbell (2007) argues that growth depends on the stressful event and on the way the individual copes with it. But other scholars argue for poor growth in resource loss situations (Powell, Rosner & Butallo, 2003). In the study group, the loss of a loved one could have been of considerable significance, but this correlation requires further study.

Another possible reason for the rejection of the proposed hypotheses is considerable age range. Some scholars argue that young people seem to experience more positive changes, explaining that older people tend to think about death. On the other hand, others claim that people aged 35+ tend to be more reflective (Ogińska-Bulik & Juczyński, 2010b).

The Conservation of Resources theory suggests that resources determine the way the individual copes with specific situations. Hobfoll (2006) argues that the more the individual loses, the more important gain is for them, because they learn through experience, draw conclusions and seek solutions that are best for them. The literature on the subject suggests that gains are crucial for post-traumatic growth.

Steven Hobfoll's Conservation of Resources theory provides valuable information about the ways resources affect specific people and their coping mechanisms. The hypotheses proposed in this study should be tested on a larger population, while taking into consideration the types of traumatic events and the time that has passed, to verify whether these aspects can significantly affect the relationship between resource distribution and post-traumatic growth.

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Distribution of resources and the severity of the psychological consequences of job loss in people displaced by military operations

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ABSTRACT

This article attempts to describe the correlations between the distribution of resources and the severity of the psychological consequences of job loss in people displaced by military operations. The study we conducted in Ukraine covered 324 people, of whom we selected 32 displaced persons who had lost their jobs. The formulated research hypotheses were tested out using the following instruments: sociodemographic data, Conservation of Resources-Evaluation (COR-E) questionnaire by S. E. Hobfoll, Beck Depression Inventory, a shorter version of the World Health Organisation Quality of Life instrument (WHOQOL-BREF), and Berlin Social Support Scales (BSSS). Our findings indicate the existence of a positive correlation between the distribution of some categories of resources and the severity of the psychological consequences of job loss.

Keywords: distribution of resources, depression, quality of life, social support, job loss, military conflict

Theoretical background

The central tenet of S. E. Hobfoll's Conservation of Resources Theory (COR) is that *individuals strive to obtain, retain and protect those things that they value* (Hobfoll, 2006, p. 71). This desire is the primary motivation behind the majority of human behaviours. Hobfoll further elaborates on that claim by arguing that people also seek to foster what they value (Hobfoll, 2003). In accordance with this claim, people go after the resources they do not yet have and seek to retain those that they already have, to protect them from threats, and to foster and use them in an optimal way. Stressful events in life affect this process of obtaining and protecting the available resources. When such experiences accumulate, they can have a negative impact on the individuals' ability to obtain and retain resources.

COR theory rests on a few fundamental tenets concerning the experiences of stress and trauma, which is directly related to the military operations addressed in the article. One of such basic tenets is the existence of gain and loss cycles, which are crucial to understanding our responses to stress.

Stress is experienced when: (1) *there is a threat of resource loss*, (2) *there is an actual resource loss*, or (3) *a substantial resource investment does not produce the expected gain* (Hobfoll, 2006, p. 72). Each type of resources identified by S. Hobfoll is necessary for the survival of individuals who function within social networks. These resources are categorised as follows: condition resources, energy resources, personal resources, and object resources (Hobfoll, 2006).

The first principle of COR theory is that resource loss is disproportionately more salient than resource gain (Hobfoll, 2006, p. 79). Moreover, such loss usually has a large impact and affects people very rapidly. Usually, loss leads to negative emotions, and mood and health disorders. Rather than encouraging the individual to look for new ways of supporting the available resources, the experience of loss can trigger avoidance and prevention strategies.

The second principle is that *people must invest resources in order to protect against resource loss, recover from losses, and gain resources*. A related corollary of this principle is that *those with greater resources are less vulnerable to resource loss and more capable of orchestrating resource gain* (Hobfoll, 2006, p. 90). *Conversely, those with fewer resources are more vulnerable to resource loss and less capable of resource gain*. This has led to the concept within COR theory of *resource caravans* (Hobfoll, 2006, p. 91). In environments that foster resource gain, the above-mentioned resource caravans develop.

Finally, the third principle is that while resource loss is more potent than resource gain, the salience of gain increases under situations of resource loss (Hobfoll, 2006, p. 79). This principle is crucial for gains in traumatic situations. When the individual experiences a serious loss, a small gain can produce a positive response and support them on their way to achieving their goal.

Resources are subject to two types of cycles – loss cycles and gain cycles. Hobfoll (2006) describes these cycles as having a spiral structure, which means that both gain and loss tend to increase from one cycle to another. However, loss spirals are more powerful than gain spirals. Moreover, resource loss is disproportionately more impactful and salient than resource gain (Hobfoll, 2006). In COR theory, exposure to traumatic experiences poses a threat to human resources, both in financial and psychological terms. As a result of such experiences (e.g. displacement, death), individuals often lose their own object resources and loved ones who provided them with support, and psychological resources such as hope and optimism

for the future. Exposure to traumatic experiences, such as job loss, affects individual levels of resources. COR theory argues that initial resource loss can affect other resources, because the individual ability to cope is impaired.

The loss of a job, which is one of the basic self-realisation areas for adult people, causes simultaneous losses in need satisfaction, skill and psychological and social competence development, attitude forging and culture creation, as the elements directly linked to one's professional life (Muszalski, 2000; Bartkowiak, 2003; Kalinowski & Czuma, 2005). Strong emotions, depression and feeling of not being understood, compounded by failure in landing a new job, can lead to more and more difficulties and, ultimately, to depressed mood. When faced with job loss, many people have their self-esteem and self-confidence undermined. Their trust in the outside world is shaken and their self-assurance is dented. There is empirical evidence showing that difficult financial situation associated with job loss contributes to poorer adaptation in crisis situations and increases the amount of time needed for restoring the balance (Klonowicz, 2001, pp. 95–101). People suffering from depression after job loss tend to be less active and avoid challenges. They are overwhelmed by a sense of helplessness, which darkens their perception of reality. Job search becomes too much of a challenge for them, and the subsequent days bring more and more disappointment. Job seekers who fail to recognise the results of their efforts, lose faith in the purposefulness of continuing the search. When this is the case, they might see their job-seeking experiences as failures and discontinue the search. The growing apathy and sense of hopelessness make the unemployed suffer from generalised dissatisfaction and unhappiness. With time, this helplessness leads to resourcelessness and discontinuation of the search (Suchańska & Świdkiewicz, 2004, pp. 248–250).

Job loss results in a spiral of losses across various categories of resources. Research shows (Kostrzewski & Worach-Kardas, 2008, p. 508) that joblessness, especially when long-term, is associated with growing financial problems and poverty among the unemployed. Consequently, many needs, e.g. related to the purchase of clothing, food, hygienic products, press, books, and entertainment, are often satisfied insufficiently, and savings are either dipped into or used up completely. Job loss causes the source of income to suddenly become unavailable. This results in a downward spiral that causes losses in object resources (house, means of transport, food, hygienic products, etc.), personal resources (sense of self-worth, motivation) and condition resources (mental and physical health, social withdrawal). The consequences of job loss that affect the mental health of the individual include depression, hostility, frustration, anger, sense of guilt, anxiety, fear, mental disorders, and mood swings (Hanisch, 1999, pp. 188–220). Empirical studies have shown a negative correlation between the financial situation, as perceived by the individual, and their good frame of mind during unemployment (Creed & Macintyre, 2001; Vinokur & Schul, 2002). Other, long-term studies show that job loss, as a discontinuation of an everyday activity, is a highly stressful experience that produces responses in the affected people (Hanisch, 1999; Kinicki & Latack, 1990; Platt, 1984; Wanberg, Kammeyer-Mueller & Shi, 2001). Such responses include, in particular, anxiety, depression and physical disorders. But there are also important losses related to social relationships.

