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War trauma and strategies for coping with stress among Ukrainian refugees staying in Poland

Piotr Długosz

Faculty of Social Sciences, Pedagogical University of Krakow, ul. Podchorążych 2, Kraków 30-084, Poland

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ABSTRACT

Objectives: The Russian military aggression against Ukraine resulted in a humanitarian crisis. There was a mass exodus of war refugees. More than 17 million people have left Ukraine since the war broke out. The refugees who came to Poland and other countries have experienced war trauma. The study aims to assess mental health of Ukrainian war refugees in Poland.

Population and methods: At the time of the study, that is, in April and May 2022, between 1,5 million and 2 million Ukrainian refugees were staying in Poland. They were mainly young women with their children. The CAWI (Computer-Assisted Web Interview) technique was used in the study. The research sample was selected using purposive sampling. The invitation to take part in the survey was posted on social media for Ukrainians in Poland, and also sent to the participants of a Polish as a Foreign Language course. The study utilizes the RHS-15 and a nominal scale measuring the strategies for coping with stress.

Results: The research sample consists of 737 respondents. The results of the screening tests indicate that depression, anxiety disorders and PTSD may be observed among 73% of respondents, whereas 66% of the respondents display psychological distress. The analyses have shown that higher levels of mental health disorders were observed among women and refugees who do not speak Polish. Younger respondents experienced a higher psychological distress. The results of the study also indicate that the refugees more often implemented problem-focused strategies. The analysis has shown that the respondents who followed active strategies scored the lowest on RHS-15. The emotion-focused strategies, such as praying, diverting attention by becoming involved in different activities or taking sedatives were not effective. The highest levels of disorders were present among the refugees who indicated resignation.

Conclusions: The collected observations indicate that the main problem which might hinder their adaptation could be mental health issues, which in turn impact the general deterioration of health and the quality of life.

Introduction

After the outbreak of the war in Ukraine on 24 February 2022, a refugee crisis emerged on an unprecedented scale since the end of WWII. By invading Ukraine, the Russian army regressed the world to the state of the 20th century military and humanitarian crisis, similar to the crisis caused by WWII.

Millions of Ukrainian citizens started fleeing their country and seeking refuge abroad. According to data published on 6 January 2023, 17 139 782 people have left Ukraine since the war broke out. 9 180 679 people have returned to Ukraine until that date. The largest number of Ukrainian refugees was registered in Russia (2 870 182), Poland (1 553 707) and Germany (1 021 667) (UNHRC, 2023). At the time of the study, approximately 3 659 000 Ukrainian refugees have come to Poland since the beginning of the war (Długosz et al., 2022). In total, approximately 9 000 102 Ukrainian refugees have arrived in Poland until 12 January 2023. On 11 January 2023, 29 500 people came from Ukraine to Poland, whereas 23 300 people went from Poland to Ukraine (Straż Graniczna [Polish Border Guard], 2023). The above data indicates that the military aggression of the Russian Federation against Ukraine and the attacks on critical infrastructure (power plants, heat and power plants, water supply lines) as well as constant artillery fire and shelling of Ukrainian cities and villages have led to a few million Ukrainians fleeing their country. Numerous institutions, such as the government, self-governments, Church institutions and Polish citizens were involved in providing aid to the Ukrainian refugees.

Not only do military conflicts result in the loss of health in people directly involved in armed combat, but also civilians, who are exposed

E-mail address: piotr.dlugosz@up.krakow.pl.

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to trauma (Rozanov et al., 2019). Numerous studies conducted up to date indicate the occurrence of negative effects as a result of wars, terrorist attacks and political violence (Calderoni et al., al.,2006; Johnson-Agbakwu et al., 2014). Anxiety disorders, acute stress reactions, depressive episodes, cognitive disorders, personality changes, or post-traumatic stress disorder (PTSD) are among the most common mental health disorders (Hollifield et al., 2006; Bisson et al., 2015; Fino et al., 2020; Ullmann et al., 2015). Somatic diseases, e.g. cardiovascular issues or inflammations, are connected with mental health disorders (Hollifield et al., 2013; Perkonigg et al., 2000).

