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The Experience of War-Related Threats, PTSD, and Post-Traumatic Growth Among Ukrainian Citizens*

Abstract

RESEARCH OBJECTIVE: The research presented in this paper concerns the psychological situation of civilian citizens of Ukraine following the attack of Russia on this country in 2022. The study looked at Ukrainian citizens who remained in their home country despite the hostilities, as well as refugees in Poland, Slovakia and Germany.

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THE RESEARCH PROBLEM AND METHODS: The main objectives of the exploration were to find out to what extent these individuals responded to war threats with post-traumatic stress disorder (PTSD) and post-traumatic growth (PTG) and to determine the importance of attachment styles. Answers were sought to the questions of the differences between a group of war refugees from Ukraine and a group of Ukrainian nationals who remained in their homeland in terms of the severity of threats, PTSD, the level of post-traumatic growth and the intensity of the individual attachment styles.

THE PROCESS OF ARGUMENTATION: A situation of war implies an accumulation of a number of various threats accompanied by traumatic experiences related to factors that are both directly and indirectly dangerous to the individual. Civilian victims of war commonly experience frustration of basic psychological needs which can lead to PTSD and the posttraumatic growth.

RESEARCH RESULTS: The severity of war-related threats was a predictor of PTSD for the respondents as it predicts variability in PTG scores, either directly positively or indirectly negatively through avoidant attachment style. War-related traumatic experiences may impair secure attachment styles and strengthen insecure styles. There were significant differences between the group of civilians who remained in Ukraine and that of refugees.

CONCLUSIONS, INNOVATIONS, AND RECOMMENDATIONS: The both groups of Ukrainian nationals in the survey experienced elevated levels of post-traumatic stress syndrome. Thus, they often require specialised therapeutic help in coping with PTSD in addition to the assistance they receive in adapting to life abroad.

KEYWORDS:

war threats, attachment styles, PTSD, post-traumatic growth, Ukrainian citizens and refugees

INTRODUCTION

The war that has been going on in Ukraine for more than two years following Russia's invasion of the country has resulted in many civilian deaths. Since the invasion of Ukraine on 24th February, more than 10 million people have been forced to leave their homes, of whom almost 3.5 million crossed the Ukrainian border as refugees. Initially, they were most numerous in Poland, from where they dispersed in the following months to other countries. The war situation faced by Ukrainian citizens threatens their very existence and is a source of trauma.

The main aim of the study presented here was to examine whether subjective characteristics, such as attachment styles mediate the relation between the severity of threats and the levels of PTSD and PTG experienced by Ukrainian war refugees and Ukrainian nationals who remained in their homeland. In addition, answers were sought to the questions of the differences between these groups in terms of threat severity, the levels of PTSD and PTG as well as the intensity of the particular attachment styles.

From being exposed to threats to experiencing PTSD

In everyday life, a person encounters a variety of threats which may persist over a long period of time if they are of high intensity, or trigger trauma and eventually lead to post-traumatic stress disorder (PTSD) if they affect the needs and values that are important to the person. Post-traumatic stress disorder is diagnosed based on three main symptoms, i.e. intrusion, avoidance and persistent sense of threat (Galecki, 2022). A situation of war implies an accumulation of a number of various threats accompanied by traumatic experiences related to factors that are both directly and indirectly dangerous to the individual. Civilian victims of war commonly experience frustration of basic psychological needs, i.e. autonomy, competence, and relatedness (Ryan & Deci, 2000; Ben-Ezra et al., 2023). A positive association between the degree of exposure to traumatic war events and the severity of PTSD in both soldiers and civilians has been found at sites of military conflicts (El-Khodary, 2020). The risk of developing PTSD as a result of experiencing severe threats is highly dependent on social support (Ozer et al, 2003; Sharp, Fonagy, & Allen, 2012). The availability of social support may be perceived and used in different ways by people with different attachment styles because these styles determine e.g. the ability to use other people's help (Bartholomew, 1990). It is precisely the importance of attachment styles as a mediating variable between the experience of the dangers of warfare and the severity of PTSD and PTG that we examine in this study of Ukrainian civilians with experiences of the 2022 war.