People who have lost their jobs tend to withdraw from social life. Such behaviour is very often motivated by the fact that social interactions fail to provide the necessary psychological support, and lead to greater frustration. Lazarus and Folkman (1984) found that social resources contribute to psychological and physical well-being in two different ways. Firstly,

membership of various social networks helps people perceive themselves and their lives in a positive light, which, in turn, makes such individuals remain positive during their unemployment. And secondly, social resources act as a buffer against stress and its damaging consequences, preventing its impact on physical health. Wenzel, Pinguart and Rensen (2000) argue that the quality of social interactions positively correlates with subjective individual well-being, and findings reported by Anderson, Ones, Sinangil, Viswesvaran (2005), show that social support reduces the perceived stress at work. In addition, Kinicki et al. (2000) demonstrated that the social resources of unemployed people were depleted during periods of unemployment and replenished when they found a new job. These findings suggest that the length of unemployment might influence the relation between social and psychological resources and physical well-being.

Research shows that prolonged unemployment, mental disorders and deteriorating finances might lead to decreased self-esteem, poorer health, and increased prevalence of psychosomatic disorders and physical diseases. A number of studies, especially longitudinal, conducted on large groups of subjects, show a correlation between long-term unemployment and deterioration in health, cardiovascular disorders, increased mortality, and increased use of medical and psychiatric services (Kostrzewski & Worach-Kardas, 2008, p. 509).

Methodology

This study assumed the existence of correlations between the distribution of resources and the severity of the psychological consequences of job loss, such as quality of life, depression syndrome and perceived social support. Based on the literature on the subject, we formulated three research hypotheses.

H1: Resource loss has positive correlation with depression syndrome in people who have lost their jobs.

The above-mentioned hypothesis is supported by a study by Vinokur and Schul (2002), who showed correlations between the depletion of financial resources and the emergence of depression symptoms. Their findings confirmed this hypothesis. It was conclusively proven that loss of (mainly object) resources produced depression symptoms in people who have lost their jobs (Vinokur & Schul, 2002, p. 79).

H2: The significance of resources after job loss has positive correlation with poor mental well-being.

As argued by Wanberg (2012) mental health refers to emotional and psychological well-being and ability to serve specific roles in society (Wanberg, 2012, pp. 68–72). Meta-analysis findings reported by McKee-Ryan et al. (2005) confirm that employment and regular income affect mental well-being (McKee-Ryan, Song, Wanberg & Kinicki, 2005, pp. 58–59). Another basis for our analysis are the results of a comparative study by Paul and Moser (2009), which show that people who have lost their jobs are characterised by worse mental health than employed individuals (Paul & Moser, 2009, pp. 264–282).

H3: Resource gain has positive correlation with social support in people who have lost their jobs.

The inspiration to investigate the issue of social support in people who have lost their jobs is provided by the results of analyses conducted in 2015 by Solove et al. (2015).

According to that study, increased optimism and motivation to find employment after job loss show positive correlation with social support received by the individual (Solove, Fisher & Kraiger, 2015).

The study was conducted on a group of 324 adults. The subjects were patients reporting for psychological support in connection with the recent armed conflict. All subjects stayed in Ukraine, which is being the theatre of military operations. We used sociodemographic data to select 32 individuals for the study. These persons had been displaced as a result of the armed conflict near their places of residence, causing them to lose their jobs. The study group included 21 men and 11 women aged 18–57. The average age among the subjects was 32. The largest number of respondents had vocational education (35%), followed by secondary education (25%). Seven people (22%) had higher education and none of the subjects had primary education. The most subjects (9) evaluated their current financial situation as relatively good (28%), 8 (25%) subjects as bad, 6 (19%) as relatively bad, and 5 (16%) as very bad. The smallest number of people assessed their situation as good (12%). No one chose the answer corresponding to very good financial situation.

The studied variables were operationalised using the following research tools: a shorter version of the World Health Organisation Quality of Life instrument (WHOQOL-BREF), Beck Depression Inventory, Berlin Social Support Scales (BSSS) by Schwarzer and Schulz, Conservation of Resources-Evaluation (COR-E) questionnaire by S. E. Hobfoll – revised for the purposes of this study, and a questionnaire on sociodemographic data.

Conservation of Resources-Evaluation questionnaire by S. E. Hobfoll

This instrument is based on Hobfoll's Conservation of Resources Theory and serves to measure the management of 74 types of resources. Expert judges categorised each of the identified resources as one of the following four types: 1) object resources, 2) personal resources, 3) condition resources, or 4) energy resources. Respondents answered questionnaire questions using a five-point scale (1 – not at all, 2 – to a small degree, 3 – to a moderate degree, 4 – to a considerable degree, 5 – to a great degree). During the first stage, respondents assessed the importance of each resource, during the second stage they evaluated their levels of those resources, and during the third stage they estimated how much of each resource they have lost. Psychometric characteristics. Reliability measured using Cronbach's alpha for a group of 1697 adults was 0.97 – resource importance, 0.98 – resource gain, 0.98 – resource loss (Kalinowski & Niewiadomska, 2010). Conservation of Resources-Evaluation questionnaire by S. Hobfoll was used to verify each of the hypotheses. For the purposes of the study, the number of questions was modified.

Beck Depression Inventory

Beck Depression Inventory (BDI) was developed in 1961. The inventory comprises 21 questions and its result is their total score. Respondents provide answers using a scale from 1 to 3. BDI is a self-assessment tool. Based on its score, the inventory determines the level of depression symptoms, with 0–11 points corresponding to no depression, 12–26 points to

a mild depression, 27–49 points to a moderate depression, and 50–64 points to a severe depression (Beck, Ward, & Mendelson, 1961). Beck Depression Inventory is a screening tool.

World Health Organisation Quality of Life instrument (WHOQOL-BREF)

This research tool is designed to evaluate the quality of life of both healthy and sick people. The BREF (short) version of the WHOQOL includes 26 questions and was developed on the basis of the long version WHOQOL-100, which includes 100 questions. It helps profile quality of life across four domains: physical health, psychological, social relationships, and environment. Questions 1 and 2 concern the individual, general perception of respondents' quality of life, and the individual, general perception of respondents' health, respectively. The reliability of the Polish version of WHOQOL-BREF was measured using Cronbach's alpha: for the physical health domain it is 0.81, for the psychological domain – 0.78, for the social relationships domain – 0.69, and for the environment domain – 0.77, while for the questionnaire as a whole – 0.90. Its scoring reflects individual perception of one's quality of life across these domains – the larger the score, the better the quality of life (Jaracz, Kalfoss, Górna & Bączyk, 2006). The study used only one of its scales – the one evaluating the psychological aspect of the quality of life.

Berlin Social Support Scale (Polish version)

This tool was employed to estimate social support. In its full version BSSS includes six scales that describe social support. Due to the purpose of our study, we used only the Perceived Available Support scale. It consists of two sub-scales: emotional support and instrumental support, that can be treated independently. Each sub-scale comprises 4 statements to be evaluated using a four-point scale, and the obtained scores range from 4 to 16 points. The higher the score, the greater the perceived available social support (Wojtyna & Dosiak, 2007). The questionnaire was modified to make it suitable for the purposes of this study.

Results

The examination of Hypothesis 1 showed that there is a correlation between the overall score in the personal loss scale and overall score concerning the presence of depression syndrome. The obtained results partially confirmed the hypothesis that there was a correlation between resource loss and the presence of depression syndrome in people who have lost their jobs ($r = 0.271$; $p < 0.05$). Result analysis did not show any positive correlation between object, energy and condition resources, and depression syndrome in people who have lost their jobs. Therefore, Hypothesis 1 was supported only partially (Table 1).

Table 1 *Correlation between resource loss and depression in people who have lost their jobs (N = 32)*

<i>Resource loss</i>	<i>Depression</i>
Object resources	0.183
Personal resources	0.271*
Energy resources	0.190
Condition resources	0.237

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

Statistical data show that the more losses in personal resources, the greater the likelihood of depression syndrome. This partially supports the findings published by Vinokur and Schul (2002, p. 71) that there is a correlation between (mainly financial) resource loss and depression syndrome symptoms.