Apart from military activities, other factors have an impact on the occurrence of mental health disorders among refugees. Besides war trauma, they experience high levels of stress which is caused by fleeing their country and travelling long distances to seek refuge (Gagnon, Tuck, 2004; Mika et al., 2015). Upon arriving at their new place of stay, acculturation stress occurs. It is caused by separation from one's family, breaking of social networks, social isolation, a change in gender roles, language barriers, unemployment, loss of social status, or intergenerational conflicts (Redwood-Campbell et al., 2008; Yuzva, 2023). Furthermore, refugees must learn to navigate an entirely new community, language, and cultural system, while simultaneously coping with the loss of their homeland, families, and their way of life (Murray et al., 2010; Jain et al., 2022). It should be noted that gender has an impact on proneness to trauma. In numerous studies conducted thus far, higher levels of trauma were observed among women than men. (Ainamani et al., 2020). Furthermore, there is a higher risk of developing PTSD among women (Irish et al., 2011).

Additionally, in spite of the fact that the refugees are abroad away from the war and violence, they are exposed to the war, as it is covered by the media, which also results in stress and excessive stimulation (Rozanov et al., 2019; Chudzicka-Czupała et al., 2023). Moreover, individual traits such as resilience and coping style may influence the occurrence of war trauma (Hooberman et al., 2010; Feder et al., 2016). Less severe trauma is expected to be observed among people following problem-focused strategies for coping with stress rather than those who employ emotion-focused strategies (Jeavons et al., 2000; Punamaki et al., 2004). The research shows that female refugees are more susceptible to mental health disorders (Zimmerman et al., 2011).

To sum up, it shall be stated that in the case of Ukrainian war refugees, all of the above-mentioned risk factors may occur. The Ukrainians fleeing the war are exposed to war trauma, evacuation trauma, acculturation trauma and media trauma (McDonnell et al., 2022; Rizzi et al., 2022; Javanbakht, 2022). Stress among refugees is increased by the uncertainty about their future (Newnham et al., 2019).

Part of the Ukrainian refugees experienced previous trauma which had been given rise by the necessity to leave their former place of residence as a result of Russian military activities taking place in the east of Ukraine since 2014 (Johnson et al., 2021; Długosz et al., 2022). Trauma is observed among both internally and externally displaced refugees (Leon et al., 2022).

This paper aims to diagnose mental health of Ukrainian refugees who arrived in Poland after 24 February 2022.

This paper focuses on the following aims:

1) estimating the frequency of refugees who are at risk of having anxiety, depression and PTSD based on the RHS-15 screening test.
2) analyzing the relationship between different socio-demographic variables and positive screening test results.
3) describing the frequency and type of strategies for coping with stress adopted by refugees.
4) analyzing the association between coping strategies and the risk of having major mental disorders based on the RHS-15 results.

RHS-15 (Hollifield et al., 2013), which was translated into Ukrainian for the purposes of this study was used to achieve these aims (Pathways to Wellness, 2011).

Before proceeding to analyses, it is important to describe the discussed phenomenon. Post-traumatic stress disorder (PTSD) is a disorder that develops in some people who have experienced a shocking, scary, or dangerous event. It is caused by traumatic, extreme events, which include: military activities, natural disasters, large-scale traffic accidents, but also individual experiences, such as rape or physical violence, life-threatening diseases or sudden death of a close relative (Heszen, 2020).

Post-traumatic stress disorder symptoms may start within one month of a traumatic event, but sometimes symptoms may not appear until years after the event. These symptoms cause significant problems in social or work situations and in relationships. PTSD symptoms are generally grouped into four types: intrusive memories, avoidance, negative changes in thinking and mood, and changes in physical and emotional reactions. Symptoms can vary over time or vary from person to person (PTSD, 2023).

The study identifies refugees at risk of developing major mental disorders, who fled the war in Ukraine and arrived in Poland. This knowledge can allow for organizing mental health support and highlight the need for programmes aimed at providing Ukrainian refugees with support and facilitating their return to mental well-being. The attention of organisations such as the United Nations, European Union and UNHCR should be directed towards addressing these issues.

By providing insight into the factors that trigger trauma and the scale of violence experienced by Ukrainian society during the war, it might be assumed that war trauma will be widespread, based on the RHS-15 measurements.

