

Do relationships with parents determine citizens' reactions to war trauma?

BACKGROUND

The article concerns the psychology of trauma: the intensity of the experienced threats and reactions to the trauma in the form of post-traumatic stress disorder (PTSD), defenses and post-traumatic growth (PTG) in Ukrainian immigrants in Poland. The issues of trauma psychology were studied in connection with the relationships with parents.

PARTICIPANTS AND PROCEDURE

The methods used mainly concerned the specifics of experiencing strong threats (trauma) and responding to them (PCL-5 questionnaire, Psycho-Social and Psychic Defenses Questionnaire, Post-Traumatic Growth Inventory), determination of closeness to parents (Scale of Closeness to Biological Parents) and secure and non-secure attachment style (Attachment Style Questionnaire). The subjects were 178 people (including 147 women and 31 men), citizens of Ukraine, who arrived in Poland after the outbreak of war on February 24, 2022, and at the time of the study were living in and around Krakow, Wroclaw, Lublin, or Warsaw. The mean age of the subjects was 38 years ($SD = 12.57$).

RESULTS

The results of the study indicate that non-secure attachment styles (anxious-avoidant and anxious-ambivalent),

along with frustration of the need for competence and intensity of threats, are predictors of PTSD and non-constructive defenses. In contrast, a secure attachment style, along with frustration of the need for competence and intensity of threats, is a predictor of constructive defenses, while a secure attachment style is a predictor of PTG. Statistical analyses show that closeness to the mother is not significantly associated with any of the explained variables.

CONCLUSIONS

The accumulation of risks associated with war trauma and the necessity to cope with them are strongly associated with the ongoing war. Attachment styles support or hinder the process of adaptation. The absence of closeness to the mother among the predictors in the models tested represents the most intriguing result, to be confirmed in further research.

KEY WORDS

PTSD; PTG; Ukrainian immigrants; threat intensity

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TO CITE THIS ARTICLE – Senejko, A., Gurba, E., Oleś, P., Marek, M., Franc, T., & Gurba, K. (2024). Do relationships with parents determine citizens' reactions to war trauma? *Health Psychology Report*. <https://doi.org/10.5114/hpr/182931>

RECEIVED 14.11.2023 · REVIEWED 11.12.2023 · ACCEPTED 22.01.2024 · ONLINE PUBLICATION 29.02.2024



BACKGROUND

Modern science, especially psychology and sociology, is increasingly addressing “urgent” problems that require rapid diagnosis and problem- and context-appropriate intervention (Ben-Ezra et al., 2023; Ioffe et al., 2022; Kang et al., 2023; Kaniasty et al., 2023). These include, in particular, the issue of trauma, i.e., taking into research consideration factors related to an individual’s experience of life-threatening events (see DSM-5; APA, 2013), and/or an individual’s psychosocial integration (see ICD-11; Gałecki, 2022). Current trauma research also takes into account not only subjective factors but also the wider context (Betancourt & Williams, 2008; Ioffe et al., 2022).

Our article is in line with the trend indicated above. In it, we present a sample of the results of research conducted with Ukrainian immigrants who left Ukraine after February 24, 2022 and are currently residing in Poland (the research was carried out under a grant¹). The aim of the research is to assess the relevance of selected family determinants for the way Ukrainian immigrants residing in Poland respond to threats related to the ongoing war in Ukraine.

The specificity of respondents’ reactions to these threats was estimated through several factors (post-traumatic stress disorder [PTSD], post-traumatic growth [PTG], and constructive and non-constructive defensive actions).

REACTIONS TO THREATS ASSOCIATED WITH WAR TRAUMA

In the context of reactions to war trauma, the most commonly described is PTSD (Ben-Ezra et al., 2023; Chrzan-Dętkoś et al., 2022; Goodwin et al., 2023; Kang et al., 2023), which is diagnosed on the basis of 3 main symptoms. These are intrusion, avoidance and anxiety (sense of threat) (Gałecki, 2022; Hara-vuori et al., 2016; Koenen et al., 2017).

PTSD, occurring after experiencing extreme trauma related to warfare, is generally analyzed together with the determination of the trauma itself, which is the initial trigger of the syndrome (criterion A in the PTSD classification; APA, 2013). Trauma associated with threats linked directly and/or indirectly to the ongoing war can involve various forms of suffering. It can result from direct, active participation in combat or being in a combat zone and severe life- or health-threatening trauma (Betancourt & Williams, 2008; Chrzan-Dętkoś et al., 2022; Rizkalla & Segal, 2018). The trauma of war can also include threats to psycho-physical integrity (lack of food, medicine, economic poverty, fire/demolition of homes, constant fear for loved ones left behind in the area of military operations) (Ben-Ezra et al., 2023; Goodwin et al., 2023; Kang et al., 2023). One may also expe-

rience suffering during wartime as a result of empathically accompanying the suffering of others or witnessing someone’s suffering by virtue of one’s profession. The common feature of these experiences is their centrality, that is, their current importance to the subject, linked to the degree of frustration of the sufferer’s most important needs (Catani et al., 2023; Huțul et al., 2023; Ryan & Deci, 2000; Senejko, 2019).