The purpose of the following analyses was to verify Hypothesis 2 concerning the relationship between the importance of financial resources and poor mental well-being of people who have lost their jobs. As shown in Table 2, statistical analysis did not show any significant correlation between these variables. Consequently, Hypothesis 2 was not confirmed.

Table 2 *Correlation between the importance of object resources and mental well-being in people who have lost their jobs (N = 32)*

<i>Resource importance</i>	<i>Poor mental well-being</i>
Object resources	0.218

In the light of a study by McKee-Ryan et al. (2005), who argued that employment and regular income affect mental well-being, no such relationship was found in our study group. This can be due to the crisis situation associated with displacement in which the respondents found themselves. Another argument for Hypothesis 2 were the results of a comparative study by Paul and Moser (2009), which suggested that people who have lost their jobs are characterised by worse mental health compared to employed persons. Our study did not demonstrate this correlation. One of the reasons for this might be the answers to the question in the sociodemographic questionnaire concerning the current financial situation of respondents. Only 16% of them evaluated their situation as very bad.

In order to test out Hypothesis 3 concerning the correlation between resource gain and social support, we used the following statistical analyses. Results of a correlational study show that this hypothesis is partially confirmed. There is a correlation between object resource gain and social support in people who have lost their jobs, but this correlation is negative ($r = -0.306$; $p > 0.05$) as presented in Table 3. Consequently, our hypothesis, predicting the existence of a positive correlation between the variables, was rejected. Moreover, there is also a correlation between condition resource gain and social support in people who have lost their jobs. This correlation, too, is inversely proportional ($r = -0.334$; $p > 0.05$). Our

analyses did not indicate any statistically significant correlation between personal or energy resource gains and social support.

Table 3 *Correlation between resource gain and perceived available social support in people who have lost their jobs (N = 32)*

<i>Resource gain</i>	<i>Social support</i>
Object resources	-0.306*
Personal resources	-0.206
Energy resources	-0.041
Condition resources	-0.334*

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

These results can be explained as follows – usually the social support that is provided to people who have lost their jobs concerns their financial situation, which has been seriously affected. When people experience financial gains, i.e. they start coping better, their need for support from other people is obviated. In addition, when unemployed people experience gains in condition resources, e.g. in relation to their health or married life, their need for social support from other people is also reduced. Nevertheless, results of our correlational study conducted to examine this hypothesis can provide grounds for undertaking a study into social support and its correlations with the experienced resource losses and gains.

Conclusion

To sum up, our statistical analyses showed that there is a correlation between personal resource loss and the presence of depression syndrome in people who have lost their jobs (H1). In addition, there is a correlation between object and condition resource gains and the perceived available support (H3), but this correlation is inverse. Our findings can be useful to psychologists who provide individual counselling to people who have found themselves in crisis situations associated with military operations. Moreover, the above-mentioned research result analyses can support professional counsellors and people who provide relief aid to individuals who have lost their jobs as a result of being displaced. This study should also offer inspiration to employment agencies, drawing their attention to problems associated with job loss among displaced people.

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Resource distribution and coping strategies among the uniformed services during war

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ABSTRACT

The primary objective of this paper was to determine the correlations between resource distribution and preferred coping strategies among the uniformed services during war. Based on the literature on the subject and research conducted by other scholars, this study proposed 4 hypotheses and asked the following research question – *What are the correlations between resource distribution and preferred coping strategies among the uniformed services during war?* The study surveyed 83 representatives of uniformed services (81 men and 2 women) involved in war. The study was conducted mainly on the territory of Ukraine, in cooperation with the staff of the National Academy of Sciences of Ukraine and Caritas. The study employed the Conservation of Resources-Evaluation questionnaire by S. Hobfoll, the Mini-COPE Inventory for Measuring Coping, and a personal information questionnaire for collecting sociodemographic data.

The majority of research hypotheses were supported for the representatives of the uniformed services involved in war. Significant correlations were found between object resource loss and preference for avoidance coping strategies. Substantial losses in object

resources proved to be significantly correlated with preference for seeking emotional and instrumental support. Significant correlations were also established between substantial losses in personal resources and preference for coping strategies characterised by helplessness. Finally, the study identified correlations between perceived substantial gains in energy resources and the use of active coping. These findings can be the basis for further research and for the development of specific prevention and support measures.

Keywords: resource distribution, coping strategies, war, uniformed services

Theoretical background

Stress is a well-established concept. As far back as in 1624, it was used in medicine when referring to disease aetiology. Each person is an individual with unique life experiences, both personal and professional. As a result, each person responds to, and handles, stressors differently. Something that might be considered a stressful problem by one person, will be not pose any difficulty for another person (Heszen-Niejodek & Ratajczak, 2000, p. 13). Depending on their individual capabilities, each person has different responses to specific situations and unique coping strategies.

There are many definitions of psychological stress. This article focuses on the definition provided by Lazarus and Folkman, which emphasises the psychological aspect of stress. They argue that stress is “*a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being*” (Lazarus & Folkman, 1984, p. 19). This definition focuses not only on the *relationship* aspect, but also emphasises the importance of individual perception, which determines whether the situation is considered stressful or not (Heszen-Niejodek & Ratajczak, 2000, p. 14). This way, these authors introduce the concept of *transaction*. It describes the interaction between the individual and the specific context of an event at a specific point in time, thus creating a completely new quality that is not the sum of its constituent parts (Terelak, 2005, p. 23). In addition, Lazarus introduces the concept of *cognitive appraisal*, which is a process carried out by the individual. Under this model, situations can be appraised as irrelevant, or positive or stressful. The cognitive aspect can be divided into two elements (Heszen & Sęk, 2007, p. 145). During primary appraisal, the individual determines whether the situation affects him/her directly and whether it is a threat. This process results in the following elements and emotions that accompany such situations: harm/loss – the individual loses their important resources, which causes anger, sadness and resentment; threat – concerns damage that can potentially be inflicted, so the most frequently experienced emotions are fear and anxiety; challenge – this aspect also concerns future, when both gains and losses can be experienced. Due to the fact that the last aspect is the most complex, it can involve both the previously mentioned negative emotions, and positive emotions, such as hope, excitement and exhilaration (Heszen & Sęk, 2007, p. 145).

If at the first stage the individual assesses the situation they have found themselves in as stressful, they will initiate another cognitive process, namely *re-evaluation*, or secondary appraisal. During this process, the individual considers the available options for eliminating the sources of stress, minimising its consequences or achieving benefits (Terelak, 2005, pp. 24–25). This is based on their personal resources and can help restore balance. Lazarus argues that secondary appraisal helps the individual adapt to the situation they have found themselves in and initiates the process of coping (Lazarus, 1986, pp. 2–39).

The second stage involves strategies for coping with stress. There are various definitions of, and strategies for, coping. However, the majority of contemporary scholars and theoreticians dealing with this phenomenon support the view that actions taken by the individual in difficult circumstances are more important than those that do not require considerable effort.

Endler and Parker described coping as a set of certain individual characteristics and dispositions. Actions taken by the individual when faced with stress are the result of the interaction between the individual's unique coping style and the characteristics of the difficult situation (Endler & Parker, 1990, pp. 844–854). In order to present their definition, Endler and Parker used a framework that identifies problem-focused coping – characterised by taking efforts aimed at solving the problem through cognitive processing or attempts to change the situation; emotion-focused coping – characterised by focusing on oneself and one's emotions, such as anger or guilt. This style is to alleviate the emotional tension caused by the stressful situation; and avoidance-focused coping – characterised by circumventing the problem and remaining unaffected by the stressful situation. This style can take two forms – seeking social interactions or diverting one's attention from the problem by becoming involved in various substitutive activities (Szczepaniak, Strelau & Wrześniewski, 1996, pp. 187–210).