Attachment styles and the experience of PTSD

Attachment, which is defined as a specific type of emotional bond, is formed in early childhood and is triggered in situations of disruption of the sense of security, both in childhood and later in a person's life. There are three main attachment styles, one secure and two insecure (anxious-avoidant and anxiety-ambivalent) which may influence the ability to regulate emotions, e.g. during the experience of post-traumatic stress (Ainsworth, 1973; Bowlby, 1980); Mikulincer et al., 2006), and determine ways of coping with threats (Bartholomew & Horowitz, 1991). Thus, it can be hypothesised that they mediate between the experience of threats and the severity of PTSD.

Meta-analyses of studies on the relation between attachment styles and symptoms of PTSD, as well as findings from examination of groups of veterans and soldiers involved in warfare and civilian victims of war have shown that in situations of threat, adults with a secure attachment are characterised by reduced severity of the symptoms of PTSD whereas those with an insecure attachment reveal elevated severity of the symptoms of PTSD (Woodhouse et al., 2015; Ferrajão & Oliveira, 2015; Barazzone et al., 2019).

Attachment style and post-traumatic growth

Traumatic events may result in the development of post-traumatic symptoms, anxiety and depression and at the same time lead to a positive transformation, referred to as post-traumatic growth (PTG) (Schubert et al., 2016). Post-traumatic growth is the experience of positive change that results from struggling with crises in life caused by the previously experienced trauma. It manifests itself in the form of increased respect for life, for interpersonal relationships, in the experience of personal power, in the discovery of new possibilities in life and in changes in life priorities. The attachment style being an important individual's disposition may be one of the predictors of post-traumatic growth (Tedeschi et al., 2018; Munroe & Ferrari, 2022). The results of the study indicated a negative correlation between PTG and the levels of anxious-avoidant and ambivalent styles, with a secure attachment style as a positive predictor of PTG

(Gleeson et al., 2021). The mediating role of attachment styles in the relation between PTSD and PTG is also indicated; the levels of insecure attachments are positively related to PTSD and negatively related to PTG (Ali et al., 2023).

RESEARCH METHODS AND TOOLS

At the outset of the empirical study on trauma and its consequences in civilian Ukrainian victims of the 2022 war, the following research questions were formulated:

1. Attachment styles among the Ukrainian citizens in the survey mediate relations between the severity of war-related threats they experience and their levels of PTSD and PTG?
2. Are there differences between Ukrainian citizens who remained in the country and Ukrainian refugees in terms of attachment styles, severity of threats, levels of PTSD and levels of PTG?

It was hypothesised that post-traumatic development among the Ukrainian participants depends on the severity of the threats experienced and the level of post-traumatic stress disorder (PTSD), and furthermore, that attachment styles act as mediators in these relationships, whilst at the same time being subject to change under the influence of PTSD.

Participants

The survey included ($n = 501$) subjects; women ($n = 350$) and men ($n = 107$) between the ages of 16 and 80 ($M = 24.12$; $SD = 12.79$). Characteristics of the study group are presented in table 1.

Table 1. Characteristics of the study group

		N	%
Country of residence	Ukraine UA	189	37.7%
	Poland PL	85	17.0%
	Germany DE	157	31.3%
	Slovakia SK	70	14.0%

Sex	Female	350	76.6%
	Male	107	23.4%
Marital status	Single	236	70.9%
	Married	69	20.7%
	De facto relationship	12	3.6%
	Divorced	11	3.3%
	Widowed	5	1.5%
Level of education	Primary	141	31.3%
	Unfinished secondary	93	20.6%
	Secondary	109	24.2%
	Unfinished higher	30	6.7%
	Higher	78	17.3%
Religion	Christianity	71	32.3%
	Orthodox	80	36.4%
	Agnosticism/atheism	63	28.6%
	Other	6	2.7%

The survey was conducted between November 2022 and March 2024. Respondents were recruited through institutions that assisted refugees from Ukraine and through the snowball method. The response rate obtained was 75%. In Ukraine, the survey was conducted online using the Forms platform.