Individuals’ health during wartime and susceptibility to PTSD can also be affected by so-called daily stressors, referring to the challenges of daily life, stressful events such as unemployment, temporary housing, health problems, and learning problems (Catani et al., 2023; Huțul et al., 2023; Spence et al., 2019). The results of research on the current war in Ukraine involving both civilian victims from Ukraine and Romanians from areas bordering Ukraine confirm the validity of this perspective (Huțul et al., 2023). Negative changes in the area of mental health, including PTSD, have also been reported by researchers among civilians in the countries neighboring the war, especially in border areas (Kaniasty et al., 2023).

Therefore, in our study, we included a factor of intensity of threats, concerning threats not directly related to the ongoing war, but strictly resulting from it, such as serious difficulties in finding shelter or work, separation from loved ones and fear for their safety and serious material problems, etc.

Importantly, the reduction of PTSD symptoms among a country’s civilian population and arriving migrants is influenced by such subject-social factors as socioeconomic status, sense of self-efficacy, confidence in rulers, and personal and national resilience (Goodwin et al., 2023; Kaniasty et al., 2023; Levin et al., 2023; Turrini et al., 2019). Results of research with civilian victims of war show that the vast majority of respondents demonstrate such resilience (Bonanno, 2021). According to research, a task-oriented coping style is more adaptive and more rational than one based on emotion regulation and absorption of fear response (Lazarus & Folkman, 1984; Senejko, 2019). Our study also considered two relatively distinct, but complementary and most commonly co-occurring, types of responses to threats: constructive, rational, task-oriented defenses that support developmental processes under threat and trauma; and non-constructive, emotion-regulation oriented defenses with no direct beneficial effect on developmental processes, although capable of supporting adaptive processes (Senejko, 2019).

Constructive defenses can therefore facilitate positive changes under the influence of trauma, referred to as post-traumatic growth (PTG). PTG is an example of flexible cognitive and emotional self-regulation, involving processes of positive interpretation and discovery of meaning in the traumatic

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events experienced and, as a result, positive change in the sphere of social contacts, self-image and sense of personal power, beliefs about oneself, spiritual experiences and in appreciation of life as a value (Tedeschi & Calhoun, 1996). PTG involves coping strategies used by the individual to not only recover from the traumatic experience but also to use it for personal growth (Tedeschi & Calhoun, 1996). The results of studies on the measurement of PTG among civilian victims of war (Laufer & Solomon, 2006), as in other study groups, are inconclusive (Bechara et al., 2021; Hobfoll et al., 2007; Jayawickreme & Blackie, 2014; Joseph et al., 2004; Solomon & Dekel, 2007; Taheri et al., 2023). They result, perhaps, from the fact that this factor was diagnosed in different periods: during or after the war, in other words: whether we are dealing with PTG as a result of positive changes or an ongoing process of their course. In our research, in connection with the ongoing war in Ukraine, we evaluate PTG as a process, not a result, and therefore we predict possible changes in this process.

This variety of opinions on the determinants of PTG and the diversity of research findings, including those with civilian victims of war, terrorist attacks, and other violent incidents, prompted us to also consider such a factor as PTG in our research with Ukrainian immigrants.

ATTACHMENT STYLES AND CLOSENESS TO PARENTS AND THE EXPERIENCE OF WAR TRAUMA

Research on the relationship between the quality of family functioning and psychological trauma associated with the experience of trauma is relatively scarce, but the limited results point to the importance of family characteristics for how one copes with stress (Alderfer et al., 2009; Birmes et al., 2009).

The quality of family relationships is determined, among other factors, by attachment styles (Barazzone et al., 2019) and the closeness to parents experienced by children. It is these family characteristics that we considered in the study presented here. The sense of closeness to parents can serve as a source of both real and imagined support for children in difficult situations, and attachment styles make it possible to explain the mechanisms of experiencing and coping with trauma (De Zulueta, 2006; Mikulincer et al., 2006) and PTG (Salo et al., 2005). Therefore, in our explorations of the determinants of war trauma experienced by refugees from Ukraine, we examined their attachment styles. Attachment determines how people seek an external or internalized attachment object to protect themselves and reduce the damage associated with the traumatic experience. Consequently, it can be hypothesized that differences in attachment styles affect the severity of post-traumatic

stress (PTS) experienced, the way it is expressed and the coping strategies used (Mikulincer et al., 2006).