The concept developed by Endler and Parker builds on the approach advocated by Lazarus (Lazarus, 1986, pp. 2–39). He argues that behaviour in a given situation is the result of the interplay between the situation and the coping style preferred by the individual. This is his/her deliberate action. Lazarus identifies two coping strategies – problem-focused, designed to resolve the problem, and emotion-focused, intended to reduce emotional tension (Lazarus, 1993, pp. 234–247). He further distinguishes between two functions of coping, namely instrumental coping, i.e., managing the relation that is at the core of the stress transaction, and coping with one's own emotions (Heszen-Niejodek & Ratajczak, 2000, p. 33).

Lazarus and Folkman define coping as “*the person's constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the person's resources*” (Aouil, 2008). Lazarus identified the following four coping strategies: information-seeking, direct action, inhibition of action, and intrapsychic processes.

All of these strategies refer to the individual, and, as noted by Hobfoll, they do not include any that would take the social context into consideration. Even our perception of each stressor depends on the social background in which we have been raised or live. In addition, the response itself largely depends on our milieu (Hobfoll, 2006a, pp. 169–172).

As emphasised by Lazarus, when we find ourselves in a stressful situation, we can seek information in order to obtain data about the situation itself. This data are necessary for making decisions about how to behave or what to do to change the current situation. In addition, the collected information often help re-evaluate losses and threats, which can change

the initial situation or confirm that the previous decision was right. There are also situations in which people prefer to avoid information. In such situations, it is better to remain in the dark and refrain from finding out more details, because such information could further add to the stress. This refers especially to difficult, hopeless and no-win situations, where hardly anything can be done to change them. Uncertainty associated with the situation can offer some hope. In many cases, people prefer to remain uncertain, believing that the difficult time will pass and everything will work out some way or another. This is also the case with patients who are often kept in the dark about the details of their prognoses. However, some people prefer to know the truth, even if it is devastating, regardless of the situation. They would rather know what might happen to them, since this allows them to adjust to the situation they have found themselves in, and to either survive or come to terms with their fate (Aouil, 2008).

Another coping strategy is direct action intended to change the situation the individual has found himself/herself in. Such actions can be very diverse and designed to either overcome the effects of the event or avoid the problems the individual is unable to deal with. This can give rise to problems with substance abuse (e.g., alcohol, drugs). By preventing subsequent threats, the individual can change the situation for the better and reap substantial benefits (Aouil, 2008).

Lazarus argues that in certain situations, it might prove more beneficial and effective to handle stressful situations by refraining from responding or from taking the action we would like to take. Wrong choice of action or behaviour in a given situation might turn out detrimental and cause damage. Sometimes the situation does not allow us to choose our behaviour (Aouil, 2008).

Finally, the last primary strategy identified by Lazarus is intrapsychic processes, also known as internal coping mechanisms. These mechanisms include very diverse strategies for self-deception, such as denial (e.g., "I don't believe it", "this can't be true"), reaction formation (e.g., pretending), rationalisation, withdrawal, and intellectualisation. These behaviours are, in fact, opposite to the actually experienced feelings and are designed to avoid threat (Aouil, 2008).

To sum up Lazarus' concept, all actions are intended to calm the individual down, improve their mood, and suppress negative emotions. However, these activities do not change the objective relationship between the individual and their milieu, or the stressful situation itself.

The second variable addressed in this article refers to a theory describing resource structure and regulating functions. S. Hobfoll's theory provides the following definition: "*I call these things that individuals value RESOURCES. Resources include the objects, conditions, personal characteristics, and energies that are either themselves valued for survival, directly or indirectly, or that serve as a means of achieving these ends. I delimit the range of resources to be resources that are valued by a broad class of individuals and that are seen as highly salient for people in general as well as the self*" (Hobfoll, 1989, p. 513). The above-mentioned definition shows that its author distinguishes between two types of resources, primary and secondary. The former directly affect individual experiences. This group includes food and shelter. The latter offer tools for obtaining or protecting primary resources. These tools include, for instance, personal skills, means of transport, and various types of insurance. A yet another type is tertiary resources, which are to manifest one's social status. These include

various luxury items (Hobfoll, 2006b, p. 70). S. Hobfoll proposed the following classification of resources: object, personal, condition, and energy resources.

Object resources include various physical objects, such as house, food, and means of transport. Some of them directly affect survival, while other raise one's social status or boost one's self-esteem. In other words, physical objects are needed for the individual to survive or help make his/her life easier (Hobfoll, 2006, p. 74). Object resources also include fetishes that are important for people because of their being perceived as symbols of higher social status and improving self-esteem (Poprawa, 2001, pp. 103–141). Fetishes can include luxury cars and collectibles. Fetishes may represent social status, and, as a result, accord the individual prestige, and are closely connected with condition resources.

Another category is personal resources, which include skills and personal characteristics. These involve especially professional and social skills, self-esteem, self-efficacy, and leadership skills. Personal resources play a key role in individual functioning. They significantly affect the ways in which other categories of resources are obtained and used (Hobfoll, 2006, p. 74). This might be due to the fact that temperament is an innate quality and is likely to directly influence one's sociability, attitude to life, and willingness to take action (Strelau, 1995, p. 63).

The next group identified by S. Hobfoll is condition resources. These are essential from the perspective of the individual, because they make it possible to obtain new, and protect the available, resources, thus being a value in their own right (Terelak, 2008, p. 67). Condition resources include health, current professional situation, and family status. It is evident that these are all things that take a lot of time to obtain, and their loss is usually rapid, which is their distinctive characteristics (Hobfoll, 2006, p. 75). R. Poprawa also considers social support as a condition resource (Poprawa, 1996, pp. 305–308). Alternatively, social support may be regarded as an energy resource. It is critical because of its huge impact on the ways people handle stressful situations. Social support is defined as a resource obtained by people through their interactions with others, and as significant others and reference groups who help satisfy one's needs in difficult situations (Sęk, 2001, pp. 13–33).

The last but not least group identified by S. Hobfoll is energy resources. These include money and knowledge that might be accumulated or acquired over time. What is distinctive about these resources is that they can be exchanged for the other three categories of resources, and the fact that they do not lose their value. For some people, energy resources become a fetish, which is why they are often accumulated without the intention of investing them in the future (Hobfoll, 2006, p. 75).

In his COR theory, Hobfoll distinguishes between two fundamental rules governing the management of individual resources. Principle 1 states "*resource loss is disproportionately more salient than resource gain*". This means that for the same levels of gains and losses, the impact of loss is much more powerful. This principle is very important, as it differentiates COR theory from other concepts. The COR concept suggests that stress is caused especially by loss and threat of loss. Principle 2 of the conservation of resources suggests that "*people must invest resources in order to protect against resource loss, recover from losses, and gain resources*".

People's behaviours are designed mainly to maintain their resources. It is less important to add to the available resources. Loss or threat of loss leads to stress. The individual puts in a lot of effort to reduce the risk of suffering a loss (Niewiadomska & Chwaszcz, 2010, p. 181). This is because, as suggested by the concept, initial loss in people with low resources leads

to a cycle of loss (Hobfoll, 2006, pp. 90–91). The person's motivation to invest resources is crucial. People take action because they want to protect their resources, thus preventing potential loss, possibly reducing the costs associated with the deficits they have faced, and increasing the spectrum of available resources. People are able to invest a lot to compensate for the failures and damage they have suffered (Hobfoll, 2006, pp. 90–91).

Based on the principles governing the importance of loss and gain, and investment mechanisms, Hobfoll drew some corollaries that complement his theory. These corollaries help anticipate how the individual will cope with difficult situations, based on their resources and experienced gains and losses.

Based on the literature, the study asked the following research question and proposed the following four hypotheses:

What are the correlations between resource distribution and preferred coping strategies among the uniformed services during war?

H1: Object resource loss is significantly correlated with preference for avoidance coping strategies in the study group.

H2: Substantial losses in object resources are significantly correlated with preference for seeking emotional and instrumental support among the uniformed services during war.

H3: Substantial losses in personal resources are significantly correlated with preference for coping strategies characterised by helplessness in the study group.

H4: Substantial perceived gains in energy resources are positively correlated with active coping among the uniformed services during war.

