

SHORT COMMUNICATION

WILEY

Autistic children and their parents in the context of war: Preliminary findings

Shir Rozenblat¹ | Tanya Nitzan^{2,3} | Tamar Matz Vaisman¹ | Ronit Shusel⁴ |
Yonat Rum¹ | Michal Ashtamker^{2,3} | Ofer Golan⁵ | Ilan Dinstein^{2,3,6} |
Judah Koller¹ 

¹Seymour Fox School of Education, The Hebrew University of Jerusalem, Jerusalem, Israel

²Psychology Department, Ben Gurion University of the Negev, Beer Sheva, Israel

³Azrieli National Centre for Autism and Neurodevelopment Research, Ben Gurion University of the Negev, Beer Sheva, Israel

⁴ALUT, The National Society for Children and Adults with Autism, Tel Aviv, Israel

⁵Department of Psychology, Faculty of Social Sciences, Bar-Ilan University, Ramat Gan, Israel

⁶Cognitive and Brain Sciences Department, Ben Gurion University of the Negev, Beer Sheva, Israel

Correspondence

Judah Koller.

Email: judah.koller@mail.huji.ac.il

Abstract

While existing literature on the intersection of trauma and autism is limited, emerging evidence suggests heightened vulnerability of autistic children to the psychological consequences of traumatic events, including an elevated risk of developing posttraumatic stress disorder (PTSD). Additionally, parents of autistic children often experience elevated levels of negative emotional states, compared to parents of typically developing children. This study investigates the impact of terrorism and war on autistic and non-autistic children and their parents, presenting preliminary results from the initial data collection phase of a year-long longitudinal investigation of the experience of autistic children and their parents following Hamas' 7 October 2023 attack on Israel. Data gathered within 30 days of the initial attack reveal that both autistic and non-autistic children exhibited clinically significant post-traumatic stress symptoms, with autistic children demonstrating a more pronounced manifestation. Moreover, parents of autistic children reported significantly higher levels of depression, anxiety, and stress in the aftermath of the events, compared to an independent cohort of parents of autistic children assessed prior to the crisis. These results underscore the heightened susceptibility of autistic children to post-traumatic stress and the unique challenges confronted by their parents during times of conflict. The study highlights the imperative for tailored support services for autistic children and their families amidst traumatic incidents and stresses the need for further research in comparable contexts globally.

KEYWORDS

autism, parenting, trauma, war

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1 | INTRODUCTION

Autism is a neurodevelopmental condition characterised by impairment in social communication and interaction, as well as restricted and repetitive behaviours, interests, or activities (American Psychiatric Association, 2013). While literature on trauma and autism is scarce, findings show that autistic children are more vulnerable to the psychological effects of traumatic events, showing increased risk for developing posttraumatic stress compared to the general population (Kerns et al., 2015). Moreover, research shows that parents of autistic children experience higher levels of stress, depression, anxiety, and health-related problems compared to parents of neurotypically developing children (Enea & Rusu, 2020). The current study aimed to assess the influences of the October 7th terror attack in Israel and the ensuing war on Israeli autistic children and their parents, compared to non-autistic children and their parents. Here, we present preliminary results from the first data collection point of a year-long study.

1.1 | Autistic and non-autistic children in the context of war

Modern warfare, which targets civilian populations and lacks defined battlefields, significantly impacts the lives of children, with exposure to war and terror-related traumatic events detrimentally impacting children's mental health. Along with an increase in post-traumatic symptoms and post-traumatic stress disorders (PTSD), children exposed to such conflicts show elevated behavioural and emotional problems (e.g., depression, anxiety), sleep disturbances, difficulties with play, and psychosomatic symptoms (Attanayake et al., 2009; Dimitry, 2012; Slone & Mann, 2016). Within the geopolitical conflict in Israel, it has been shown that children living in Southern Israel, an area exposed to prolonged security threats and rocket attacks, experience greater emotional and behavioural problems than those in central Israel (Feldman et al., 2013; Shechory Bitton & Laufer, 2018). While limited research has examined differences between autistic and typically developing children in such contexts, evidence suggests that autistic children are more susceptible to short and long-term negative health outcomes, and that families of children with disabilities (including autism) show lower resilience in the face of adversity (Dodds, 2021; Mann et al., 2021; Stough et al., 2017).