Relationships between the child and the object of attachment described on two dimensions – anxiety and the need for closeness – made it possible to distinguish three main attachment styles: secure and two non-secure (anxiety-avoidant and anxiety-ambivalent) and later, a disorganized style (Ainsworth, 1973; Main & Solomon, 1990). These early patterns, established within so-called operational models, influence the ability to regulate emotions (Bowlby, 1980), for example during the experience of post-traumatic stress (De Zulueta, 2006; Mikulincer et al., 2006), and condition the ways in which people cope with experiencing threats (Bartholomew & Horowitz, 1991).

Individuals with a secure attachment style deal constructively with threats and distress, and turn to others for emotional and instrumental support when needed (Mikulincer & Shaver, 2016). Non-secure attachment most often reveals itself in the form of an anxiety-ambivalent and anxiety-avoidant style. Non-securely attached adults experience limited support from others. Consequently, when faced with stressful events, adults with a preoccupied/ambivalent style tend to overreact to their negative experiences and feelings in order to gain support from others, while those with an avoidant style tend to distance themselves from others and from emotional situations.

A meta-analysis of studies on the relationship between attachment styles and PTS symptoms showed (Woodhouse et al., 2015) that in threatening situations, adults with secure attachment are characterized by reduced PTS symptom severity, while those with non-secure attachment reveal raised PTS symptom severity. Similar patterns emerged from a meta-analysis of results from 21 studies (Barazzone et al., 2019) on the relationship between attachment styles and PTSD severity among prisoners and veterans. Also in the case of civilian victims of war, secure attachment mitigated the psychological detrimental effects of various traumatic events, such as missiles attacks (Mikulincer et al., 1993) and wartime captivity (Dieperink et al., 2001), while non-secure attachment increased the vulnerability of civilians directly exposed to prolonged terrorist attacks in southern Israel (Besser & Neria, 2010). Similarly, in a group of witnesses to the 9/11 World Trade Center attacks, it was found that securely attached individuals reported the fewest PTS symptoms, while those with preoccupied/ambivalent attachment revealed the highest levels of PTS (Fralely et al., 2006).

Attachment styles have also been linked to positive change after experiencing traumatic experiences involving exposure to direct or indirect threats to health, life, or a sense of security.

Compared to the previously analyzed relationships between attachment styles and PTS, the asso-

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ciations of attachment styles with PTG are much less frequently tested, and the results of these studies are inconclusive, especially with regard to non-secure attachment styles (Romeo et al., 2019). At the same time, several studies included in the aforementioned meta-analysis reported a significant positive correlation between secure attachment style and PTG (Gleeson et al., 2021).

Many studies have documented a positive relationship between closeness in parent-child relationships and the well-being of children in various difficult situations (Booth et al., 2010; Luthar et al., 2015). They show, for example, that children who revealed negative stress symptoms (increased aggression, anxiety and depression) during the Israeli-Palestinian war came from families with abnormal parental relationships (Punamäki et al., 2017). In contrast, better mental health of young refugees, as well as the mental health of their parents, was associated with family cohesion and receiving support from the family (Rousseau et al., 2004).

Perceived social support is a basic interpersonal resource that is associated with psychological well-being in stressful situations (Norris & Kaniasty, 1996) and is considered a protective factor for people who have experienced some kind of disaster (Norris et al., 2002) or terrorist attack (e.g., Hobfoll et al., 2007). Individuals who experience supportive social relationships are characterized by high resilience in the face of life-threatening conditions (e.g., Norris & Kaniasty, 1996; Shalev et al., 2006). Support resulting from proximity to parents and children may serve a protective function by promoting adaptive behavior or inducing appropriate neuroendocrine responses in the face of stress (Luthar et al., 2000; Masten, 2014).

RESEARCH HYPOTHESES

Through our research, we wanted to test the extent to which factors such as the type of attachment (secure/non-secure) and proximity/non-proximity to father and mother, as well as the severity of threats and war trauma, determine the specificity of response to threats related to the war taking place in Ukraine. Taking into account the analyses presented and the variables we took into account, some basic hypotheses verified in our research were formulated.

H1. Non-security attachment and lack of closeness to father and mother are predictors of non-constructive defensive actions and PTSD.

H2. Secure attachment and closeness to father and mother are predictors of constructive defense activities and PTG.

H3. PTSD is positively associated with intensity of threats, and the frustration of three groups of needs: connectedness, competence and autonomy.

PARTICIPANTS AND PROCEDURE

PARTICIPANTS

The study included 178 subjects (147 women and 31 men), Ukrainian citizens who arrived in Poland after the outbreak of the war on February 24, 2022, and were living in and around Krakow, Wroclaw, Lublin or Warsaw at the time of the study. Three people returned incomplete tests and their responses were not included in the analyses. Mean age of the subjects was 38 years ($SD = 12.57$).

Marital status: 87 people (48.9%) were married, 13 people (7.3%) were in an informal relationship, 13 (7.3%) were divorced, 4 women (2.2%) were widows, 38 people (21.3%) were single; 23 (12.9%) did not indicate marital status.

Education: 92 people (51%) had higher education, followed by 42 people (23.6%) with secondary education and 37 people (20.8%) with primary education; in the case of 7 people (3.9%) information on education was missing.