The study presented in this article was conducted between February and June 2016, on a group of 324 adults, involved in various ways in the recent armed conflict in Ukraine. The study analysed questionnaires completed by 83 persons who had had worked in the uniformed services at the time. The study was conducted mainly on the territory of Ukraine, in cooperation with the staff of the National Academy of Sciences of Ukraine and Caritas.

The study group was rather diverse in terms of age. The youngest participant in the study was 20 and the oldest was 74. The average age was 38.3. Standard deviation for this group was 9 years. Another addressed variable was gender. In total, there were 83 participants in the study, including 81 men and 2 women.

Description of research methods

The purpose of this section is to describe research methods used for the purposes of this paper. The study employed the following psychological questionnaires: Conservation of Resources-Evaluation questionnaire by S. Hobfoll, and the Mini-COPE Inventory for Measuring Coping. In addition, the study used a structured interview in the form of a personal information questionnaire. The data collected on the basis of this questionnaire were used to characterise the study group in terms of sociodemographic variables.

Each respondent completed the questionnaire, which had been prepared by fifth year students at the Chair of Social Psychoprevention under the supervision of Professor I. Niewiadomska. The questionnaire comprises 29 questions concerning sociodemographic

data (gender, age, marital status, children, education, place of residence), data on social status, employment, financial/economic situation, participation in the armed conflict, distance between place of residence and the area directly affected by war, and involvement in armed combat. The collected data were used to characterise the uniformed services during war in Ukraine as the study group, and to test out the proposed hypotheses.

The Conservation of Resources-Evaluation questionnaire was developed by S. Hobfoll on the basis of his Conservation of Resources (COR) theory. For the purposes of this paper, the original version, which consists of 74 items, was reduced by expert judges to 54 items. Questions were grouped into four categories, namely object resources (4 resources), personal resources (19 resources), condition resources (20 resources), and energy resources (11 resources). Respondents answered each question using a five-point scale (1 – not at all, 2 – to a small degree, 3 – to a moderate degree, 4 – to a considerable degree, 5 – to a great degree), and in relation to three aspects, namely resource importance, resource gain, and resource loss.

Mini-COPE is a tool for surveying adults. It comprises 28 statements, which are part of 14 strategies (2 statements per each strategy), namely active coping, planning, positive reevaluation, acceptance, sense of humour, return to religion, seeking emotional support, seeking instrumental support, substitute activities, denial, discharge, substance use, cessation of operations, and blaming oneself. This method is usually used to measure dispositional coping, i.e., to evaluate the typical ways of responding to, and experiencing, highly stressful situations.

Spearman's *rho* is the primary method used for the analysis of rank correlations. It is a special instance of Pearson's *r*. This correlation is calculated for ranks. It must not refer to neither normal nor *t* distributions. Instead, it needs to calculate the probability (Francuz & Mackiewicz, 2005, p. 519). Pearson's *r* is a measure of the linear correlation between two variables. For the purposes of its calculation, data need to be paired. This coefficient ranges between -1 and $+1$. The closer its result is to 0, the weaker the correlation between the variables. A negative correlation means that when one variable increases, the other variable decreases. A positive correlation is found when the increase in one variable causes a corresponding increase in the other variable. The strength of the correlation between the variables is represented by the absolute value of the correlation coefficient (Francuz & Mackiewicz, 2005, pp. 474–475).

Analysis of own research results

Hypothesis 1: Object resource loss is significantly correlated with preference for avoidance coping strategies in the study group.

Below there are the results of Spearman's *rho* for the data collected during the study using the Conservation of Resources-Evaluation questionnaire by S. Hobfoll and the Mini-COPE Inventory for Measuring Coping for representatives of the uniformed services during war (Table 1).

Table 1 *Correlations between object resource loss and preference for avoidance coping strategies among the uniformed services during war (N = 83)*

Mini-COPE	Object resource loss		
	<i>n</i>	<i>rho</i>	<i>p</i>
Avoidance	83	0.254*	0.020

*0.05; **0.01; ***0.001.

This hypothesis was supported. Statistical analysis showed that there is a positive correlation between object resource loss and preference for avoidance coping strategies. This correlation is weak ($rho = 0.254$) but statistically significant at $p < 0.05$. It seems that the greater the loss in object resources, i.e., such physical objects as house, food, means of transport, and money, the more likely the individual is to opt for strategies such as avoidance, substitute activities, and seeking interactions with other people.

Hypothesis 2: Substantial losses in object resources are significantly correlated with preference for seeking emotional and instrumental support among the uniformed services during war.

Below there are tables with the results of calculations based on data from the Conservation of Resources-Evaluation questionnaire by S. Hobfoll and the Mini-COPE Inventory for Measuring Coping for representatives of the uniformed services during war (Table 2).

Table 2 *Correlations between substantial losses in object resources and preference for seeking emotional and instrumental support among the uniformed services during war (N = 83)*

Mini-COPE	Object resource loss		
	<i>n</i>	<i>rho</i>	<i>p</i>
Seeking emotional and instrumental support	83	0.240*	0.029

*0.05; **0.01; ***0.001.

This hypothesis was supported. Statistical analysis showed a positive correlation between substantial losses in object resources and preference for seeking emotional and instrumental support. This correlation is weak ($rho = 0.240$) but statistically significant at $p < 0.05$. It seems that substantial losses in object resources, i.e., in physical objects such as house, food, means of transport, and money, correlate with preference for coping strategies involving the seeking of support, sympathy, or understanding from other people.

Hypothesis 3: Substantial losses in personal resources are significantly correlated with preference for coping strategies characterised by helplessness in the study group.

Below there are tables with the results of calculations based on data from the Conservation of Resources-Evaluation questionnaire by S. Hobfoll and the Mini-COPE Inventory for Measuring Coping for representatives of the uniformed services during war (Table 3).

Table 3 *Correlations between substantial losses in personal resources and preference for coping strategies characterised by helplessness among the uniformed services during war (N = 83)*

<i>Mini-COPE</i>	<i>Personal resource loss</i>		
	<i>n</i>	<i>rho</i>	<i>p</i>
Helplessness	83	0.244*	0.026

*0.05; **0.01; ***0.001.

This hypothesis was supported. There is a positive correlation between substantial losses in personal resources and preference for coping strategies characterised by helplessness. This correlation is weak ($rho = 0.244$) but statistically significant at $p < 0.05$. It seems that losses in personal resources, i.e., skills and personal characteristics, which are either innate or obtained by the individual in the process of socialisation, correlate with preference for coping strategies characterised by helplessness.

Hypothesis 4: Substantial perceived gains in energy resources are positively correlated with active coping among the uniformed services during war.

Below there are the results of Spearman's rho for data (Table 4) collected during the study using the Conservation of Resources-Evaluation questionnaire by S. Hobfoll and the Mini-COPE Inventory for Measuring Coping for representatives of the uniformed services during war.

Table 4 *Correlations between perceived gains in energy resources and use of active coping among the uniformed services during war (N = 83)*

<i>Mini-COPE</i>	<i>Perceived gains in energy resources</i>		
	<i>n</i>	<i>rho</i>	<i>p</i>
Active coping	83	0.423***	< 0.001

*0.05; **0.01; ***0.001.

This hypothesis was supported. Statistical analysis showed that substantial perceived gains in energy resources are correlated with the use of active coping among the uniformed services during war. This correlation is positive, moderate ($rho = 0.423$), and statistically significant at $p < 0.001$. Substantial perceived importance of energy resources correlates with active coping. Energy resources can be exchanged by the individual for other resources, especially when he/she experiences losses in other resource categories. Therefore, when the individual has a lot of energy resources, he/she can easily cope with difficult or problem situations and take proactive action to remove the stressor or reduce its negative consequences.

This chapter addressed and discussed the results of a study on representatives of the uniformed services during war in Ukraine. Firstly, it described the study group in terms of psychosocial variables, and then explored study results and examined each research hypothe-

sis. The next part will be the conclusion. It is the summary of this paper with the discussion and possible applications of findings, and recommendations for further study of resource distribution and preference of coping strategies among the uniformed services during war.