Methods

Participants

The research survey was conducted online (Computer-Assisted Web Interview) between 15 April 2022 and 10 May 2022 among Ukrainian refugees who arrived in Poland after 24 February 2022. The research sample was selected using non-probability sampling; it was an opportunity sample (Frankfort-Nachmias, Nachmias, 1996). Participation was voluntary and anonymous. Data were collected in an online study administered via a tool for online surveys: Lime Survey. The respondents were recruited through advertisements posted on social media (i.e., Facebook) and internet forums for Ukrainians in Poland. What is more, the Ukrainian learners of Polish as a Foreign Language at the Teacher Training centre in Kraków were sent invitations to the study. The web-based approach has several advantages, in particular high efficiency and low costs (Best, Krueger, 2002). However, despite the advantages of online surveys, they also have certain limitations. Respondents are selected purposely and thus there is limited control over the research. The respondents are selected by self-recruitment. As a consequence, the conclusions drawn from CAWI-based studies cannot be applied to the entire population. There is no control over the study, which means that the respondents may provide untrue answers or may fail to understand the research questions. The respondents also often skip particular questions, which is noticeable in this type of studies (Mider, 2013).

Refugee health screener-15

A special scale was used to measure mental distress in refugees (Hollifield et al., 2013). The Refugee Health Screener-15 (RHS-15) is a culturally responsive, efficient, validated screening instrument that detects symptoms of emotional distress across diverse refugee populations and languages (Johnson-Agbakwu et al., 2014).

The first 13 questions assess the presence of different symptoms of depression, anxiety, and PTSD during the last month. Question 14 measures the general coping capacities. Answers are given on a 5-point Likert scale (0 – not at all, 1 – a little bit, 2 – moderately, 3 – quite a bit, 4

– extremely). Question 15 assesses how much suffering the participant experienced last week. Responses to this item were reported on a scale of 0–10 on a "distress thermometer" (Boettcher, Neuner, 2022).

The effectiveness, validity, and reliability of the screening instrument have been demonstrated in various studies (Hollifield et al., 2013; Stingl et al., 2019; Palit et al., 2022). In the study, a Cronbach's α of 0.878 was arrived at. The cutoff value recommended by Hollifield et al. (2013) is a sum-score of ≥ 12 regarding questions 1–14 and/or a score of ≥ 5 regarding the distress thermometer. The Ukrainian language version made by the War Survivors Institute especially for the purpose of this study was used in the research (Refugee Health Screener 15, 2023).

Strategies for coping with stress

The construct was used to measure the strategies for coping with stress (Lazarus, Folkman, 1984; Straub, 2003). The first strategy focuses on a problem (problem-focused strategies). It is based on undertaking activities aiming to change the situation, remove the obstacle or eliminate its causes. The following responses are the indices of this strategy: I get mobilised and do my best to protect myself from it. The second strategy concentrates on emotions (emotion-focused strategies). Individuals attempt to moderate and regulate stressful emotions. The indices of such an approach are the following responses: I ask other people for help and advice; I comfort myself with a thought that it could have been worse, but at the moment I am healthy; I pray to God for help; I focus on different things which divert my attention and improve my mood. The emotion-focused strategy was indicated by the following responses: I use alcohol, drugs, other psychoactive substances; I give up, don't know what to do and what to expect; I take sedatives. In the questionnaire, the respondents marked '1' in the event the used a given strategy and '0′ when they did not follow it. The variable was nominal. The reliability and accuracy of this scale have been positively verified in the Diagnoza Społeczna research (Czapiński, 2015).

Independent variables

The research form included questions regarding the following demographic factors: gender, age, place of residence (in Ukraine), region of origin, education, economic status, having children, command of Polish, and a place of stay in Poland.

Statistical analyses

Statistical analyses were conducted using IBM SPSS 27. Continuous variables are expressed as the mean ± standard deviation, whereas categorical data are expressed as frequency or percentage. Student's t-tests and the ANOVA were used when applicable. The results were expressed with 95% confidence intervals (CIs). P values less than 0.05 were considered to indicate statistical significance. In tables 2, 4 and 5, average values and standard deviation are used to summarize the data. The higher the average value, the more frequently a given symptom occurs among the respondents. Higher values of standard deviation indicate a higher distribution of results around the average.

Results

Demographic characteristics

A total of 737 valid questionnaires were obtained for the study. Thanks to this method, responses from refugees residing all over Poland were collected. At the time of the study, they were inhabiting 125 Polish cities. The majority of respondents reside in big cities with over 500 000 inhabitants (55%), cities with up to 500 000 inhabitants (20%), cities with up to 100 000 inhabitants (20%) and the countryside (5%). At the time of the study, the vast majority of respondents had been living in Poland for more than a month (80%), approximately a month (14%), approximately a week or two (3%), or a few days (1%).