Religion: Orthodoxy 58 (32%), Christianity 33 (20%), 21 (12%) respondents indicated that they were atheists or agnostics, and others did not provide an answer to the question about religion.

PROCEDURE

The research was conducted between November 2022 and May 2023. Respondents were recruited through institutions that assisted refugees from Ukraine and through the snowball method. The response rate obtained was 75%.

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 attachment, Anxiety-avoidant attachment, Anxiety-ambivalent attachment. Responses are marked on a 7-point scale. The score on each scale is the sum of the scores of all items on that scale. The higher the score, the greater the severity of a particular attachment style. Regarding reliability of the scales, Cronbach's α values in the present study were: Secure attachment $\alpha = .73$; Anxiety-avoidant attachment $\alpha = .76$; Anxiety-ambivalent attachment $\alpha = .73$.

The Scale of Closeness to Biological Parents (SCBP), developed by Regnerus (2012), in the Polish adaptation by Gurba and Czyżowska (2016), was used to determine the intensity of the sense of closeness to parents. The scale consists of 6 items describing in-

teractions with the mother and father. Respondents rate their current relationships with their mother and father separately by providing the frequency of six parent-child interactions. The 5-point response scale ranges from 1 (*never*) to 5 (*always*). Cronbach's α values in the present study were: for the Proximity to Mother scale $\alpha = .89$; and for the Proximity to Father scale $\alpha = .91$.

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: intrusiveness, avoidance, symptoms of increased arousal and reactivity, and negative changes in the cognitive and/or emotional sphere. The total score is the sum of points from the respondent's answers on a 5-point scale from 0 to 4, from all 20 items of the full PCL-5 scale. In our study, Cronbach's α for the PCL-5 was .95.

The *Psycho-Social and Psychic Defenses Questionnaire* (PSPDQ1-R), developed by Senejko (2019). The PSPDQ1-R consists of 62 statements about threats and psychological defenses. The respondent provides answers on a 4-point scale, from 0 to 3. The PSPDQ1-R method diagnoses 18 categories of detailed defensive actions, grouped into 2 main categories: constructive defenses (task-oriented) and non-constructive defenses (oriented to regulate emotions). 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. In our research, we use this tool to estimate the following factors: intensity of threats, frustration of the need for connectedness; frustration of the need for competence; frustration of the need for autonomy, constructive defenses, non-constructive defenses.

In our study, Cronbach's α for intensity of threats = .85; for non-constructive defenses $\alpha = .85$; for constructive defenses $\alpha = .70$; for frustration of the need for connectedness $\alpha = .77$; for frustration of the need for competence $\alpha = .65$; for frustration of the need for autonomy $\alpha = .72$.

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 the experienced trauma. The method consists of 21 items to which the respondent answers using a 6-point scale from 0 to 5. PTG is measured in the Polish adaptation of this method based on the score of the overall index and 4 aspects of PTG (rather than 5 as in the original version): changes in self-perception, changes in relationships with others, greater appreciation of life and changes in the spiritual sphere. In our study Cronbach's $\alpha = .91$.

RESULTS

Whole-group averages for intensity of threats and PTSD were at a moderate level, although standard deviations showed relatively high variation within the refugee group (Table 1).

A simple correlation analysis between attachment styles and intensity of threats, constructive and non-constructive defenses, and PTSD revealed two distinct patterns of association. Non-constructive defenses, intensity of threats, and PTSD correlated positively with anxious-avoidant attachment style and anxious-ambivalent attachment style, while constructive defenses correlated positively with secure attachment style (Table 2).

All the correlations were moderate, and they showed that constructive defenses are related to secure attachment style – as we postulated – while non-constructive defenses are related to insecure styles. Furthermore, there was a low negative correlation between secure attachment and PTSD. Interestingly enough, non-constructive defenses correlated negatively with closeness to the father. This relationship, although very weak, may indicate that a weak (or lack of) emotional bond with the father may contribute to the use of non-constructive defenses. But also, the greater the closeness to the father, the lower the share of non-constructive defenses, focused on regulating emotions and not on tasks, in the behavioral profile of the respondents. In contrast, the bond with the mother was not of importance here. Moreover, closeness to mother and closeness to father did not correlate with attachment styles; nor did closeness to parents correlate with PTSD intensity. In contrast, PTSD intensity correlated with the intensity of threats and the frustration of the need for competence and connectedness, but not autonomy.

When we explained PTSD in the regression analysis model based on the variables attachment styles, closeness to father, closeness to mother, and intensity of threats, only three variables were found to be significant in the regression equation: anxious-ambivalent attachment style, anxious-avoidant attachment and intensity of threats, explaining a total of 23% of the variance of PTSD (Table 3).

If, on the other hand, among the explanatory variables, the intensity of threats was replaced by indicators of frustration of the needs for connectedness, autonomy, and competence, both insecurity styles and frustration of the need for competence explained a total of nearly 30% of the variance of PTSD.