Conclusion

This study addressed correlations between resource distribution and preferred coping strategies among the uniformed services during war. Study results led to the following conclusions:

People who experience losses in object resources, i.e., physical objects, usually use avoidance-oriented coping strategies. This finding is consistent with the literature on the subject. As reported by Mellibruda, people who experience losses in object resources are more likely to use psychoactive substances, i.e., to use avoidance coping strategies (Mellibruda, 2006).

People who experience substantial losses in object resources prefer coping strategies based on seeking emotional and instrumental support. This means that people affected by object resource loss seek comfort and support from other people, and are ready to receive the offered support (Hobfoll et al., 2003).

People who experience substantial losses in personal resources prefer coping strategies characterised by helplessness. This correlation is consistent with research by Hobfoll, which showed that losses in personal resources, such as self-confidence and optimism, are a strong predictor of Post-Traumatic Stress Disorder (PTSD), which is associated with the use of destructive coping strategies, including strategies characterised by helplessness (Hobfoll, 2006, p. 97).

People perceiving gains in energy resources prefer strategies based on taking proactive action. This finding is supported by a study conducted by Kurza. People who perceive substantial gains in energy resources, such as knowledge about healthy behaviours, satisfaction with family and non-family relationships or education or financial situation, are more likely to use constructive coping strategies in problem situations (Kurza, 2003).

The results of this study might have a wide range of applications and broaden the existing psychological knowledge with the study of the functioning of the uniformed services during war. In addition, they expand the range of groups examined in terms resource distribution and coping strategies.

Moreover, the study provided knowledge on the distribution of resources and preferences for coping strategies among the uniformed services during war. Study findings can be used to support this group in relation to resource distribution and the development of coping strategies among the uniformed services during war. The above-mentioned conclusions can also be used to support this group in terms of emotional coping strategies. Furthermore, the knowledge on resource distribution can be used to provide various forms of therapy. These efforts might contribute to improved quality of offered support, and, ultimately, to improved quality of life and appropriate coping during armed conflicts.

It would be advisable to broaden the knowledge of the problem addressed in this study. Further analyses would undoubtedly contribute to continued development of the knowledge in this area of psychology. It might also be interesting to conduct similar research on other groups of the uniformed services, which would broaden the knowledge on the functioning of a wider study group.

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Distribution of resources and substance use among people affected by armed conflict

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ABSTRACT

This article addresses distribution of resources in relation to the level of substance use in the group of people affected by the recent armed conflict in Ukraine. Its goal is to explore correlations between resource distribution and substance use among people who have been caught up in military operations. The study surveyed 324 respondents. Resource management was measured using S. Hobfoll's Conservation of Resources-Evaluation questionnaire, and the current health of respondents was tested on the basis of the Health Functioning Questionnaire. The analysis of study results shows, i.a., that, contrary to perceived resource loss, perceived resource gain is not associated with substance use. The group of persons who have lost someone as a result of the armed conflict did not exhibit any correlations between significant resource loss and substance use. The availability of considerable energy resources proved to be a protective factor. Persons with considerable personal skills and strong support network were less likely to use psychoactive

substances. Contrary to expectations, the study showed that people who have lost a loved one as a result of the armed conflict were less likely to use psychoactive substances.

Keywords: resources, distribution of resources, conflict, armed conflict, substance use

Introduction

The article explores the issue of resource distribution among people affected by the armed conflict in Ukraine. It attempts to find out whether resource distribution influences the level of substance use as an avoidance strategy in this social group. Due to the relatively limited data and given the number of armed conflicts worldwide, this issue is worth exploring in more detail.

The analysis of the literature on the subject shows resource theories have a long history and cover many scientific disciplines, such as biology, ecology, economy, sociology and psychology (Hobfoll, Warner, Martens & Ronald, 2010, p. 2). While scholars adjust the definition of resources to meet their needs, which might make them seem apparently different, all representatives of all scientific disciplines agree that resources are the key determinant of taking action, adapting, and making changes (Hobfoll, Warner, Martens & Ronald, 2010, p. 2). Usually, the notion of resources appears in the context of issues related to health, and especially to stress and methods of coping with it (Hobfoll, 2002, p. 307).

Teesson and colleagues (2005, p. 14) defined psychoactive substances as chemical substances not classified as food that affect biological and brain functions and result in alterations in cognitive processes, mood, or behaviour. Such substances affect mood and perception of reality (Woronowicz, 2003, p. 163). The analysis of the literature on the subject shows that there is a number of theories (biological, genetic/behavioural, psychological, environmental, sociological), which suggest explanations for the development of substance addiction (Jędrzejko, Neroj, Kowalewska & Wojcieszek, 2009, p. 65). Psychological concepts suggest that substance use can be predicated on certain individual characteristics (e.g., poor self-esteem, shyness, chronic anxiety, extraversion, introversion, neurotic traits), early development disorders (e.g., domineering parents, excessive control or a complete lack thereof, which results in difficulty in independent decision-making and situation assessment) (Jędrzejko, Neroj, Kowalewska & Wojcieszek, 2009, pp. 65–66). In addition to the above-mentioned explanations, psychological literature emphasises the special role of stress in the development of substance use (Krupa, Bargiel-Matusiewicz & Hofman, 2005, p. 58).

Theoretical background

The analysis of the literature on the subject shows resource theories have a long history and cover many scientific disciplines, such as biology, ecology, economy, sociology

and psychology (Hobfoll, Warner, Martens & Ronald, 2010, p. 2). There have been many psychological studies on human resources (Hobfoll, 2002, p. 307). Usually, the notion of resources appears in the context of issues related to health, and especially to stress and methods of coping with it (Hobfoll, 2002, p. 307). In his Conservation of Resources theory, Steven Hobfoll defines resources as things that people value (Hobfoll, 2006, p. 70; Hobfoll, 2002, p. 307; Hobfoll, Tirone, Holmgreen & Gerarth, 2016, p. 65). According to Hobfoll, resources are “*the objects, conditions, personal characteristics, and energies that are either themselves valued for survival, directly or indirectly, or that serve as a means of achieving these resources*” (Hobfoll, 1989, p. 516; Hobfoll, 2006, p. 61; Hobfoll, 2011, p. 117). Therefore, it can be assumed that resources are all the goods available to the individual and everything that contributes to the attainment of such goods, e.g., work, money, food, marriage, support, and self-worth. It is important to note here that, according to Hobfoll, each person is biologically predisposed, in the course of their experiences and education throughout life, to recognise what is important for them, and learns how to obtain and retain the things that they value (Hobfoll, 2006, p. 68). The importance attached by the individual to specific resources, and the processes associated with their gain or loss, are referred to as resource distribution (Niewiadomska, Chwaszcz & Bartczuk, 2013).

One of the main tenets of this theory is that “*individuals strive to obtain, retain, protect, and foster those things that they value*” (Hobfoll, 2006, p. 70). The stressors that affect the individual usually make it impossible for them to obtain resources, while also hampering their ability to retain and protect the available resources. This claim helps define stress, which, as argued by Hobfoll, “*is predicted to occur as a result of circumstances that represent a threat of resource loss, or actual loss of resources required to sustain the individual-nested-in, family-nested-in social organization. In addition, because people will invest what they value to gain further, stress is predicted to occur when individuals do not receive reasonable gain for themselves or social group following resource investment, this itself being an instance of loss. Hence, stress occurs when: (1) resources are threatened with loss, (2) resources are actually lost, or (3) there is a failure to adequately gain resources following significant resource investment*” (Hobfoll, 2006, pp. 71–72). This claim suggests that resources play a key role in stressful situations.

COR theory provides three classifications of resources. Hobfoll (2006, pp. 73–76) identifies: (1) internal resources and external resources, (2) structural classification of resources, (3) classification based on the importance of resources for survival. In a way, these various approaches to categorising resources show that this is a multi-dimensional concept that can be viewed from different perspectives.

