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## Psychological Well-Being and Resources of Mothers of Children with Autism Spectrum Disorder in Forced Migration

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## Abstract

**Introduction**. This article analyzes various aspects of psychological well-being and resources for mothers of children with autism spectrum disorder (ASD) who have been displaced from their permanent residence. **Methods**. Mothers of children with ASD, the main group (N = 18, mean age 39.9 years) who live with their children in a temporary accommodation center (TAC) and the control group (N = 18, mean age 32.9 years) participated in the study. The abbreviated *Depression, Anxiety, and Stress Scale* (Lovibond, Lovibond, 1995), *Multidimensional Scale of Perceived Social Support* (Zimet et al., 1988), *Frequency of seeking help in* different categories (Ushkov et al., 2020), *Modified Semantic Differential methodology* (Molchanov, Almazova, Poskrebysheva, 2023), *Coping Ways Scale, Single-item assessment of general life satisfaction* were used. **Results**. Forced migrants demonstrated lower life satisfaction, weaker perception from friends and in general from different sources, more often ready to seek help from "secondary support" groups, and less often from partners and friends compared to the control group. No differences were found between the groups in measures of depression, anxiety, and stress, but the levels of depression and stress were significantly higher in

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both groups compared to the population data. Differences in time perspective were found: forced migrants perceive the world in the future as less complicated compared to the control group. **Discussion**. The peculiarities of psychological well-being (increased levels of stress and depression) due to the presence of children with ASD, characteristic of both groups, and differences between groups determined by forced migration were revealed. Important resources for migrants may be a positive image of the world in the future, readiness to rely on support from family and "secondary support" groups, and some sociodemographic characteristics (presence of other children, age). **Conclusion**. The results obtained will make it possible to pay special attention to those categories of forced migrants who were previously in risk groups, including mothers of children with mental developmental disabilities.

#### **Keywords**

mothers of children with autism spectrum disorder, depression, stress, anxiety, psychological well-being, social-psychological support, coping strategies, perception of attractiveness and complexity of the world at different times

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## Introduction

Children with autism spectrum disorder (ASD) face many challenges related to communication, behavior, expressing and understanding emotions, self-care, and accessing various types of services, including health care and education (Crowell, Keluskar & Gorecki, 2019). Clearly, there is a tremendous burden on the close environment of these children to nurture the child and provide for their needs on a variety of levels.

Studies conducted in different countries and cultures have revealed a reduced level of psychological well-being in parents of children with ASD, which is manifested in feelings of helplessness, frustration, feelings of fear, anxiety and depression (Nesterova & Kovalevskaya, 2015; Padden & James, 2017; Russell et al., 2020; Efstratopoulou et al., 2022;

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Zovko, Šimleša, Olujić Tomazin, 2024), as well as high levels of general stress (Pisula & Porebowicz-Dörsmann, 2017). The siblings of children with ASD have also been found to be also characterized by increased anxiety and frustration and impaired communication skills (Guseva, 2017), which in turn can affect the psychological well-being of parents. Compared to parents of normally developing children, parents of children with ASD often feel isolated from others and deprived of meaningful communication, and lack social-psychological support that would allow them to cope with problems different from those of parents of normally developing children (Karst & Van Hecke, 2012; Yesilkaya & Magallón-Neri, 2024).

Regardless of gender, parents of children with ASD experience higher levels of parental stress not only compared to parents of neurotypical children, but also compared to those whose children have other developmental disabilities (Rodriguez et al., 2019). A study by Hou et al. (2018) showed that more than a quarter of mothers of children with ASD exhibit moderate to severe symptoms of depression, compared to only 15.6% of mothers of children with other developmental delays. In a comparative qualitative and quantitative study of parental stress and coping strategies of parents of children with ASD and parents of children with attention deficit disorder and learning problems, it was shown that despite similar sources of stress and generally higher levels of stress in both groups, it was higher in parents of children with ASD who also had sleep problems (Chad-Friedman et al., 2022).

Whereas fathers' levels of parental stress depend on the severity of the child's disorder, mothers of children with autism, regardless of the severity of the child's disorder, generally experience greater parental stress (Soltanifar et al., 2015) and are also more prone to rumination (Pervushina et al., 2021) compared to fathers. In those rare studies that do not find significantly elevated levels of stress in mothers of children with ASD (e.g., a study conducted by Croatian researchers (Zovko, Šimleša, Olujić Tomazin, 2024), it is likely that this may be due to sample characteristics (eg, a study conducted by Croatian researchers (Zovko, Šimleša, Olujić Tomazin, 2024), it is likely that this may be due to sample characteristics (eg, a study conducted by Croatian researchers (Zovko, Šimleša, Olujić Tomazin, 2024), it is likely that this may be due to sample characteristics (eg, a study conducted by Croatian researchers (Zovko, Šimleša, Olujić Tomazin, 2024), it is likely that this may be due to sample characteristics (eg, a study conducted by Croatian researchers (Zovko, Šimleša, Olujić Tomazin, 2024), it is likely that this may be due to sample characteristics. For example, specifically in this study, it was found that mothers had sufficient levels of support from their environment and other protective factors were identified that helped them cope with stress.