The degree of explaining non-constructive defenses reached at least 30% and their predictors were anxious-avoidant attachment and closeness to the father (negative beta) and the intensity of threats or frustration of the need for competence. Meanwhile, the degree of explanation of constructive defenses

Table 1

Means and standard deviations for all variables

Variables	Sec	Anx-Av	Anx-A	Clos m	Clos f	Rel-f	Com-f	Aut-f	ConD	N-CD	IThr	PTSD	PTG
<i>M</i>	35.40	36.74	32.02	21.35	18.14	9.42	10.29	10.60	24.00	32.65	30.10	37.46	70.33
<i>SD</i>	7.82	8.21	8.43	6.47	7.47	4.62	4.01	4.09	6.45	11.45	10.53	18.66	18.34
<i>N of items</i>	8	8	8	6	6	6	6	6	14	22	18	20	21
<i>Scale range</i>	1-7	1-7	1-7	1-5	1-5	0-3	0-3	0-3	0-3	0-3	0-3	0-4	0-5
<i>Cronbach's α</i>	.73	.76	.73	.89	.91	.77	.65	.72	.70	.85	.85	.95	.91

Note. Sec – secure attachment; Anx-Av – anxiety-avoidant attachment; Anx-A – anxiety-ambivalent attachment; Clos m – closeness to mother; Clos f – closeness to father; Rel-f – relatedness – frustration; Com-f – competence – frustration; Aut-f – autonomy – frustration; ConD – constructive defenses; N-CD – non-constructive defenses; IThr – intensity of threats; PTSD – post-traumatic stress disorder; PTG – post-traumatic growth.

was found to be low (12% to 13%); their predictors were secure attachment and intensity of threats or frustration of the need for competence.

Predictors of posttraumatic growth were secure attachment, regardless of the set of explanatory variables, whether they were attachment styles, closeness to mother or father, and intensity of threats or frustration of needs (15% of variance).

DISCUSSION

For civilian victims of the war in Ukraine, the accumulation of risks associated with the direct effects of war, the radical change in living conditions, and the need to face new challenges in adapting to life in a foreign country can be sources of severe stress. Symptoms of PTSD were observed in more than three quarters of Ukrainian refugees residing in Poland (Długosz et al., 2022). Adaptation to war and refugee conditions is likely to be determined by skills and adequate judgment. Our study aimed to investigate whether and to what extent relationships with parents determine citizens' reactions to war trauma.

As we postulated (H1, H2), on a very general level and according to simple correlations, the use of non-constructive defenses and PTSD were associated with insecure attachment styles while the use of constructive defenses and PTG were associated with a secure attachment style. Such results are consistent with previous findings indicating that secure attachment styles reduce PTSD symptoms, whereas non-secure styles increase PTSD symptoms (Barazzone et al., 2019; Woodhouse et al., 2015).

However, when we looked at the details, our results were not entirely consistent with the hypotheses. Why is this the case? We start with a few psychometric remarks and then we will discuss our results from the point of view of the relationships between attachment styles and relationships with parents and reactions to war trauma. We have examined both potential and current disorder triggers (intensity of threats, non-constructive defenses, PTSD) and adaptive coping with war trauma (constructive defenses, PTG). Let us note at the beginning that non-constructive defenses and PTSD had at least 20% of common variance, and almost the same correlates among all other variables (Table 2). The mutual relationship between constructive defenses and PTG was weaker, with not more than 10% of common variance, and both patterns of correlates (of constructive defenses and PTG) were also not so similar to each other.

According to hypothesis three, the intensity of PTSD correlated with the intensity of threats and the frustration of the need for competence and related-

Table 2

Correlations between all variables (Pearson's *r* – missing data filled with means, *N* = 178)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Sec	1	-.36***	-.14	.08	.13	-.06	-.07	.10	.27***	-.18*	-.01	-.16*	.36***
2. Anx-Av	-.36***	1	.43***	-.11	0	.18*	.29**	.11	.04	.30***	.22**	.34***	-.01
3. Anx-A	-.14	.43***	1	.02	-.01	.25***	.29***	.06	.06	.40***	.24***	.38***	.06
4. Clos m	.08	-.11	.02	1	.39***	-.01	.02	.10	.12	.04	.04	.01	.09
5. Clos f	.13	0	-.01	.39***	1	-.08	.02	.09	-.06	-.16*	.01	0	.16*
6. Rel-f	-.06	.18*	.25***	-.01	-.08	1	.49***	.55***	.21**	.38***	.84***	.21**	-.03
7. Com-f	-.07	.29***	.29***	.02	.02	.49***	1	.55***	.21**	.51***	.81***	.47***	-.02
8. Aut-f	.10	.11	.06	.10	.09	.55***	.55***	1	.21**	.23**	.84***	.20**	.08
9. ConD	.27***	.27***	.04	.12	-.06	.21**	.21**	.21**	1	.41***	.25***	.15*	.31***
10. N-CD	-.18*	.30***	.40***	.04	-.16*	.38***	.51***	.23**	.41***	1	.45***	.46***	-.06
11. IThr	-.01	.22**	.24***	.04	.01	.84***	.81***	.84	.25***	.45***	1	.35***	.01
12. PTSD	-.16*	.34***	.38***	.01	0	.21**	.47**	.20**	.15*	.46***	.35***	1	.05
13. PTG	.36***	-.02	.06	.09	.16*	.03	-.02	.08	.31***	-.06	.01	0.05	1