Measures

The Attachment Style Questionnaire (ASQ), developed by Feeney et al. (1994), in the Polish adaptation by Marchwicki (2004), was used to study attachment styles. The questionnaire contains 24 items, which form three scales: secure, anxious-avoidant and anxious-ambivalent attachment. Responses are marked on a 7-point scale.

The PCL-5 questionnaire (PTSD Checklist for DSM-5, PCL-5), as developed by Weathers et al. (2013), in the Polish adaptation by Ogińska-Bulik et al. (2018), was used to measure PTSD in terms of the total score (factor) and four symptoms of PTSD. The total score is the sum of points from the respondent's answers on a 5-point scale, from all 20 items of the full PCL-5 scale.

The Psycho-Social and Psychic Defenses Questionnaire (PSPDQ1-R), developed by Senejko (2019). The PSPDQ1-R consists of 62 statements

about threats and psychological defences. The respondent provides answers on a 4-point scale. The PSPDQ1-R method diagnoses 18 categories of detailed defensive actions. In addition, it estimates 9 categories of threats from the respondent's life areas. These can be grouped into 3 categories of frustrated needs: connectedness, competence and autonomy.

The Post-Traumatic Growth Inventory (PTGI) by Tedeschi and Calhoun (1996), in the Polish adaptation by Ogińska-Bulik and Juczyński (2010), was used to identify positive changes in the psychosocial functioning of the respondent after having experienced the trauma. The method consists of 21 items to which the respondent answers using a 6-point scale. It measure four aspects of PTG: changes in self-perception, changes in relationships with others, greater appreciation for life and changes in the spiritual sphere.

RESEARCH RESULTS

Descriptive statistics and differences between the group of Ukrainian refugees and Ukrainians remaining in the country

Descriptive statistics were calculated for the variables estimated in the study, as presented in Table 2.

Table 2. Descriptive statistics

Variables	<i>R</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>Sk</i>	<i>Kurt</i>	<i>D</i>
secure style	1.86-7	4.43	1.00	4.43	-0.14	-0.55	0.06**
avoidant style	1.88-7	4.32	0.98	4.25	0.09	-0.40	0.05**
anxious-ambivalent style	1.00-7	4.11	1.13	4.07	-0.04	-0.53	0.05*
intensity of life-threatening threats	2.00-54	29.82	9.09	30.00	-0.03	-0.07	0.04
frustration of the need for relatedness	0.00-18	9.21	3.87	9.00	0.20	-0.40	0.08**
frustration of the need for competence	0.00-18	9.59	3.46	10.00	-0.14	-0.20	0.07**
frustration of the need for autonomy	0.00-18	10.98	3.58	11.00	-0.14	-0.48	0.07**
PTSD total score	0.00-80	38.53	17.57	41.00	-0.18	-0.65	0.07**
PTG total score	3.00-105	71.32	19.74	76.00	-0.88	0.26	0.10**

* $p < 0.05$; ** $p < 0.01$, $N=466$

Prior to the analysis, cases with deficiencies were removed, which reduced the number of respondents from $N = 501$ to $N = 466$.

In order to answer the question of whether the two groups of Ukrainian nationals (a. – those who remained in their homeland after the outbreak of the war in February 2022, and b. – those who emigrated to Germany, Poland and Slovakia) differed in terms of attachment styles, severity of threat, and levels of PTSD and PTG, an analysis of differences was conducted using the non-parametric Mann-Whitney U test (table 3).