To provide adequate psychological assistance and effective social support to children with ASD and their environment, an active search and study of factors contributing to parental improvement of psychological state, as well as risk factors affecting their psychological well-being, primarily mothers. Special attention in research is paid to individual and personal characteristics of parents, sociodemographic factors (age of parents and child, gender, level of education, income level, marital status) (Rosenbrock et al., 2021; Samadi & McConkey, 2014), environment (presence of close family members, support from society), severity and peculiarities of the course of the disease in the child (Enea & Rusu, 2020).

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Different studies have demonstrated a mixed association of different aspects of psychological well-being of mothers of children with ASD with the same sociodemographic characteristics. For example, when it comes to education, some studies have shown that mothers with higher levels of education exhibit fewer symptoms of depression (Dembo et al., 2023) and lower levels of stress (Efstratopoulou et al., 2022), while others have found that mothers with higher levels of education exhibit lower coping skills, in particular lower scores on the reframing scale of the F-COPES questionnaire (Ntre et al., 2022). Regarding characteristics such as maternal age and marital status, there is more similarity between the results of different studies: young mothers are more stressed (Pakenham et al., 2005), single or divorced mothers are found to have higher levels of stress, depression, and anxiety compared to those with a spouse or permanent partner (Russell et al., 2020). At the same time, some studies have not found any association between basic socio-demographic characteristics (see, for example, Zovko, Šimleša, Olujić Tomazin, 2024).

It has been noted that one of the key factors influencing various aspects of psychological well-being of mothers of autistic children is the characteristics of their social environment and relationships with others (see e.g. Sim et al., 2018; Ludlow, Skelly & Rohleder, 2012). A wide social circle and especially its diversity create favorable conditions for maintaining their mental health in the long term (Dembo et al., 2023), and lack of support from friends is a predictor of more pronounced parental stress (Zovko, Šimleša & Olujić Tomazin, 2024). Informal social-psychological support from various sources acts as the most important source of support related to the psychological well-being of mothers of children with ASD (Efstratopoulou et al., 2022; Zovko, Šimleša & Olujić Tomazin, 2024), and the predominance of women in their social environment contributes to their depression (Dembo et al., 2023).

In turn, among the risk factors that aggravate the psychological state of the mother of a child with ASD, the most studied are the severity and specificity of the symptomatology of the child's disorder and the peculiarities of the mother's interaction with the child. Thus, the increase in the time spent daily by the mother on child care and treatment reduces her ability to rethink the situation (Ntre et al., 2022). It is legitimate that the severity of the disorder's symptomatology leads to higher levels of parental stress (Enea & Rusu, 2020; Reed et al., 2017; Yesilkaya & Magallón-Neri, 2024), and the feeling of being unable to support the child and the inability to establish contact with him or her leads to the mother's emotional exhaustion, up to depersonalization (Kuzmina & Krivoshey, 2024). Although the severity and behavior of the child's problem are significant predictors of maternal depression, these relationships become insignificant when maternal satisfaction with interpersonal relationships with the social environment in maternal psychological well-being.

A special place in the research of the psychological well-being of parents of children with ASD is occupied by the study of its relationship with various coping skills. For example, it has been shown that a low ability to rethink leads to an increase in the level of parental

stress (Ntre et al., 2022). Among destructive coping strategies, reluctance to take care of yourself, bad habits, overeating, or malnutrition have been identified. Among adaptive coping strategies, parents of children with ASD cite the ability to self-organize, have fun, participate in mindfulness practices, and seek support from parents of children with similar difficulties (Chad-Friedman et al., 2022; Picardi et al., 2018). Coping strategies that are specific to particular sociocultural contexts have also been identified. For example, a systematic review by Chinese researchers of published work on this topic in China showed that parents of children with ASD who rely on Confucian and Taoist philosophies are less susceptible to parental stress (Ng et al., 2021).

## Purpose of the study

The present study aimed to: 1) compare different aspects of psychological well-being and available resources to cope with the negative emotional state of mothers of children with ASD in a situation of forced migration and in the control group; 2) compare the perception of the world in the past, present, and future in mothers of children with ASD in a situation of forced migration with the control group on two parameters: its valence (attractiveness) and complexity.