The first classification, as proposed by Hobfoll, is based on the central psychological concept of self (Hobfoll, 2006, p. 73). The group of internal resources includes “*those that are possessed by the self or are within the domain of the self*” (Hobfoll, 2006, p. 73), as well as those that support individual growth and adaptation. Internal resources include the functional and structural characteristics of the self and all elements of personality (Sęk, 2012), such as the sense of self-worth, sense of self-efficacy, professional skills, and sense of coherence. External resources, on the other hand, are those that are external to the self. This group includes all tangible goods, social status, and social support. Hobfoll notes that internal resources are necessary for managing external resources.

To a certain degree, the next distinction builds on the above-mentioned categorisation into internal and external resources. As part of the structural classification, Hobfoll (2006) identified object resources, personal resources, condition resources, and energy resources.

When referring to object resources, Hobfoll mentions various tangible objects, such as a house, a car, a boat, and valuables, such as gold, jewellery, audio-visual equipment and household appliances. The primary function, or attribution, of these resources is to support human existence. Moreover, they can be used to improve one's self-esteem or position within a social group. The value of such resources depends on the individual themselves and on society in general (Hobfoll, 2006, p. 74).

The second type identified as part of this distinction is personal resources, which comprise personality traits, such as "*self-esteem, self-efficacy, hope, and optimism*" (Hobfoll, 2006, p. 74) and individual competences, e.g., interpersonal skills, and various professional abilities and qualifications.

Condition resources include elements, situations or structures that facilitate access to other resources, which makes them valuable for the individual in their own right. This group includes marriage, job and seniority, health, and other goods which help the individual establish their position within a community. These resources are not readily available and they often require the investment of other resources. What is also characteristic of condition resources is the fact that they can be quickly lost, e.g., by losing one's job, illness, etc. (Hobfoll, 2006, p. 75).

The last sub-group identified within the structural classification is energy resources, such as knowledge, money, and securities, i.e., things that can be exchanged for other resources from the three categories described above. Over time, these resources can either decrease or increase in value, and sometimes this takes place independently of the individual, e.g., through a rise in inflation. People with resources at their disposal can either retain or invest them (Hobfoll, 2006, p. 75).

Finally, the third distinction focuses on the resources' importance for survival. Hobfoll argues that this construct is superior as it has a theoretical basis (Hobfoll, 2006, p. 76). This classification categorises resources into primary, secondary, and tertiary. Primary resources are those that are directly related to survival and include food, shelter, and clothing. Moreover, this group includes the skills that are crucial for obtaining the means for satisfying primary human needs (Hobfoll, 2006; Şek, 2012). Primary resources can be obtained on the basis of secondary resources. The latter include such resources as social support, interpersonal relationships, group relationships, marital ties, social roles, membership of a group, etc. The last group is tertiary resources, which are closely related to the previous two types. These include tangible goods (money, house, car, jewellery, technology), position at work, and social status (group membership, social ties) (Hobfoll, 2006).

Along with the development or acquisition of experience, individual resources change. The individual can gain, foster, invest, retain, or lose resources. Since this is a dynamic process, the pursuit of the things whose availability is limited and which are valuable for people can create conflict between individuals with a society, lead to competition or cooperation between people, and, consequently cause stress (Hobfoll, 2006). Hobfoll explained resource management on the basis of certain principles and corollaries.

Principle 1: "*Resource loss is disproportionately more salient than resource gain*" (Hobfoll, 2006, p. 78). This rule suggests that losses are more important for people than gains. Loss and gain are not considered equal, since it is loss, or threat of loss, that causes the individual

to experience stress (Hobfoll, 2006, p. 79). However, it is important to note that loss and gain of certain resources are not commensurate, e.g., loss/gain of one's partner is not equal to financial loss/gain (Hobfoll, 2006, p. 79).

Principle 2: "*People must invest resources in order to protect against resource loss, recover from losses, and gain resources*" (Hobfoll, 2006, p. 90). This claim suggests that people must foster their resources in order not to lose them, which involves some costs, such as the potential costs incurred in connection with a holiday trip or the time spent on building a relationship.

In addition to its basic tenet and the above-mentioned principles, COR theory (Hobfoll, 2006, p. 97) suggests four corollaries, which complement its theoretical framework. They serve to specify certain rules, which can be used to anticipate resource development over time.

Corollary 1 states that "*those with greater resources are less vulnerable to resource loss and more capable of orchestrating resource gain. Conversely, those with fewer resources are more vulnerable to resource loss and less capable of resource gain*" (Hobfoll, 2006, p. 97). This corollary stipulates that individuals who have a lot of resources are better positioned to protect themselves against the loss of such resources, and, consequently, against stress. The situation is different for individuals who have fewer resources, as they are at risk of losing what they have and are unable to invest their resources to make more gains.

In his Corollary 2, Hobfoll states that "*not only are those who lack resources more vulnerable to resource loss, but that initial loss begets future loss*" (Hobfoll, 2006, p. 98). In this corollary, Hobfoll suggests that the loss of a resource by individuals who are poor in resources is followed by losses in other resources (e.g., by losing their job, the individual has no means of subsistence, is more likely to face problems in their family, and feel out of control).

Corollary 3 states that "*those who possess resources are more capable of gain, and that initial resource gain begets further gain*" (Hobfoll, 2006, p. 99). In other words, people who have some resources are better positioned to invest their resources to obtain even more of them, and each investment can produce further returns.

Finally, Corollary 4 pertains to people who lack resources. It posits that "*those who lack resources are likely to adopt a defensive posture to conserve their resources*" (Hobfoll, 2006, p. 100).

The next important element of the COR theory is the description of how loss spirals and gain spirals regulate resources. In order to address resource gain and its importance for the individual, it is important to make a reference to resource loss. When faced with loss, people are forced to take action to prevent further loss. Hobfoll argues that the best way to do that is to initiate a gain spiral. Loss causes the individual to experience stress. In order to minimise stress and the negative emotions associated with it, the individual has to find and make gains (Hobfoll, 2006).

Research on populations at risk of, or affected by, armed conflicts shows that such people often tend to resort to substance use to cope with the difficult situation in which they have found themselves. Bjelosević et al. (2003) proved that substance abuse increases during the times of crisis (war, displacement, disasters, various circumstances caused by stress, fear for one's life, lack of prospects and hope). The war in Bosnia and Herzegovina had some unexpected consequences, caused massive migration, and took a heavy death and injury toll, while also separating families and leading to large-scale unemployment and poverty. All these factors left a mark on the affected population's mental health. Participants in

this armed conflict most often used benzodiazepines, which were the most frequently used psychopharmaceuticals due to their accessibility and properties that helped overcome fear, relieve anxiety, and manage mood disorders and pain. As a result of long-term and uncontrolled use, 50% of respondents who abused benzodiazepines became addicted to BZs.

In people caught up in armed conflicts, it is mainly the loss of condition resources that leads to an increased use of avoidance strategies, such as substance use. Studies have shown that the loss of loved ones or a limb, or significant exposure to suffering, considerably contribute to mental disorders, including substance addiction (Murthy, 2007).

In their study on a group of people displaced as a result of military operations in Africa (Kenya, Liberia, northern Uganda) and Asia (Iran, Pakistan and Thailand), other scholars proved that the affected populations markedly increased their use of alcohol, khat, benzodiazepines, opiates and other psychoactive substances, to cope with the stress caused by the sudden change of their places of residence. Displacement was associated with a sudden detachment from a familiar community and change in applicable social norms, which not only made people more likely to start using psychoactive substances but also made their use patterns more harmful (Ezard et al., 2011). Another study, conducted among Jews at risk of terrorism, demonstrated that the loss of social interaction led to heavier drinking (Schiff, 2006).

A study on a group of refugees from Somalia provided evidence suggesting that gains in condition resources protected people from substance use, even when faced with a military conflict. People who had a job and received education were less likely to be diagnosed with mental disorders, including substance addiction (Bhui et al., 2006).

The findings reported by the literature on the subject unequivocally show that resources can provide protection against substance use. Therefore, further research is necessary to develop prevention measures for individuals and groups who require support, especially in the context of armed conflict.