Table 3. Significant differences between the group of Ukrainian refugees and Ukrainians remaining in the country with regard to the variables estimated in the survey (Mann-Whitney U test)

Variables	Refugees (n = 312)		Ukraine (n = 189)		U	P	rg
	<i>Mdn</i>	<i>Mrang</i>	<i>Mdn</i>	<i>Mrang</i>			
avoidant style	4.25	221.39	4.56	258.03	20247.00	0.006	0.16
anxious-ambivalent style	4.00	224.67	4.29	251.40	21267.50	0.044	0.11
intensity of threats to life	29.00	216.22	32.00	241.50	20280.50	0.049	0.11
frustration of the need for autonomy	11.00	216.03	12.00	257.13	19402.00	0.002	0.18
PCL total score	42.00	235.43	34.50	202.78	19092.50	0.012	0.15
negative changes in mood and cognition	15.00	238.12	13.00	211.79	20444.00	0.045	0.11
arousal and reactivity	12.00	236.88	10.00	209.94	20166.00	0.040	0.12
intrusion	10.00	244.46	7.50	200.21	18706.50	0.001	0.19
overall level of PTG	79.50	247.10	66.00	174.28	14816.50	<0.001	0.33
changes in self-perception	35.00	250.82	28.00	176.69	15204.00	<0.001	0.33
greater appreciation for life	12.00	241.09	11.00	203.07	19187.00	0.003	0.17
spiritual changes	6.00	241.57	5.00	197.87	18402.00	0.001	0.19

Denotations: $N=466$.

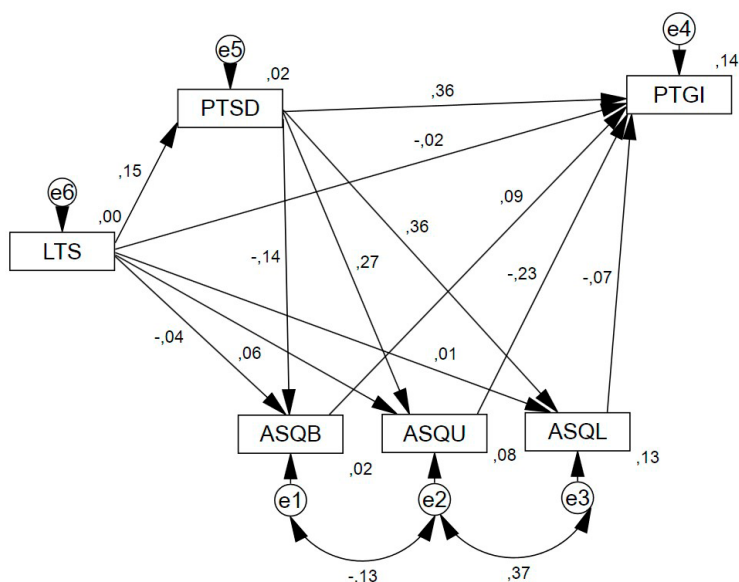
An analysis of the results indicates that refugees from Ukraine, as compared with Ukrainian nationals who remained in their homeland, revealed lower levels of insecure attachment styles (anxious-avoidant=4.25/4.56, anxious-ambivalent =4/4.29), lower levels of threat intensity ($NZ=29/32$) and frustration of the need for autonomy ($FA=11.00/12.00$), but higher levels of post-traumatic stress ($PTSD=42.00/34.00$) and in almost all scales (except the *Avoidance* scale) describing post-traumatic stress symptoms. At the same time, they were characterised by higher levels of overall post-traumatic growth

(PTGI=79.50/ 66.00) and they also showed greater growth changes in each of the domains examined: self-perception (35.00/28.00), relationships with others (26.00/22.00), appreciation for life (12/11), and spiritual changes (6.0/5.0).