The following hypotheses were tested:

- 1. The level of psychological well-being is lower in mothers of children with ASD who found themselves in a forced migration compared to those whose life situation is quite stable.
- 2. Resources for coping with negative emotional state, including sources of sociopsychological support, will differ between the two categories of respondents.
- 3. The perception of the world in the past, present and future will be different depending on whether you are in a situation of forced migration or in a more familiar environment.

## Methods

#### Sampling

Based on voluntary informed consent, 36 mothers of children aged 2 to 17 years of age with autism spectrum disorders (ASD) participated in the study and were grouped into 2 subgroups. The main group included mothers of children from Belgorod Oblast who live with their children in a temporary accommodation center (TAC) located in Moscow Oblast (N = 18, mean age 39.9, standard deviation 5.42) (hereafter referred to as the TAC subgroup). The mean age of the children with ASD was 9.44 years (standard deviation 4.9), and the number of children in the family ranged from 1 to 4 (4 mothers had two,

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2 had three, and 1 had four). At the time of the study, the mothers had been living with their children in the TAC for three to four months, away from husbands and other family members for an indefinite period of time. Contact with family members was limited to remote communication and, in some cases, rare visits from family members to the TAC. An educational program was organized for children in the TAC for the first ten weeks of their stay in the TAC, after which, due to the onset of summer vacations, the rehabilitation program was limited to online developmental classes for children and a number of cultural, creative and recreational activities for children and adults. At the same time, there was an opportunity to organize additional online or offline classes with children in the city closest to the TAC. The control group included mothers of children undergoing rehabilitation at the State Budgetary Institution 'Scientific and Practical Center for Child Psychoneurology of the Department of Children's Health' (SPC DP) in the city of Moscow (N = 18, mean age 32.9, standard deviation 6.2) (hereafter referred to as the subgroup of the NPPC DP). The mean age of the children with ASD was 7.06 years (standard deviation 4.53) and the number of children in the family ranged from 1 to 4 (8 mothers had two, 3 had three, and 1 had four children). The mothers accompanied their children during a planned hospitalization of two weeks, which included rehabilitation procedures for the child.

#### Methods

Depression Anxiety Stress Scales (DASS-21): short version (Lovibond & Lovibond, 1995). This scale measures negative emotional states (depression, anxiety, and stress). The short version of the scale includes 21 items: 7 items for each subscale.

*Multidimensional Scale of Perceived Social Support (MSPSS)* (Zimet et al., 1988). The method is used to assess the perceived importance of three sources of support significant others, family, and friends - and also allows us to assess the overall level of perceived social-psychological support.

*Frequency of seeking help from* different categories of people from the respondents' social environment in case of emotional problems (Ushkov et al., 2020). The list includes categories related to sources of primary support (parents, close relatives, spouses) and groups related to sources of secondary support (colleagues, doctors, psychologists, etc.). Responses ranged on a 4-point scale from 1 (never) to 4 (constantly).

Modified Semantic Differential methodology (Molchanov, Almazova, Poskrebysheva, 2023). Respondents were asked to characterize the "world" in different periods of their life: at present, five years ago, and in five years, using ten pairs of adjectives with opposite meanings (bipolar semantic differential): unpredictable - stable, unfair - fair, unreliable - reliable, chaotic - manageable, hostile - friendly, fragmented - holistic, anxious - calm, useless - valuable, passive - active, complex - simple. In processing the results, the nine pairs of adjectives, except for the pair of "complex - simple», were combined into one integral scale (Cronbach's alpha >0.8) assessing the valence of the world.

The specially developed *Scale of Constructive and Destructive Ways of Coping* includes 14 items rated on a 5-point scale (from "never helps" to "always helps"), reflecting behavior aimed at adapting to life conditions and helping to distract from negative emotions.

To assess life satisfaction, respondents were given a *one-item 11-point scale* and asked to answer the question "To what extent are you satisfied with your life in general, taking into account your living conditions and personal circumstances?" (0 - absolutely not satisfied, 10 - completely satisfied).

The sociodemographic data block included the following information: age, gender, education, occupation, profession, number of children and their age, marital status.

#### Data analysis

The study data were analyzed in Jamovi software (version 2.3.21). The Wilcoxon test for comparing the obtained data with the results of other studies, the Mann-Whitney test for pairwise comparisons between subgroups were used (the coefficient of rank biserial correlation was calculated as an effect size, hereinafter denoted by "R"), two-factor analysis of variance with repeated measures for processing the results of the semantic differential, and the Spearman correlation coefficient (denoted by  $R_s$ ) of the parameters studied with sociodemographic data was calculated.