1.2 | Parenting and war

Parenting in the context of terrorism and war presents unique challenges, with the experience of conflict impacting parental mental health (Conway et al., 2013) and parenting behaviour (Eltanamy et al., 2021). Following Russia's attack on Ukraine in February 2022, parents reported higher levels of anxiety, depression, and loneliness, with greater mental health deterioration in parents of children with emotional or behavioural problems (Hyland et al., 2023). These

negative changes in parental mental health were associated with increased risk of child PTSD (Martsenkovskyi et al., 2023). Similarly, in the Israeli–Palestinian conflict, parental posttraumatic stress was associated with neurotypical children's emotional, behavioural, and social problems (Nuttman-Shwartz, 2023), and with coercive parenting practices which, in turn, associated with child externalising problems (Zamir et al., 2020).

Independent of war, parents of autistic children show higher levels of parenting stress, anxiety, and depression (Hayes & Watson, 2013; Stein et al., 2011), suggesting that autistic children and their parents may be more vulnerable to developing mental health problems in times of conflict than typically developing children and their parents. Given the above, the Hamas attacks of 7 October 2023 on Israel, the ensuing war, and consequent changes in daily life present a unique challenge to autistic children and their families in Israel.

1.3 | The current study

In the current study, we aim to examine differences between autistic and non-autistic children and their parents in response to the terror attack of October 7th and the ensuing war. We focus here on children's post-traumatic stress symptoms and parental mental health. Given autistic children's increased vulnerability to post-traumatic stress (e.g., Kerns et al., 2015), we hypothesise that autistic children will show greater levels of such stress than non-autistic children. In addition, due to the heightened negative emotional states experienced by parents of autistic children compared to parents of non-autistic children (e.g., Enea & Rusu, 2020), we hypothesise that parents of autistic children will experience greater levels of depression, anxiety and stress after the October 7th attack, compared to parents of non-autistic children.

Furthermore, we aim to examine potential differences in the mental health of parents of autistic children before and after 7 October 2023, using an independent cohort from a study conducted prior to the outbreak of the war. Due to the unique parenting challenges presented by terrorism and war (e.g., Conway et al., 2013; Hyland et al., 2023), we hypothesise that parents of autistic children will report greater negative emotional states post October 7th than prior to 7 October 2023.

We present preliminary findings from the first data collection point of a 1-year longitudinal study. The current data was collected within 30-days following 7 October 2023.

2 | METHODS

2.1 | Participants

Participants were parents of autistic and non-autistic children ages 3–17. The link to the online study was disseminated through social media and online platforms by the Autism Child and Family Lab at the

Hebrew University, the Azrieli National Centre for Autism and Neurodevelopment Research at Ben Gurion University, and by the Israeli Society for Autistic Children and Adults (ALUT). One hundred and thirty-nine parents elected to participate, 46 participants were removed due to incomplete measures (completed 33% or less of the measures), and one participant was removed from the final sample due to the child having a previous diagnosis of PTSD. The final sample included 57 parents (75.4% mothers) who reported having an autistic child (56.14% males; mean age = 7.02 years, SD = 3.7) and 35 parents (74.3% mothers) with a non-autistic child (45.71% males; mean age = 7.12, SD = 3.65). Further sociodemographic characteristics are shown in Table 1.

Available data on parental mental health from a distinct pre-war study of parents of autistic children recruited through the Azrieli National Centre for Autism and Neurodevelopment Research ($N = 55$; 78.18% males; mean age = 4.5, SD = 1.02) was used to examine possible pre-post war effects specific to the autistic population.

2.2 | Procedure

The study was approved by the relevant ethics committee and then advertised via social media and professional networks. Through an online questionnaire distribution platform (Qualtrics XM), participants were first provided information about the study's topic and duration, and given the research team's contact information. They were then asked to provide written informed consent through the online platform, after which a series of online measures was administered.

2.3 | Measures

2.3.1 | Demographic questionnaire

Parents completed a demographic questionnaire, which provided information regarding the parent's age, gender, family status, and city of residence, as well as the child's age, gender, diagnoses, support needs, educational setting, and pharmacological treatments, services and therapies received prior to the outbreak of the war. Parents with more than one child were instructed to report on only one child throughout the study. Information on siblings was collected separately at the second time point of the longitudinal study. Demographic characteristics of the sample are shown in Table 1.

2.3.2 | Non-standardized questionnaire assessing the impact of the October 7th attack and ensuing war

Parents were asked several questions aimed at understanding the family's level of exposure to the terrorist attack and its impact on the child's daily life. Questions assessed if the family was displaced, if

anyone in their immediate surroundings (i.e., close family, neighbours, or friends) was killed, kidnapped, reported missing, or is currently serving in the military (active duty or reserves), if the child's educational setting or other services were influenced (e.g., school shut down or functioning remotely, limited or no contact with child's regular therapists), if the parent's routine changed, and if the family's financial status was influenced (see Appendix 1). Relevant data on the impact of the Oct. 7th attack and the ensuing war on the sample are shown in Table 2.