The effect of threat severity on post-traumatic growth when considering the mediating effect of post-traumatic stress and attachment styles—a Model

Structural equation modelling (SEM) was conducted in order to determine the consistency of the theoretical model with empirical data. The effect of intensity of threats (PSPZ) on post-traumatic growth (PTGI) was analysed, taking into account the mediating effect of post-traumatic stress disorder (PTSD) and attachment styles (ASQ). The analysis was performed on N = 406 cases with no missing data. An algorithm based on the parametric maximum likelihood (ML) method was used to calculate and estimate coefficients using SPSS AMOS 26.0 because all variables showed slight deviations from the normal distribution and the critical statistic of the multivariate normal distribution did not exceed 2 ($CR = 1.44$). The predictors in the model explained 2.2% of the variable post-traumatic stress disorder (PTSD), 12.7% of the variable anxious-ambivalent attachment style (ASQL), 8.2% of the variable anxious-avoidant style (ASQU), 2.2% of the variable secure attachment style (ASQB), and 14.3% of the variable post-traumatic growth (PTG). The model was a good fit to the data: [$\chi^2/df = 1.93$; RMSEA = 0.048 (0.000-0.151); GFI = 0.998; AGFI = 0.966; TLI = 0.936; CFI = 0.996].

Figure 1. The effect of intensity of threats to life (LTS) on post-traumatic growth (PTGI) taking into account the mediating effect of post-traumatic stress (PCL) and attachment styles (ASQ)—a SEM model



Denotations: LTS—intensity of threats, PTSD—severity of post-traumatic stress disorder, PTGI—level of post-traumatic growth, ASQB—secure attachment style, ASQU—anxious-avoidant attachment style, ASQL—anxious-ambivalent attachment style

The coefficients obtained in the analysis indicated that intensity of threats was a positive predictor of the PCL total score (intensity of PTSD), which in turn positively affected the overall level of post-traumatic growth, which was not directly influenced by intensity of threats. Mediators in the form of secure, anxious-avoidant and anxious-ambivalent styles were also not explained directly by intensity of threats (path coefficients were statistically insignificant). The PTSD index was found to be a significant predictor of attachment styles, with an increase in the index resulting in a decrease in the intensity of the secure style and an increase in the intensity of the anxious-avoidant and anxious-ambivalent styles. Further, the anxious-avoidant style decreased post-traumatic growth while its associations with secure and anxious-ambivalent styles can be

considered negligible. Within the mediating effects, significant effects of intensity of threats on attachment styles can be identified, but the standardised coefficients are so weak that the result can basically be considered an artefact. The only indirect effect observed within the model whose significant coefficient is moderately large is the indirect effect of the overall PCL score (intensity of PTSD) on PTG. The intensity of post-traumatic stress directly contributes to a higher intensity of post-traumatic growth while the indirect effect is negative.

Since the SEM model enables obtaining significant effects even if they are very weak, in the next step an isolated model of mediation of a more conservative nature was calculated in order to explicitly confirm the mediating effect. The analysis followed the classic three-step approach proposed by Baron and Kenny (1986). The associations between post-traumatic stress disorder and post-traumatic growth ($\beta = 0.25$; $p < 0.001$) and the mediator in the form of anxious-avoidant style ($\beta = 0.28$; $p < 0.001$) were confirmed. The inclusion of the mediator in the analysis changed the original effect of the explanatory variable ($\beta = 0.33$; $p < 0.001$) (table 5), which indicates that a mediating effect occurred (figure 2). This is also confirmed by the result of Sobel Z-test ($Z = 3.82$, $p < 0.001$).

Table 4. Post-traumatic stress disorder (PTSD) as a predictor and avoidant style as a mediator versus post-traumatic growth (PTG)

	<i>B</i> (<i>SE</i>)	<i>B</i>
Constant	80.02 (4.33)	---**
PCL (PTSD)	0.37 (0.06)	0.33**
avoidant style	-5.44 (0.99)	-0.27**
<i>F</i>	29.85**	
<i>R</i> ²	0.126	

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

DISCUSSION

Experience of daily threats, levels of Post-Traumatic Stress Disorder (PTSD) and Post-traumatic growth by refugees and civilians remaining in war-torn Ukraine