## Results

The respondents in the main group showed less life satisfaction than representatives in the control group, while no differences were found between the groups for the parameters of depression, anxiety, and stress (Table 1).

#### Table 1

Descriptive statistics and comparison results on dimensions of psychological well-being

Parameter	Main group	Control group	Mann-Whitney criterion values
Depression	11,412 <u>+</u> 11,040	11,667 <u>+</u> 9,994	U = 147.5, p = 0.868
Anxiety	7,178 <u>+</u> 9,436	6,778 <u>+</u> 7,519	U = 144.5, p = 0.786

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Parameter	Main group	Control group	Mann-Whitney criterion values
Stress	17,176 ± 10,150	15,667 <u>+</u> 11,024	U = 136.0, p = 0.585.
Satisfaction with life	6,056 <u>+</u> 1,765	7,778 <u>+</u> 1,555	U = 63.5, p = 0.002, R = 0.608

Note. Cells of individual groups show the mean and standard deviations.

The comparison showed that the study participants in the main group perceived significantly less support from friends and significantly less support from all sources in general compared to mothers of children with ASD in the control group (Table 2). At the same time, the comparison did not reveal significant differences between the level of perceived support from significant others (U = 105.0, p = 0.111) and the support of the family (U = 126.0, p = 0.377) in the study groups.

#### Table 2

Descriptive statistics and comparison results by source of perceived psychosocial support

Parameter	Main group	Control group	Mann-Whitney criterion values
Significant others	5,382 <u>+</u> 1,644	6,236 <u>+</u> 1,100	U = 105.0, p = 0.111
Family members	5,882 <u>+</u> 1,031	6,250 <u>+</u> 0,647	U = 126.0, p = 0.377
Friends	4,529 <u>+</u> 1,548	6,042 <u>+</u> 1,033	U = 67.5, p = 0.005, R = 0.559
General level of support	3,949 <u>+</u> 0,650	4,632 <u>+</u> 0,601	U = 63.5, p = 0.003, R = 0.585

Note. Cells of the individual groups show the mean and standard deviations.

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Regarding the perception of the effectiveness of different coping methods, it was found that respondents in the main group were less likely to be helped to cope with negative emotions by browsing the Internet or smoking: while respondents in the control group were sometimes helped, respondents in the main group were not helped at all (Table 3).

#### Table 3

Coping styles and sources of support differ between respondent groups (only parameters with significant differences identified are given).

Parameter	Main group	Control group	Mann-Whitney criterion values
Viewing information on the Internet	3,000	4,000	U = 74.5, p = 0.005, R = 0.540
Smoking	1,000	3,000	U = 70.5, p = 0.004, R = 0.510
Spouses/partners	3,000	4,000	U = 86.0, p = 0.009, R = 0.469
Friends	2,000	3,000	U = 70.0, p = 0.002, R = 0.568
Doctors	2,000	1,000	U = 67.0, p = 0.001, R = 0.586

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Parameter	Main group	Control group	Mann-Whitney criterion values
Psychologists	2,000	1,000	U = 73.5, p = 0.002, R = 0.546
Casual acquaintances	2,000	1,000	U = 67.5, p < 0.001, p = 0.583

*Note.* Medians are given as a measure of central tendency for the groups because indicators are measured on ordinal scales.

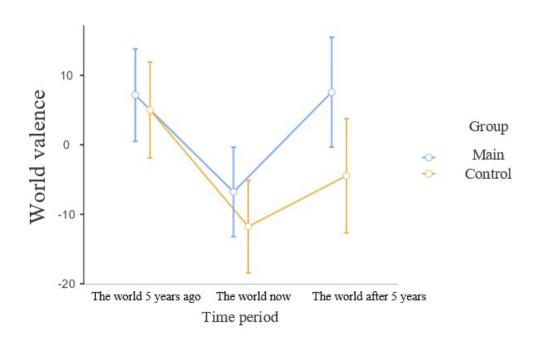
The differences were not significant for coping behaviors such as socializing with family members (U = 129.5, p = 0.257), socializing with friends (U = 142.5, p = 0.516), reading books and magazines (U = 117.0, p = 0.143), pets (132.5, p = 0.941), immersion in work or study (U = 136.0, p = 0.408), drinking alcohol (U = 100.0, p = 0.108), eating (U = 161.5, p = 1), playing sports (U = 153,5, p = 0.795), walking (U = 152.0, p = 0.986), watching movies and TV series (139.0, p = 0.447), music (U = 115.0, p = 0.126), sleeping (U = 144.0, p = 0.553).