Note. Sec – secure attachment; Anx-Av – anxiety-avoidant attachment; Anx-A – anxiety-ambivalent attachment; Clos m – closeness to mother; Clos f – closeness to father; Rel-f – relatedness – frustration; Com-f – competence – frustration; Aut-f – autonomy – frustration; ConD – constructive defenses; N-CD – non-constructive defenses; IThr – intensity of threats; PTSD – post-traumatic stress disorder; PTG – post-traumatic growth. **p* < .05, ***p* < .01, ****p* < .001.

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ness, but not autonomy (which was no longer consistent with this hypothesis). In all regression analyses – except for those on PTG – a common factor was the intensity of threats or one component of it, the frustration of the need for competence.

An even more interesting result is that one predictor of both constructive and non-constructive defenses was the frustration of the need for competence. Note that frustrations of all three needs – relatedness, competency, and autonomy – were quite strongly cor-

Table 3

Predictors of PTSD, non-constructive and constructive defenses, and PTG – regression analyses: all variables

Dependent variable and predictors	β	<i>t</i>	<i>p</i>	VIF
1. PTSD: $R^2 = .23$, $F(3, 174) = 18.09$, $p < .001$				
Anxious-ambivalent attachment	.24	3.29	.001	1.25
Anxious-avoidant attachment	.18	2.40	.018	1.25
Intensity of threats	.25	3.57	< .001	1.09
Secure attachment	-.07	-0.91	.363	1.16
Closeness to mother	.02	0.31	.756	1.03
Closeness to father	-.02	-0.27	.787	1.00
2. PTSD: $R^2 = .29$, $F(3, 174) = 25.04$, $p < .001$				
Anxious-ambivalent attachment	.21	2.97	.003	1.27
Anxious-avoidant attachment	.14	1.98	.049	1.13
Need for competence frustration	.37	5.46	< .001	1.27
Secure attachment	-.06	-0.86	.393	1.15
Closeness to mother	.02	0.28	.778	1.02
Closeness to father	-.01	-0.19	.849	1.00
Need for relatedness frustration	-.07	-0.95	.341	1.34
Need for autonomy frustration	-.05	-0.61	.542	1.45
3. Non-constructive defenses: $R^2 = .30$, $F(3, 174) = 26.53$, $p < .001$				
Anxious-ambivalent attachment	.31	4.73	< .001	1.06
Closeness to father	-.15	2.41	.017	1.06
Intensity of threats	.38	5.89	< .001	1.00
Secure attachment	-.11	-1.74	.083	1.05
Anxious-avoidant attachment	.11	1.52	.129	1.25
Closeness to mother	.01	1.43	.154	1.20
4. Non-constructive defenses: $R^2 = .34$, $F(3, 174) = 31.79$, $p < .001$				
Anxious-ambivalent attachment	.27	4.25	< .001	1.09
Closeness to father	-.16	2.57	.011	1.09
Need for competence frustration	.44	6.91	< .001	1.00
Secure attachment	-.09	-1.42	.159	1.05
Anxious-avoidant attachment	.08	1.14	.256	1.27
Closeness to mother	.11	1.62	.106	1.20
Need for relatedness frustration	.12	1.63	.104	1.35
Need for autonomy frustration	-.01	-0.13	.883	1.46

(Table 3 continues)

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Table 3*(Table 3 continued)*