Many refugees from Ukraine left their homeland shortly after Russia's onslaught. Those respondents who left the country were characterised by a lower intensity of insecure attachment styles as compared with compatriots remaining in Ukraine, which may have been one of the factors facilitating their decision to leave for the 'unknown'. Refugees received assistance from both the governments of the countries they reached and members of local communities (Karstoft et al., 2024). It is the support received that can be explained by the lower intensity of risks experienced in this group of respondents compared to compatriots who remained in their homeland. Refugees experienced less frustration related to the need for autonomy. This need is related to the ability to perceive oneself as a voluntary actor and master of one's own destiny (Landon et al., 2020), and is satisfied in an environment conducive to making and implementing independent decisions and choices (Ryan & Deci, 2002). Such conditions are not available to those who have remained in the war-torn country. Therefore, they are more likely than refugees to experience the daily threats associated with limited opportunities to satisfy basic needs. The results of the study indicate a slightly elevated level of post-traumatic stress disorder (PTSD) symptoms among Ukrainian citizens who remained in the country despite the ongoing war, and more significantly elevated level in refugees suggesting the presence of PTSD in this group. Based on the PCL scores, significantly higher levels of both total post-traumatic stress disorder (PTSD) and its individual components were found in the group of Ukrainian refugees surveyed compared to those still living in Ukraine, which can be explained in the context of resource conservation theory (Hobfoll, 2011). Similarly, elevated levels of PTSD were also diagnosed in civilians in various countries ravaged by war (Johnson et al., 2022; Karstoft et al., 2024). A considerable proportion of refugees experienced the tragic events (air raids by enemy planes, destruction of homes,

hiding in shelters, or loss of loved ones) that usually accompany warfare before leaving their country, in addition to the dangers of wandering 'into the unknown' and being separated from their loved ones and the environment in which their lives had been lived before (Karstoft et al., 2024). Anxiety about loved ones, husbands or fathers fighting on the frontline, fear for their own future, as well as for the provision of good living and development conditions for children in a foreign country contribute to increased stress (Długosz, Kryvachuk, & Izdebska-Długosz, 2022). Refugees may also experience feelings of guilt towards those who stayed in the homeland and, as a consequence, be unable to fully experience positive emotions themselves. Admittedly, civilian population that has remained in Ukraine is experiencing the dangers of war on a daily basis, but over time they are acquiring coping skills and even continuing with their previous activities. This allows them to 'disengage' from the reality of war. They also experience the supportive proximity of people important to them. Although, like refugees, they feel fear for their loved ones, they often have direct contact with them, which can provide them with a sense of empowerment to care for them.

In our study, refugees from Ukraine revealed higher levels of post-traumatic growth compared with compatriots remaining in their war-stricken homeland; both in terms of the overall score and, also, in all component dimensions, such as *changes in self-perception, changes in relating to others, greater appreciation for life, and spiritual changes*. These results are in line with Tedeschi and Calhoun's (2004) concept of post-traumatic growth conditions. Permanent residents of Ukraine regularly experience trauma, and thus their efforts, including cognitive activity, focus on securing survival conditions for themselves and their loved ones, rather than on the mental and emotional elaboration of the trauma. In contrast, once they are in safe conditions, refugees are more likely to use cognitive resources to understand and make sense of the traumatic experience, which forms the basis for the manifestation of post-traumatic growth. In addition to this, the social support received by Ukrainian refugees in their countries of destination, was a factor for refugees to support post-traumatic growth (Ning et al., 2023). Both refugees and nationals remaining in Ukraine experience trauma, but it has different facets due to the differences in the conditions they live in and the type and extent of support they receive.