Regarding the significance of the frequency of seeking help from different categories of social environment, it was found that respondents from the control group are more willing to seek help from spouses/partners and friends, while respondents from the group of forced migrants are more willing to seek help from doctors, psychologists, and casual acquaintances (Table 3). Although these categories are less significant for all respondents compared to the frequency of seeking support from spouses/partners and friends, women in the control group do not consider them as a source of support at all. No differences were found between the two subgroups in the frequency of seeking help from parents (U = 117.5, p = 0.137), close relatives (U = 137.0, p = 0.416), coworkers (U = 125.0, p = 0.285), social workers (U = 116.0, p = 0.123) and clergy (U = 150.5, p = 0.665).

Analysis of the results of the semantic differential, namely the integral world valence scale (Fig. 1), indicated the presence of an effect only for the factor of time period (F(2, 50) = 15.488, p < 0.001,  $\eta 2 = 0.383$ ), while the effect of the subgroup factor of the respondents (F (2, 50) = 1.614, p = 0.209) and the interaction effect of the factors (F(1, 25) = 3.028, p = 0.094) were insignificant. Respondents from both subgroups have a more positive evaluation of the world 5 years ago and the world 5 years from now compared to evaluating the world now.

#### Figure 1

Valence of the world in different time periods in two subgroups



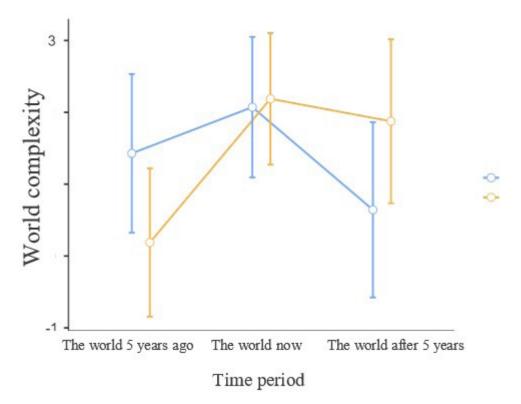
*Note:* the higher the values on the ordinate axis, the more positive respondents are about the world; the ranges of the 95-% confidence interval are indicated on the graph.

In relation to the results for the integral world valence scale, analysis of the results of the world complexity scale (Figure 2) revealed the effects of the time period (F (2,56) = 5.837, p = 0.005,  $\eta$ 2 = 0.173) and the factors of interaction of the time period with the respondents' subgroup factor (F(2,56) = 4.961, p = 0.010,  $\eta$ 2 = 0.151). The separate effect of the subgroup factor was found to be insignificant (F(1,28) = 0.004, p = 0.952). It was found that both subgroups perceived the world at present as the most complex, but forced migrants assessed the complexity of the world 5 years ago comparable to the perception of the world at present and believed that the world would be much simpler in 5 years. In cont ASDt, respondents of the control group perceive the world five years ago as relatively simpler and expect that in five years the world for them will be as complex as it is in the present.

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#### Figure 2

Complexity of the world in different time periods in two subgroups



# *Note:* The higher the values on the ordinate axis, the more complex the respondents perceive the world to be; the ranges of the 95-% confidence interval are plotted.

Analysis of the results also revealed relationships between several sociodemographic characteristics of the sample respondents as a whole and the parameters studied. Therefore, the level of perceived support from significant others (R = -0.545, p < 0.001), from friends (R<sub>s</sub> = -0.372, p = 0.028) and, accordingly, the integral level of perceived support (R<sub>s</sub> = -0.543, p < 0.001) decreases with age, while no relationship was found between age and the level of perceived support from the family (p = 0.503). Also with age, the respondents tended to evaluate the world in the future more positively (R<sub>s</sub> = 0.419, p = 0.026), but age was not related to evaluations of the valence of the world in the present (p = 0.054) or in the past (p = 0.446). The association of age with world complexity was not found for perceptions in the past (p = 0.102), present (p = 0.352), or future (p = 0.058). The number of children in the family was inversely related to maternal stress levels (R = -0.349, p = 0.041) and directly related to perceptions of the complexity of the world 5 years ago (R<sub>s</sub> = 0.414, p = 0.026). Regarding the level of education, no significant relationships were found with the variables under study (in all cases p> = 0.1).