Dependent variable and predictors	β	<i>t</i>	<i>p</i>	VIF		
5. Constructive defenses: $R^2 = .13$, $F(2, 175) = 14.12$, $p < .001$						
Secure attachment	.28	3.92	< .001	1.00		
Intensity of threats	.26	3.63	< .001	1.00		
Anxious-ambivalent attachment	.04	0.57	.570	1.10		
Anxious-avoidant attachment	.10	1.28	.202	1.22	<i>Relationships with parents and war trauma</i>	
Closeness to mother	.07	1.04	.302	1.02		
Closeness to father	-.09	-1.20	.233	1.03		
6. Constructive defenses: $R^2 = .12$, $F(2, 175) = 12.84$, $p < .001$						
Secure attachment	.29	4.08	< .001	1.00		
Need for competence frustration	.23	3.29	.001	1.00		
Anxious-ambivalent attachment	.04	0.51	.609	1.25		
Anxious-avoidant attachment	.10	1.23	.219	1.11		
Closeness to mother	.08	1.07	.284	1.02		
Closeness to father	-.09	-1.25	.212	1.03		
Need for relatedness frustration	.14	1.78	.078	1.32		
Need for autonomy frustration	.07	0.85	.397	1.47		
7. PTG: $R^2 = .12$, $F(1, 176) = 25.30$, $p < .001$						
Secure attachment	.36	4.87	< .001	1.00		
Anxious-ambivalent attachment	.11	1.58	.115	1.02		
Anxious-avoidant attachment	.13	1.67	.096	1.15		
Closeness to mother	.06	0.79	.431	1.02		
Closeness to father	.13	1.89	.061	1.03		
Intensity of threats	.01	0.20	.840	1.00		
8. PTG: $R^2 = .12$, $F(1, 176) = 25.30$, $p < .05$						
Secure attachment	.36	4.87	< .001	1.00		
Anxious-ambivalent attachment	.11	1.58	.115	1.02		
Anxious-avoidant attachment	.13	1.67	.096	1.15		
Closeness to mother	.06	0.79	.431	1.02		
Closeness to father	.13	1.89	.061	1.03		
Need for relatedness frustration	-.01	-0.09	.930	1.00		
Need for competence frustration	0	0.06	.950	1.00		
Need for autonomy frustration	.04	0.56	.574	1.01		

Note. PTSD – post-traumatic stress disorder; PTG – post-traumatic growth; VIF – variance inflation factor. Statistically significant variables are marked in **bold**.

related (24% to 30% of common variance); hence the need whose frustration was most strongly related to PTSD – the need for competence – appeared in the regression equation ($r = .47$, $p < .001$). But why exactly this need? Recall that the subjects were mainly

women; the frustration of the need for relatedness probably related to contact with relatives (husband, partner) who stayed in the country and with the social environment; nevertheless, this need may have been partially satisfied in the relationship with the children.

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The frustration of the need for autonomy may have been related to the dependence on the assistance refugees received and the limited scope for deciding for themselves in a refugee situation. The frustration of the need for competence, on the other hand, was probably related to the limited possibility of using one's competencies and skills in a foreign country and/or with the need to adapt to a new environment with its new challenges (organize life in a new place; apartment, work, kindergarten/school for children, etc.), which could be associated with a sense of threat and doubts whether they will cope with these challenges, during the early period of adaptation.

The importance of the need for competence in predicting PTSD and both kinds of defenses can be interpreted using the cognitive theory of learned helplessness (Sędek & Kořta, 1991). Cognitive efforts invested in understanding a situation that is objectively out of one's control and under severe threat could be associated with frustration with the need for competence (which, if prolonged, could lead to learned helplessness). In contrast, the fact that frustration of the need for competence is a predictor of both non-constructive and constructive defenses, and both kinds of defenses were mutually related ($r = .41, p < .001$), may imply defensive mobilization under threat, but also coping plasticity through the use of a variety of strategies under threat (Parkes, 1986).

Another challenging result was that closeness to the mother was not a predictor in any one regressive model. Only closeness to father was (a weak) predictor of non-constructive defenses (negative beta). Such results show that a weak (or absent) emotional bond with the father contributes to the use of non-constructive defenses, while an existing bond with him stimulates adaptive change after trauma. The participants were women, and current separation from their husbands and fathers who have remained in the country may – under stressful conditions – recall the bond with the father from the past, which may have an adaptive effect.

A similar or analogous result, demonstrating the importance of the father figure for the mental health of the (in this case) child, was obtained in extensive research on flood trauma. In a study of children's vulnerability to PTSD in a flood situation, the deciding factor was whether or not emotional disturbance due to severe stress was present in the father, while its presence or absence in the mother was irrelevant (Strelau, 2004). Simply put, if the father was healthy, so was the child. The father's lack of PTSD may have been a guarantee of the children's sense of security, and modeling by the father may also have been relevant. Here it could be similar; in traditional Ukrainian families with a clear division of gender roles, a weak emotional bond with the father could have promoted the use of non-constructive defenses.

The degree of explaining non-constructive defenses was found to be higher (30-34%) than the degree of explaining constructive defenses, which was only 12-13%. A result analogous to the difference in explaining non-constructive and constructive defenses was obtained in explaining PTSD (23-29%) and PTG (15%). This may contribute to our understanding of the controversy surrounding the potential relationship between attachment styles and PTG (Gleeson et al., 2021; Romeo et al., 2019). The results of a meta-analysis from 12 studies on the relationship between attachment styles and PTG showed a positive association between secure attachment style and PTG and a weak, but significant, negative correlation between avoidant attachment and PTG. In the case of a pre-occupied/ambivalent style, inconsistent results were obtained (Gleeson et al., 2021).