Their average age was 36.6 years (SD = 9.8). The majority of the respondens were women. Previously, they were mainly inhabiting cities, and they most often originate from Central Ukraine. Most of them came with their children, evaluated their financial status as good, and had a good education. The majority of them have a poor command of Polish. They reside in apartments they rent on their own, or stay with their Polish or Ukrainian relatives (Table 1).

Table 2 shows the average results obtained by the respondents on the RHS-15. The results indicate that the most commonly occurring problems were racing thoughts, and feeling down or sad. Emotional numbness was also often observed. It is also clearly seen that the respondents had emotional distress and exceeded the critical value of 5 points.

The results indicate the percentage of people having positive RHS-15 screening results among Ukrainian refugees. This is confirmed by the results obtained on the RHS-15. For the studied sample, the results of RHS-15 (1–14) are: M = 20.23, SD=9.90, and for emotional distress (15): M = 5.38, SD=2,24. A positive PTSD result was obtained by 73% of respondents (1–14). 66% of the surveyed refugees experienced emotional distress (15).

Table 3 shows strategies for coping with negative emotions. The refugees most often become mobilised in order to solve their problems. Becoming preoccupied with activities which are supposed to divert one's attention from war experiences is also common. It is noticeable that more than a half of the respondents comfort themselves with a thought that things could have been worse, but now they are in a safe place. One third prays to God and asks others for help. The refugees rarely resort to sedatives or alcohol. They also rarely give up. On the basis of the collected data, it should be claimed that the respondents employ problem-focused strategies, but emotion-focused strategies are equally common.

The results shown in Table 4 indicate that PTSD symptoms are more frequently observed among women and the respondents who do not speak Polish. In the remaining cases, the differences were not statistically significant. Psychological distress was most often observed among the youngest age group (≤34). The remaining variables had no impact on distress levels.

Table 5 shows the relationship between strategies for coping with stress and mental health disorders. The results of the analyses indicate

Table 1
Percentage (%) and frequency (N) of answers to demographic questions.

		%(n)
Gender	Male	3(21)
	Female	97(600)
Age	M(SD)	36.6
	Min-Max	(9.8)
		14 – 73
Place of residence	City	91(666)
	Village	9(66)
Region of origin	West	22(156)
	East	13(93)
	Central	46(322)
	South	19(134)
Education	Below secondary	12(67)
	Secondary	5(30)
	Higher	83(473)
Evaluation of financial status	Bad	8(49)
	Average	31(181)
	Good	62(379)
Having children	Yes	75(511)
	No	25(167)
Command of Polish	None	18(118)
	Poor	67(445)
	Good	16(106)
Place of stay	Renting an apartment on one's own	55 (396)
	Staying with Polish or Ukrainian relatives	33(234)
	Collective accommodation facility	12(88)

Table 2
Mean scores for RHS-15 Items.

	M (95% CI)	SD
(1)Muscle, bone, joint pains	1.11 (1.04–1.19)	1.02
(2)Feeling down, sad, or blue most of the time	2.18 (2.10–2.26)	1.15
(3)Too much thinking/thoughts	2.56 (2.48–2.65)	1.23
(4) Feeling helpless	1.75 (1.66–1.84)	1.20
(5) Suddenly scared for no reason	1.20 (1.13–1.28)	1.03
(6) Faintness, dizziness, or weakness	0.75 (0.68–0.81)	0.84
(7) Nervousness or shakiness inside	1.05 (0.98–1.12)	0.96
(8)Feeling restless, can't sit still	1.31 (1.23–1.38)	1.06
(9) Crying easily	1.59(1.50–1.67)	1.19
(10) Reliving the trauma	1.06 (0.99–1.13)	0.98
(11) Physical reactions when reminded of trauma	1.11 (1.04–1.18)	0.99
(12) Felt emotionally numb	1.59 (1.50–1.67)	1.15
(13) Jumpier, more easily startled	0.95 (0.87–1.02)	1.00
(14) Ability to cope	1.24 (1.18–1.30)	0.73
(15) Distress Thermometer	5.38 (5.21–5.56)	2.24
RHS-15 Total Score	25.6 (24.7–26.5)	11.01

Table 3
Strategies for coping with stress.