## Discussion

The situation of forced migration, when the main reason is the threat to life and health due to ongoing military actions, can cause severe and long-term damage to the mental health and psychological well-being of any individual (AlRefaie & Dowrick, 2021; Girardi, Modesti & Del Casale, 2023). Parents of children with ASD and without this additional factor are at risk due to high levels of stress and severity of depression symptoms (Nesterova & Kovalevska, 2015; Russell et al., 2020; Efstratopoulou et al., 2022; Zovko, Šimleša & Olujić Tomazin, 2024; Pisula & Porebowicz-Dörsmann, 2017), which was confirmed by the results of our study. Although the comparison of the results obtained in the main and control samples did not reveal any differences between them on the DASS-21 subscale, the indicators comparison of the obtained with the results of studies conducted in different populations through this scale, presented in the comprehensive review by Zolotareva (2020), revealed significantly higher depression and stress scores in the respondents to our study in general, while the revealed anxiety level did not differ significantly from the results of other studies (see Appendix A).

The revealed differences between the subgroups, presumably caused by the situation of forced migration and its associated consequences (long-term living away from home in a temporary accommodation center, isolation from family members and the immediate environment, uncertainty of the near future) manifested themselves in the level of overall life satisfaction, reliance on various resources, and specific features of time perspective. Therefore, it is natural that women who live in TAs with children with ASD demonstrate significantly lower overall life satisfaction compared to those whose life situation is relatively stable, feel a lack of support, and feel more isolated from the nearest social environment. For women in the control group who have been hospitalized with their children for a short period of time, the support of spouses (partners) and friends remains particularly relevant due to its availability and regularity. In the presence of support from the immediate environment, seeking help from other categories (doctors, psychologists) and expanding the circle of social interaction is not a necessary resource.

The greater willingness of women in the group of forced migrants to seek help from their extended environment, including not only doctors and psychologists but also casual acquaintances, revealed in the analysis of the results, was also noted through personal observation of AMs during the research. Mothers of children with ASD living in the TAC actively seek consultation with specialists with inquiries of interest. This proactive expansion of social networks and acceptance of support and assistance from the wider environment (the so-called "secondary group") in case of long-term isolation from the immediate environment (the "primary group") acts as an essential resource that ensures stable levels of stress, anxiety, and depression in the situation of forced migration for women with children with autism. Despite the fact that, compared to the results of other population studies, the levels of depression and stress are significantly higher in the forced migrants, they do not differ from the same indicators in mothers of children

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with ASD from the control group, whose life situation is quite stable, suggesting that such high indicators are due to experienced difficulties associated with the special needs of a child with ASD, rather than the forced migration. In studies of the influence of different sources of support on psychological well-being, it has been shown that in different life situations, support from different sources can be critically important: in some, from the "primary group" (family, friends, close relatives) and in others, from the "secondary group" (colleagues, neighbors, acquaintances, teachers, etc.) (Ushkov et al., 2020; Pierce & Quiroz, 2019; Thoits, 2011). Therefore, in a study by Ushkov et al. (2020) involving juvenile offenders also in long-term isolation from family and immediate environment, a significant direct relationship was found between seeking help from categories belonging to the "secondary group" of support (psychologists and teachers) and better emotional well-being.

As for the ways of coping with negative emotional state, despite the fact that no significant differences were revealed for the overwhelming majority of the assessed types of activities that help in a difficult life situation, which, among other things, can be explained by the peculiarities of the methodology with an insufficiently differentiated scale of answer selection and a small sample size, the revealed differences between the groups concern, nevertheless, coping behaviors that are more likely to be destructive - Internet browsing and smoking. These coping methods are significantly less frequently used by women living in TACs. Less dependence on destructive coping strategies can become an additional resource for this category, allowing them to better cope with the negative emotional state, which, in turn, can have a positive impact on the condition of children.

Time perspective features have a profound and prolonged impact on human behavior, health, and happiness (Daugherty & BASDe, 2010; Drake et al., 2008); therefore, it is highly relevant to study the perception of the world in different periods of life in categories whose psychological well-being is threatened by the presence of chronic stressors. Analysis of the perception of the valence and complexity of the world in the temporal perspective by both subgroups revealed a common trend for all study participants. Respondents in both subgroups perceived the world most negatively in the present, showing more positive perceptions of the world in the past (5 years ago) and the future (5 years from now). The more positive perception of the past compared to the present may be determined both by global factors related to a calmer geopolitical environment and, in the case of our sample, by individual life situations, for example, by the fact that the autistic child was much younger 5 years ago, and the diagnosis may not have been made yet, and relationships in the family and with other close environment may have been stronger and more regular at that time. This more positive attitude toward the future compared to the present may be an important resource for mothers of children with ASD to cope with the challenges of raising and meeting the needs of a child who requires significantly more care and presence than neurotypical children. Studies have found, among other things, that a positive outlook is associated with a better ability to self-regulate and implement

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plans (Baird et al., 2021). Furthermore, fixation on a positive past and a positive future as opposed to a relatively negative perception of the present becomes an important support for self-regulation in a wide range of life situations, as shown, for example, in a study involving diabetic patients who, if they have a more positive perception of the past and future than the present, tend to monitor their blood glucose levels more regularly and thus take greater responsibility for their health (Baird et al., 2021). Kurt Lewin, in his classic work on time perspective, points to examples in history where a positive perception of the future by "a small group of people with high morale" not only helped them survive a difficult present, but also became an example for the general public (Lewin, 1997, p. 81).