Effect of the intensity of threats on post-traumatic growth with the mediating effect of Post-Traumatic Stress Disorder (PTSD) and attachment styles

Structural equation analysis allowed us to construct a model that provided a good fit to the results. Our hypothesis that the intensity of the threats experienced by Ukrainian civilians and related to the war situation was a direct source of the trauma they experienced was confirmed. Similar associations are indicated by the results of studies on both soldiers and civilians involved in military conflicts (El-Khodary & Samara, 2020). In a war situation, different types of threats are experienced, which linger over a long period of time if they are of high intensity, or if they pertain to important values, they can trigger symptoms such as constant 'revisiting' of the threats experienced, avoidance of circumstances associated with those threats, and a persistent sense of threat (considered to be the main symptoms of PTSD).

The results of our study did not confirm that attachment styles would mediate between the intensity of threats experienced by Ukrainian civilians and the level of PTSD they experienced in such a way that secure styles would weaken the association between the intensity of threats and the level of PTSD while insecure styles would enhance this association. Only a direct association between the intensity of threats and PTSD levels was observed. As in other studies (Solomon & Dekel, 2007), the intensity of post-traumatic stress syndrome was related to the level of post-traumatic growth among the Ukrainian civilians in our survey. Thus, it turns out that in order to for the process of post-traumatic growth to be triggered, it is necessary for an individual to experience a breakdown of the previous vision of life and image of the surrounding world. The experience of war trauma can thus become an opportunity for positive changes in interpersonal relationships, self-perception and life philosophy provided that appropriate coping strategies are employed (Tedeschi & Calhoun, 1996, 2004). Therefore, it can be assumed that post-traumatic growth took place in those Ukrainian nationals in the survey who, having experienced negative events directly or indirectly related to the war, conducted a cognitive reflection on these events, which enabled them to modify their

previous value system, world image, self-image, and relationships with others (Tedeschi & Calhoun, 1996, 2004; Joseph & Williams, 2005; Ogińska-Bulik, 2012). Our predictions regarding the role of attachment styles playing a mediating role between PTSD among Ukrainian nationals after the outbreak of war and the PTG experienced by them were only confirmed to a small extent. It was only the anxious-avoidant style that mediated by weakening the association between the trauma experienced and the post-traumatic growth. A similar association was indicated by the results of another study (Ali et al., 2023). The other attachment styles were not significant as mediating variables. The anxious-avoidant style makes it more difficult to 'grapple with trauma' (Helgeson & Lopez, 2010) because by avoiding close relationships and relying solely on themselves as well as by denying dangers a person with this attachment style prevents the cognitive and emotional working through of their fears, which is a necessary condition for post-traumatic growth (Tedeschi & Calhoun, 2004; Munroe & Ferrari, 2022). Our study also revealed an interesting association between the level of PTSD and the level of attachment styles. The intensity of PTSD proved to be a significant predictor of attachment styles, with an increase in PTSD resulting in a decrease in the level of the secure style and an increase in the level of avoidant and anxious styles. Similar findings have been reported in studies of prisoners of war (Horesh et al., 2014). The possibility that attachment styles may be modified as a result of life experiences was already suggested by Bowlby (1980) and was confirmed in subsequent studies (e.g. Waters et al., 2000). Changes in attachment styles result from experiencing stressful events because they disrupt the socio-emotional sphere of people's lives, and consequently the quality of relationships with loved ones (Diehl et al., 1998). Moreover, traumatic events and post-traumatic reactions cause changes in people's resources and resilience and thus may reduce their level of secure attachment. They cope with the danger by avoiding threatening situations and relying solely on themselves.

CONCLUSIONS

The results of the study provide a basis for the conclusion that Ukrainian civilians who remained in their place of residence experience the threats related to their circumstances to a greater extent compared with refugees after the Russian invasion in 2022. Trauma is an inevitable consequence of armed conflict, hence both groups of Ukrainian nationals in the survey experienced elevated levels of post-traumatic stress syndrome, but the refugee group was characterised by both higher levels of post-traumatic stress syndrome and higher levels of post-traumatic growth as compared with civilians who remained in their homeland. Thus, refugees often require specialised therapeutic help in coping with PTSD in addition to the assistance they receive in adapting to life abroad.

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