	%	n
I get mobilised and do my best to cope with my problems	59	368
I focus on other things which divert my attention and improve my mood	53	327
I comfort myself with the thought that it could have been be worse, but by now I am safe	48	295
I pray to God for help	32	196
I ask others for advice and help	28	174
I take sedatives	15	95
I give up, don't know what to do, don't know what is going to happen	6	34
I resort to alcohol, tobacco or other stimulants	3	16

that lower levels of trauma are observed among younger refugees who become mobilised in order to cope with their problems. Higher levels of trauma are observed among people who give up and feel helpless, take sedatives, pray to God for help, or comfort themselves with a thought that it could have been worse. Similar regularities have been observed on the scale of psychological distress. Furthermore, it has been shown that the strategy connected with diverting attention from unpleasant things was successful in decreasing the level of distress. In general, it may be claimed that following active strategies for coping with stress was the only successful way of decreasing the score on the RHS-15 scale. Employing emotion-focused strategies or giving up facilitated the occurrence of PTSD.

Discussion

The screening tests conducted with the use of the RHS-15 indicate a high risk of the occurrence of mental health disorders among the studied sample of Ukrainian refugees. Anxiety disorders, depression, and PTSD were observed among ¾ of the respondents during measurement with the use of RHS-15. High levels of psychological distress were observed among 2/3 of the refugees. Similar results were arrived at in Germany in the studies carried out among the refugees from Syria, Afghanistan and Iraq. On the basis of RHS-15, it was determined that 67% of the refugees who reside in reception centres and 80% of those who dwell in public housing display symptoms of PTSD, anxiety disorders, depression (Stingl et al., 2019). Female refugees from Syria who fled to Jordan scored even higher. In the above case, 99% of the respondents had a positive results (1–14 items on RHS-15) and 91% of them scored ≥5 on the distress thermometer (Kheirallah et al., 2022).

A slightly lower risk of the occurrence of mental health disorders has been observed by Hollifield et al. (2103) among the refugees who arrived in the USA (30%). An average percentage of positive results (from 39% to 51%) was observed by Schlaudt et al. (2020). On the basis of these comparisons, it may be claimed that high levels of mental health disorders are observed among the refugees who flee the countries amid war, such as Syria, Iraq, or Afghanistan (Borho et al., 2022; Kheirallah et al., 2022). On the other hand, lower levels of mental health disorders were recorded among refugees from the countries where military operations were not taking place, such as Cuba, Somalia, or Burma (Polcher, Calloway, 2016; Bosson et al.,2015; Schlaudt, 2020).

Increased levels of PTSD were observed among internally displaced Ukrainian refugees at the time of war activities led by Russians in the east of Ukraine since 2014 (Johnson et al., 2021; Niewiadomska et al., 2023). Among war refugees who arrived after 24 February 2022, high levels of anxiety disorders, depression, anger, and sleep disorders were observed (Rizii et al. 2022).

Table 4
Distribution of average values on the RHS-15 scale in the category of independent variables.

		Items 1–14				Distress thermometer			
		n	M	SD	p=0.00	n	M	SD	p=0.09
Gender	Male	21	9.47	5.8		21	4.5	2.2	
	Female	586	20.57	9.8		595	5.4	2.8	
Age	≤34	246	21.2	21.2	F =2.4	250	5.7	2.1	F=5.6
	35–54	325	19.5	19.5	p=0.08	330	5.1	2.2	p=0.00
	≥55	27	18.6	18.6		27	4.8	2.5	
Place of residence	City	563	20.2	9.9	p=0.88	569	5.4	2.2	p=0.245
	Village	52	20.0	10		53	5.0	2	
Region of origin	West	125	19	9.3	F =1.3	126	5.3	2.2	F =0.55
	East	83	19.6	9.7	p=0.26	82	5.1	2.4	p=0.64
	Central	267	20.4	10.1		272	5.4	2.1	
	South	115	21.4	10.2		118	5.5	2.3	
Education	Below secondary	67	19.7	10.2	F =1.0	67	5.3	2.1	F=1.2
	Secondary	28	23	12	p=0.36	29	5.9	2.4	p=0.28
	Higher	464	20	9.6		471	5.2	2.2	
Evaluation of financial status	Bad	46	20.3	9.1	F=1.4	47	5.4	2.2	F =1
	Average	185	21.1	10.1	p=0.24	186	5.5	2.1	p=0.36
	Good	370	19.6	9.9		377	5.2	2.2	
Having children	Yes	462	19.9	9.6	p=0.14	464	5.3	2.2	p=0.10
	No	148	21.2	10.6		154	5.6	2	
Command of Polish	None	103	22.2	11	F=4.4	107	5.6	2.3	F=0.8
	Poor	414	20.2	9.6	p=0.01	416	5.3	2.2	p=0.44
	Good	97	18	9.3		100	5.4	2.1	
Place of stay	Renting an apartment on one's own	330	20.1	9.8	F=0.48	332	5.3	2.2	F=0.48
	Staying with Polish or Ukrainian relatives	200	20.4	10	p=0.61	204	5.5	2.1	p=0.61
	Collective accommodation facility	74	19.5	9.2		75	5.2	2.3	