A slightly different trend is observed with regard to the assessment of the world on the second scale (simplicity-complexity of the world in the past, present, and future). What unites the two subgroups of respondents is that they both assess the world in the present as complex, but the subgroup of forced migrants perceives the world in the future as simpler, whereas respondents from the control group perceive the world as complex as in the present. This discrepancy can be explained by different attributions of the reasons for such complexity. Probably, for mothers living with their children in TACs, the key factor complicating the perception of the present is the situation of forced migration rather than the peculiarities of the child's mental development. The hope that in 5 years the situation will change and living conditions will be more stable allows them to hope that the world will become easier for them in the future. While for moms in the control group, the main reason for perceiving the complexity of the world is most likely the condition of their child. And since they on average do not expect a radical change in this condition, or more precisely, an improvement in the conditions for child care and development, the world in the future is perceived as complex as in the present. At first glance is the paradoxical fact is that there are differences between the two groups in the perception of the complexity of the world in the past. Thus, for the forced migrants, the world in the past is perceived to be about as complex as in the present, while women in the control group perceive the world in the past to be simpler. One explanation could be that children of mothers from the control group are on average younger (7.06 years) than children from forced migrant families (9.44 years). Although the differences are insignificant (U = 95.0, p = 0.143), this may be because there may not be enough power to produce meaningful differences due to the small sample size. If this explanation is true, then respondents from the control group 5 years ago may not have faced the difficulties of raising a child with ASD that they have to live with in the present and which at that time could have already been faced by mothers from the sample of forced migrants whose children are older on average. The differences can also be explained by the peculiarities of the family situation (presence of a spouse, older children, support from close family members 5 years ago), but the available data are insufficient to confirm this explanation.

The association of various aspects of psychological well-being of mothers of children with ASD with sociodemographic characteristics was tested for the entire sample. The analysis of relationships allowed us to obtain two significant results, which deserve

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verification in larger samples: 1) the index of stress is inversely related to the number of children in the family and 2) the perception of sociopsychological support in general, and especially from significant others and friends is inversely related to age. The observed protective role of the number of children in the family in regulating maternal stress levels may have various explanations, the most likely of which is that having other children who are not mentally impaired and who are successful at school and other activities allows them to distract themselves from caring for a child with ASD who has specific needs and requires special attention and perhaps hope that, when needed, other children will be able to share the burden of lifelong care for a child with autism with them. Other studies also emphasize the presence of a healthy child in the family as a powerful supportive resource for mother psychological well-being (Dorosheva, Grabelnikova, 2018).

The decrease in perceived support with age from a broader social environment beyond the family found in our study is consistent with the findings of other studies. A limited social circle is characteristic of parents of children with ASD throughout their life (Dembo, 2022) and is associated with a particular rhythm of life dependent on their children's specific needs, but as they age, their social environment narrows even more markedly compared to other parents, and the risk of isolation increases (Marsack & Perry, 2018; Seltzer et al., 2011). On a positive note, the direct relationship found in our study between maternal age and positive perceptions of the future may indicate increasing optimism due to experience, gaining competence in raising a child with autism, coping with crises and difficult life periods, or accepting one's special situation as it is. This connection may be a reflection of the phenomenon of so-called posttraumatic growth characteristic of parents of children with ASD (Tsioka et al., 2022) identified in a number of studies, positive changes in the psychological state of parents over time due to certain coping strategies and other resources involved.

Thus, each of the three hypotheses was confirmed: differences were found between the main and control subgroups on a number of indicators of psychological well-being, differences in the level of perceived support and willingness to seek help from different categories from the social environment, as well as in the perception of the valence and complexity of the world in different periods of time.