Own research methodology

This study analysed the correlation between the distribution of resources and substance use among people affected by armed conflict. Based on a review of the literature on the subject, the study formulated the following research question to capture its objective: *What are the correlations between the distribution of resources and substance use among people affected by armed conflict?* This research question was addressed on the basis of the following hypotheses:

H1: High levels of resource gain correlate negatively with heavy substance use.

H2: High levels of perceived resource loss correlate positively with heavy substance use in the study group.

H3: Considerable perceived importance of resources correlates negatively with heavy substance use.

In order to achieve the objective captured by the research question, the study used the following methods:

Personal information questionnaire including 29 questions concerning sociodemographic data, social status, professional status, financial/economic situation prior to the armed conflict and now, information about participation in the armed conflict – loss of

a loved one as a result of the conflict, distance between one's place of residence and the theatre of war, and involvement in the armed conflict.

Conservation of Resources-Evaluation questionnaire developed by S. Hobfoll on the basis of his Conservation of Resources (COR) theory. This instrument is used to measure resource management. The original questionnaire comprises 74 items (resources) which were grouped by expert judges into four categories. For the purposes of this paper, the number of items was reduced by expert judges to 54. Respondents assessed each item in relation to three dimensions, namely resource importance, gain, and loss, using a five-point scale (1 – not at all, 2 – to a small degree, 3 – to a moderate degree, 4 – to a considerable degree, 5 – to a great degree). The reliability (Cronbach's alpha) of the original version of the instrument on a group of $N = 1697$ people was $\alpha = 0.97$ for resource importance, $\alpha = 0.98$ for resource gain, and $\alpha = 0.98$ for resource loss. The scale and its subscales are characterised by a considerable degree of cohesion (Bartczuk, 2010, pp. 59–60).

Health Functioning Questionnaire is a method used to measure the current health of respondents. It was developed for the purposes of the study by participants in a Social Pathology Psychoprevention seminar and staff of the Chair of Social Psychoprevention, under the guidance of KUL Professor Iwona Niewiadomska, PhD. This questionnaire includes experimental questions concerning estimated damage to one's health since the commencement of the armed conflict and questions about the symptoms related to substance use, as well as abbreviated Maudsley Addiction Profile (MAP) by J. Marsden, D. Steward and D. Best – the part concerning health and the type and frequency of substance use.

The study was conducted on a group of 324 adults. The respondents were patients reporting for psychological support in connection with the recent armed conflict in Ukraine.

Own research results

In order to test Hypothesis 1, the study conducted a statistical analysis of the correlation between resource gain and substance use. Its results are presented in Table 1.

Table 1 *Correlations between perceived resource gain and substance use*

<i>Conservation of Resources-Evaluation</i>		<i>MAP</i>		
		<i>Total Score</i>	<i>Alcohol</i>	<i>Sedatives/hypnotics</i>
Resource gain level	Pearson's r	-.061	-.009	-.012
	Significance (one-tailed)	.148	.442	.422
	N	296	294	289

** $p < 0.01$.

Correlation coefficient analysis did not show any statistically significant correlations between perceived resource gain and substance use. This indicates that perceived resource gain, i.e., recognising the increases in resources, is not associated with substance use.

In order to test Hypothesis two, which predicted that *high levels of perceived resource loss correlated positively with heavy substance use in the study group*, Pearson's *r* was calculated. The results are presented in Table 2.

Table 2 *Correlation between high levels of perceived resource loss and heavy substance use*

<i>Conservation of Resources-Evaluation</i>		<i>MAP</i>		
		<i>Total Score</i>	<i>Alcohol</i>	<i>Sedatives/hypnotics</i>
Degree of resource loss	Pearson's <i>r</i>	.147**	.116*	.096
	Significance (one-tailed)	.006	.025	.053
	<i>N</i>	291	289	285

* $p < 0.05$; ** $p < 0.01$.

Information in Table 2 supports Hypothesis 2. High levels of perceived resource loss are accompanied by heavy substance use ($r = 0.147$) or alcohol consumption ($r = 0.116$).

This finding can be interpreted on the basis of Hobfoll's COR theory. As he/she loses one resource, the individual is likely to experience stress. When he/she resorts to substance use, he/she employs an avoidance strategy, which does not help to solve the problem, but only to divert his/her attention from it. As a result, the loss of one resource can cause a spiral of loss in his/her life.

In order to examine Hypothesis 3: *Considerable perceived importance of resources correlates negatively with heavy substance use*, the study conducted a statistical analysis, as presented in the table below.

Table 3 *Correlations between resource importance and substance use*

<i>Conservation of Resources-Evaluation</i>		<i>MAP</i>		
		<i>Total Score</i>	<i>Alcohol</i>	<i>Sedatives/hypnotics</i>
Resource importance	Pearson's <i>r</i>	-.250**	-.135**	.032
	Significance (one-tailed)	.000	.009	.288
	<i>N</i>	310	308	303

** $p < 0.01$.

This hypothesis was confirmed. People who perceive resources to be important show a correlation with refraining from substance use. This correlation can be interpreted on the basis of an approach that advocates the existence of factors protecting from substance use. Individuals who consider their lives as satisfactory, tend to be happy with their lives and to have a lot of resources, which makes them less prone to developing addiction.

Conclusions

The study pointed to the following conclusions:

H1: High levels of resource gain correlate negatively with heavy substance use. This hypothesis was not supported, i.e., perceived resource gain, or recognising the increases in resources, has no statistically significant correlation with substance use. However, this finding requires further study, since the literature on the subject shows that gains in various resources co-occur with low levels of substance use. In their paper, Kaiebić and Dorcic (2015) report that support from other people is a factor that reduces the likelihood of substance use. Another study, conducted by Cotton et al. (2006), also supports this hypothesis, proving that gains in health resources help reduce the frequency of substance use. Perhaps the fact that this hypothesis was not supported is due to the specific nature of the group including people affected by armed conflict.

H2: High levels of perceived resource loss correlate positively with heavy substance use in the study group. This hypothesis was confirmed, and this finding can be interpreted on the basis of Hobfoll's COR theory. As he/she loses one resource, the individual is likely to experience stress. When he/she resorts to substance use, he/she employs an avoidance strategy, which does not help to solve the problem, but only to divert his/her attention from it. As a result, the loss of one resource can cause a spiral of loss in his/her life. This finding is consistent with the literature on the subject. Studies show that among people affected by armed conflict, health resource loss tends to co-occur with heavy substance use. Research indicates that armed conflict increases the frequency of substance use, and this, in turn, leads to significant losses in health, and in particular markedly increases the risk of HIV epidemics (Friedman, Rossi & Braine, 2009).

H3: Considerable perceived importance of resources correlates negatively with heavy substance use. This hypothesis was confirmed. This correlation can be interpreted on the basis of an approach that advocates the existence of factors protecting from substance use. Individuals who consider their lives as satisfactory, tend to be happy with their lives and to have a lot of resources, which makes them less prone to developing addiction. Literature, too, shows that the frequency of substance use can decrease as the individual perceives gains across various categories of resources, with such gains not being created by substance use (Kaiebić & Dorcic, 2015; Cotton, Zebracki, Rosenthan, Tsevat & Drotar, 2006).

To sum up, this study showed that resource distribution, as described by S. Hobfoll's Conservation of Resources theory, plays a significant role in the functioning of people affected by war in respect of substance use. It constitutes an important preventive and strengthening factor that safeguards the individual against substance use, especially in relation to alcohol and sedatives/hypnotics. The above findings can contribute to improved effectiveness of therapeutic and readaptation measures for socially excluded groups, and in particular for groups affected by armed conflicts. These findings indicate that resources associated with optimism, high level of activity, interactions between people, perceived social support, health and various object resources are crucial. In view of the above, it is important that these resources be fostered by developing extensive support networks and creating opportunities for practising individual activity and agency.

This study was one of only a few undertaken in relation to people affected by war and this area requires further empirical study to explore this social group more thoroughly and develop specific support measures for people affected by such difficult situations.

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