Table 5
Distribution of average values on RHS-15 scale and the methods of coping with stress.

		Items 1–14				Distress thermometer			
		n	M	SD	p-Value	n	M	SD	F, p-Value
I get mobilised and do my best to cope with my problems	Yes	361	18.8	9.1	p=0.00	364	5.1	2.2	p=0.00
	No	250	22.1	10.6		256	5.7	2.1	
I ask others for advice and help	Yes	171	20.4	9.5	p=0.71	171	5.2	2.1	p=0.71
	No	440	20.1	10.1		449	5.4	2.2	
I focus on other things which divert my attention and improve my mood	Yes	322	20.1	9.5	p=0.88	326	5.2	2.1	p=0.03
	No	289	20.2	10.3		294	5.5	2.3	
I comfort myself with the thought that it could have been be worse, but by now I am safe	Yes	287	21.5	9.6	p=0.00	326	5.6	2	p=0.02
	No	324	19	10		394	5.1	2.3	
I pray to God for help	Yes	191	22.1	9.5	p=0.00	194	5.7	2.2	p=0.00
	No	420	19.3	10		426	5.2	2.2	
I take sedatives	Yes	94	26.7	9.6	p=0.00	95	6.4	1.9	p=0.00
	No	517	19	9.5		525	5.2	2.2	
I give up, don't know what to do, don't know what is going to happen	Yes	33	30.3	10	p=0.00	34	7	1.6	p=0.00
	No	578	19.6	9.6		586	5.2	2.2	
I resort to alcohol, tobacco or other stimulants	Yes	16	19.6	7.3	p=0.82	16	6	1.9	p=0.22
	No	595	20.2	10		604	5.3	2.2	

Higher levels of mental health disorders measured with the use of RHS-15 may result from the fact that Ukrainian refugees were at risk of losing their health or lives in Ukraine. They have also experienced stress on their way to Poland, and were also exposed to acculturation stress. Moreover, psychological discomfort is induced by media coverage of military operations, as well as contacts on social media (Rozanov et al., 2019). What is more, the unfavorable situation of refugees is increased by the uncertainty and unpredictability of the future (Newnham et al., 2019). Nobody can be sure when the war will end, whether they will be able to return home, or if their relatives are safe and sound. Furthermore, high levels of mental disorders among refugees may result from a phenomenon called "the survivor's guilt" (Hutson et al., 2015). The Ukrainians who have fled to Poland and left their relatives behind may suffer, because they feel guilty about leaving their husbands, partners and parents in a country in war and they themselves have moved to a safe refuge.

The conducted analyses indicate that gender and command of Polish have an impact on mental health disorders measured with the use of RHS-15. Women scored higher on the scale of mental health disorders, which had also been observed in numerous similar studies (Schlaudt, 2020; Kheirallah et al., 2022). To a certain extent, high scores obtained by women may result from the fact that upon leaving Ukraine they had to cope with a change in gender roles and thus became exposed to the loss of social status (Yuzva, 2023).

The studies conducted by Roberson et al. (2006); Söndergaard, Theorell (2004) and Kartal et al., (2019) indicate that the question of proficiency in the language of the host country is of crucial significance. The acquisition of the host country language is identified as a protective factor which buffers against the stress connected with adapting to the new environment and facilitates the process of managing daily errands (Beiser and Hou, 2001). In the case of Ukrainian refugees in Poland, it allows them for finding a job and increasing their financial and existential security.