It may also reflect a more general regularity that negative phenomena (disorders) have specific causes which are easier to identify, whereas positive phenomena like PTG have causes that are more complex and more difficult to identify. The fact of the lower percentage explanation of constructive defenses and PTG compared to non-constructive defenses and PTSD may be because positive phenomena involve more of the person's intentional and reflective activity, while negative phenomena limit or inhibit it. According to the 'code-emotions' hypothesis, strong negative emotions make us comprehend the world in terms of concrete threats, whereas the involvement of positive emotions enables us to abstract reality (Obuchowski, 2003).

The results of our study, while mostly supporting the hypotheses, are not as clear cut as they might seem. The evolutionary theory of socialization (Belsky et al., 1991) suggests that insecure attachment styles prepare a person to cope in a hostile and unpredictable world, such as during war, whereas secure attachment prepares a person to cope in a predictable and safe world. So, we could have had the opposite result to the one postulated. This did not happen because the refugees were in a relatively safe and friendly environment, in Poland, not affected by warfare; by fleeing the country they minimized the effects of the war trauma. In addition, refugees arriving in Poland were provided with long-term social support apart from emergency care (money for the first days of their stay in Poland, warm meals, a telephone card, medical care, placement in the homes of Polish families, in apartments at parishes and various types of shelters and hotels). Ukrainian citizens were granted identical rights to those held by Polish citizens to child allowance. The unemployed were also eligible for cash allowance, and assistance in finding work was provided. Ukrainian refugees could also benefit from free psychological support provided through the activities of various foundations. Thus, the material help that refugees experienced during

their stay in Poland and the social emotional support may have had a significant influence on their sense of security; such impacts are beneficial to the regeneration of resources, making it possible to cope with stress in a more adaptive way (Hobfoll et al., 2007).

Further research should allow the sample to be diversified by age, education, social status, and psychological and social losses caused by war and refugeeism. It would be beneficial to find out what determines whether or not trauma of similar severity leads to disorders, and what determines the ability to grow after trauma with similar severity of disorders. Given the chronic nature of war and refugee-related trauma, it is possible that due to the long-term stressor of violence, some of our subjects may suffer not only from symptoms of PTSD but also complex PTSD (cPTSD). However, due to the fact that, according to the criteria included in ICD-11, cPTSD concerns not only PTSD symptoms but also permanent personality changes that require time to develop (Gałecki, 2022), we limited our analysis to PTSD symptoms. Potential further research should take into account such diagnosis and its measurement.

Summing up, insecure attachment styles promote using non-constructive defenses and experiencing PTSD, while secure attachment promotes constructive defenses and activates posttraumatic growth. Note that different attachment styles are expressed through partially unconscious behavioral scripts activated in coping situations. Why is the secure attachment style adaptive? In the case of a secure style, coping scripts appropriate to the situation are activated (Mikulincer & Shaver, 2016). To put it simply, securely attached people are not only able to give support to others and establish relationships with others but also, having trust in people, to benefit from their help (Elliot & Reis, 2003). This rule is also true in situations of exposure to the trauma of war (Mikulincer et al., 1993), which in a refugee situation is of considerable importance. The question is whether a secure attachment style would have proved equally adaptive in a population directly exposed to warfare and the associated unpredictability of events, tragedies and atrocities. We will address this question on the basis of the results of further research.

CONCLUSIONS

The threats related to the ongoing wars in the world and in Europe force political and social decision-makers to devote more space to psychoeducation, what trauma is, especially war trauma, and how to deal with the psychosocial disorders it triggers. Our study is consistent with those showing connections between attachment styles and reactions such as PTSD and PTG (Romeo et al., 2019), as well as between experiencing a sense of threat in various spheres of everyday life,

indirectly related to the ongoing war in Ukraine (Catani et al., 2023; Huțul et al., 2023; Spence et al., 2019).

As the present research shows, the accumulation of risks associated with a radical change in the living conditions and previous life scenarios of Ukrainian immigrants residing in Poland and the need to cope with the associated challenges is most strongly associated with the ongoing war. Established attachment styles, on the other hand, may support or hinder the process of adaptation to new living conditions. The absence of the variable closeness to the mother among the predictors in the models tested, and closeness to the father as only a weak predictor of non-constructive defenses, represent the most intriguing results, to be confirmed in further research. Our research, like any other, also has its limitations. These are, first of all, the small sample of respondents and the clear disproportion between the men and women surveyed, conditioned by the situation of war and the possibility of leaving Ukraine mainly for women and children. Other weaknesses are the questionnaire nature of the research and multiplicity of methods used, the completion of which required considerable attentiveness. However, within the framework of our grant, the research continues, including in Ukraine and Germany. Therefore in the near future it will be possible to compare the results reported here with other ones.

ENDNOTE

Project “The role of the family in coping with war trauma by Ukrainian civilian victims of war 2022”, funded by the National Agency for Academic Exchange – contract no. BPN/GIN/2023/1/00001/U/00001.

DISCLOSURE

The authors declare no conflict of interest.

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