#### Limitations of the study

In conclusion of the discussion of the results, it is necessary to recognize a number of limitations of the research conducted. First, we are talking about the small sample size, which is explained by the high specificity of the respondents, especially representatives of compactly residing forced migrants with autistic children. In this sense, the absence of a number of effects may be due to the insufficient power of the study rather than the real absence of differences between subgroups or relationships between the variables under study. Therefore, the discussion of the results focused mainly on the effects found and the differences between subgroups, and less on the absence of differences. It is

important to emphasize that most studies conducted with parents of children with ASD are conducted in small sample sizes, with the exception of telephone and online surveys, whose value is inevitably reduced compared to individually conducted studies, or long-term studies that span several years. In our case, in order to exclude the influence of the rapidly changing social and geopolitical context on the psychological well-being of the respondents, the study was carried out over a short period of time, almost simultaneously with all participants.

#### Conclusion

This study has made some contribution to understanding the specifics of psychological well-being and available resources in a special category of forced migrants, women whose children suffer from autism spectrum disorder, living in a temporary accommodation center for a long time and staying there indefinitely.

The differences between the two groups of respondents, the main group and the control group, regarding various aspects of psychological well-being and available resources, revealed even with a small sample size, indicate the need to pay special attention to those categories of forced migrants who were at risk before they left their permanent place of residence, including mothers of children with peculiarities of mental development. Additional research is necessary in this area, which will make it possible to develop targeted and effective measures to prevent psychological well-being of this category, including for parents of children with autism spectrum disorder.

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**Alexey M. Bukinich** – data collection and analysis, results discussion, article text preparation.

**Alexandra G. Dolgikh** – research methodology, data collection organization, data collection, results discussion.

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## **Conflict of Interest**

The authors have no conflicts of interest to declare that are relevant to the content of this article.

## **Supplementary Materials**

#### Appendix 1

*Differences between published DASS-21 population means (Zolotareva, 2020) and current study results* 

Study	Depression	Anxiety	Stress
Alfonsson et al., 2017	W = 473,0,	W = 389,0,	W = 556,0,
	p = 0,010	p = 0,226	p < 0,001
Asghari et al., 2008	W = 535,0,	W = 389,0,	Ŵ = 571,0,
	p < 0,001	p = 0,226	p < 0,001
Bottesi et al., 2015	W = 535,0,	W = 446,0,	W = 556,0,
	p < 0,001	p = 0,031	p < 0,001

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Psychological Well-Being and Resources of Mothers of Children with Autism Spectrum Disorder in Forced Migration

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Study	Depression	Anxiety	Stress
Coker et al., 2018	W = 473,0,	W = 292,0,	W = 556,0,
·	p = 0,010	p = 0,711	p < 0,001
Gomez et al., 2014	W = 535,0,	W = 389,0,	W = 571,0,
	p < 0,001	p = 0,226	p < 0,001
Henri, Crawford, 2005	W = 560,0,	W = 474,0,	W = 588,0,
Henn, Clawfold, 2005	p < 0,001	p = 0,009	p < 0,001
	W = 504,0,	W = 389,0,	W = 571,0,
Jafari et al., 2017	p = 0,002	p = 0,226	p < 0,001
	W = 504,0,	W = 368,0,	W = 556,0,
Le et al., 2017	p = 0,002	p = 0,387	p < 0,001
	W = 535,0,	W = 446,0,	W = 588,0,
Lee et al., 2019	p < 0,001	p = 0,031	p < 0,001
	•	•	•
Lu et al., 2018	W = 560,0, p < 0,001	W = 446,0, p = 0,031	W = 602,0, p < 0,001
	•	·	•
Musa et al., 2007	W = 504,0,	W = 338,0,	W = 542,0,
	p = 0,002	p = 0,711	p < 0,001
Nanthakumar et al.,	W = 535,0,	W = 446,0,	W = 571,0,
2017	p < 0,001	p = 0,031	p < 0,001
Notron, 2007	W = 504,0,	W = 389,0,	W = 556,0,
Notion, 2007	p = 0,002	p = 0,226	p < 0,001
O	W = 504,0,	W = 389,0,	W = 571,0,
Osman et al., 2012	p = 0,002	p = 0,226	p < 0,001
Pezirkianidis et al.,	W = 504,0,	W = 389,0,	W = 542,0,
2018	p = 0,002	p = 0,226	p < 0,001
	W = 504,0,	W = 389,0,	W = 571,0,
Szabó, 2010	p = 0,002	p = 0,226	p < 0,001
	•	·	-
Tully et al., 2009	W = 504,0, p = 0,002	W = 389,0, p = 0,226	W = 571,0, p < 0,001
	-		-
Vasconelos-Raposo et	W = 535,0,	W = 389,0,	W = 571,0,
al., 2013	p < 0,001	p = 0,226	p < 0,001

*Note*. Significant differences are bold. Expected p-value level for null hypothesis rejection is corrected by splitting 0,05 by the number of comparisons (0,05/18 = 0,0028).

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