In the case of psychological distress, it was observed that younger refugees display higher levels of mental discomfort. In this case, intergenerational differences are noticeable. The younger generation is more susceptible to stress. They are at the time of adolescence and more neurotic than the older generation (Twenge, 2000; Długosz, Kryvachuk, 2021). Older refugees have a greater life experience, they had lived through the collapse of the Soviet Union and various struggles of Ukraine since it regained its independence.

It is worth stressing that factors, such as place of residence, region of origin, having children, education, financial status or the place where one stays in Poland had no impact on the levels of mental health disorders.

The results of the study have shown that the surveyed refugees more often employ active strategies for coping with stress (59%). These strategies are based on mobilizing one's resources in order to solve their problems. This is confirmed by the results obtained on RHS-15 scale (item 14). 15% of the respondents were convinced that they are able to cope with all the difficulties, 57% of them maintain that they can handle most of the problems (57%), some of the problems (26%), whereas 4% of the respondents have problems with coping, and 1% of the refugees cannot cope with anything.

The refugees follow both problem-focused and emotion-focused strategies, which was also confirmed by other studies carried out among Ukrainian war refugees (Oviedo et al., 2022).

The results of the *t*-test indicate that the lowest levels of trauma are observed among the refugees who follow active strategies for coping with stress. Emotion-focused strategies might not be effective. The worst well-being was reported by the refugees who have taken the attitude of resignation and tried to help themselves by taking sedatives. What is also surprising is that praying has no protective effect in the case of the researched group. The positive impact of prayer was observed in the study carried out among Syrian (Kheirallah et al., 2022) and Ukrainian refugees (Oviedo et al., 2022; Kostruba, Fishchuk, 2023). Spirituality has a crucial role in coping with war trauma. Qualitative studies have shown the significance of receiving support from one's family, volunteers and friends among the Ukrainian refugees (Oviedo et al., 2022). Social media are an important factor which facilitates adaptation in the new environment. Social support is a very common instrument used for coping with problems by the refugees (UNHCR, 2016; Harvey et al., 2013; Wall et al., 2017). Further studies indicate that a vital factor protecting Ukrainian citizens from war stress were pets (Kateryna et al., 2023). While receiving the refugees in Poland it was observed that they brought their animal companions, which may affect them positively and mitigate the acculturation stress. It is worth considering whether online therapy could be a significant and helpful means of supporting the refugees who face mental health issues. (Soh et al., 2020). Devising special programmes aimed at improving mental health among refugees should be a priority for international organizations such as WHO, UN and UNHCR. Thanks to them, it would be easier for refugees to integrate into their new society, rebuild Ukraine from war damages, and create a new, safer future.

Study limitations

The study was conducted with the use of the online survey method, and the research sample was selected using non-probability sampling. An opportunity sample was studied. The results of this study cannot be applied to the entire population of Ukrainian refugees in Poland.

The present study was cross-sectional, due to which the relationships

between the variables used cannot be presented in the cause-and-effect order.

Yet another limitation of the study is the fact that the research was conducted only at one point in time. It is known that screening for distress should occur at least twice during the resettlement in order to detect those with initial distress and those with delayed distress (Hollifield et al., 2021). This study fails to allow for observing delayed anxiety and distress among refugees, which could be increasing over time. In the case of the respondents, symptoms of stress may be suppressed by the occurrence of the "honeymoon" period (Polcher, Calloway, 2016). At first the refugees report a greater sense of well-being during displacement, due to the fact that they had escaped danger, violence and death. They can see much better prospects for the future, but after some time they start losing their good mood, as new stressors and post-migration difficulties emerge.

Conclusions

On the basis of this data, it may be said that the refugees originate from the Ukrainian middle class. The conducted research is the first study in which utilized the RHS-15 scale translated into Ukrainian for the purposes of screening anxiety disorders, depression and PTSD among Ukrainian war refugees. The results indicate the occurrence of PTSD among ¾ of the surveyed population. In spite of the fact that the Ukrainian refugees have found a safe refuge in Poland, they experience mental suffering, which is a result of the accumulated stress. A large scale of disorders among the refugees indicates that apart from financial aid, providing them with jobs and a place to stay as well as with an access to mental health facilities and clinics must be provided. Psychological and psychiatric support is as important as financial aid, or perhaps even more vital. This fact should be borne in mind by Polish authorities and international organisations that provide help and support for Ukrainian refugees in Poland.

Declaration of Competing Interest

The author declared no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

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