2.3.3 | Child and Adolescent Trauma Screen (CATS; Sachser et al., 2017)

The CATS is a caregiver-report screening questionnaire for post-traumatic stress symptoms in preschool and school-age children and based on DSM-5 criteria, including three sections: a 15-item structured potential traumatic events checklist, an assessment of post-traumatic stress symptoms, and one of psychosocial functioning. Given the context of the study, a potential traumatic event was assumed, and parents were asked to report on the child's symptoms by rating 16 items for preschool children (ages 3–6) and 20 items for school-age children (i.e., ages 7–17) on a 4-point Likert-type scale ranging from 0 = 'Never' to 3 = 'Almost always', and on their child's psychosocial functioning by reporting yes/no on five items assessing whether the symptoms interfere with key areas of functioning (social, school, hobbies, family relationships, general happiness). A total symptoms score is calculated by summing the posttraumatic stress items (range 0–48 for preschool children, 0–60 for school-age children), with a recommended clinical cutoff score of 15 for preschoolers (Redican et al., 2023) and 21 for school-age children (Sachser et al., 2022). The CATS has been shown to have good internal consistency, with Cronbach alpha coefficients of $\alpha = 0.88$ – 0.94 for the school-age version and $\alpha = 0.92$ for the preschool version (Sachser et al., 2017). Although the CATS has yet to be examined specifically in the autistic population and given the lacuna in trauma screening tools specific to autistic children (Haruvi-Lamdan et al., 2018), the CATS caregiver report was deemed appropriate for the current study. In the current sample, internal consistency was $\alpha = 0.90$ for the school-age children version and $\alpha = 0.91$ for the preschool version.

2.3.4 | The Depression Anxiety and Stress Scale 21 (DASS-21; Henry & Crawford, 2005)

The DASS-21 is a short form of the 42-item self-report measure of depression, anxiety, and stress (DASS; Akin & Çetin, 2007). It consists of three scales, each containing seven items: (1) Depression (assessing dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia), (2) Anxiety (assessing autonomic arousal, skeletal muscle effects, situational anxiety, and experience of anxious affect), and (3) Stress

TABLE 1 Demographic characteristics of autistic and non-autistic samples.

	Autism (<i>n</i> = 57) <i>M</i> (<i>SD</i>)	Non-autistic (<i>n</i> = 35) <i>M</i> (<i>SD</i>)
Child age ^a	7.02 (3.7)	7.12 (3.65)
Parent age ^a	39.8 (7.37)	40 (7.46)
	% (<i>n</i>)	% (<i>n</i>)
Child gender		
Male	56.14 (32)	45.71 (16)
Female	22.81 (13)	34.29 (12)
Missing	21.05 (12)	20 (7)
Parent gender		
Male	5.26 (3)	14.29 (5)
Female	75.44 (43)	74.29 (26)
Missing	19.3 (11)	11.43 (4)
Child's daily support needs (autism only)		
Low	21.1 (12)	
Medium	43.86 (25)	
High	17.54 (10)	
Missing	17.54 (10)	
Parent marital status		
Married	73.68 (42)	88.57 (31)
Divorced	5.26 (3)	
Single	3.5 (2)	
Missing	17.54 (10)	8.57 (3)
Child's comorbid conditions		
ADHD	19.3 (11)	17.14 (6)
Anxiety	3.51 (2)	
OCD	1.75 (1)	
General developmental delay	1.75 (1)	
Language delay		2.86 (1)
ODD	1.75 (1)	
Dyslexia		2.86 (1)
Vision impairment	1.75 (1)	
Epilepsy	1.75 (1)	
Other medical conditions	7.02 (4)	
None	50.88 (29)	68.57 (24)
Missing	17.54 (10)	8.57 (3)
Current living location in Israel		
Israel-Gaza border area	8.77 (5)	8.57 (3)
Negev and south	14.04 (8)	25.71 (9)
Center and Sharon regions	28.07 (16)	22.86 (8)
Jerusalem and surroundings	15.79 (9)	22.86 (8)
North	10.53 (6)	2.86 (1)
Missing	22.81 (13)	17.14 (6)

TABLE 1 (Continued)

	% (n)	% (n)
Educational settings		
Special education	52.63 (30)	5.71 (2)
Inclusion with aid	21.05 (12)	
Inclusion without aid	5.26 (3)	
Traditional		74.29 (26)
Other	3.51 (2)	8.57 (3)
Missing	17.54 (10)	11.43 (4)

^aData on parent and child age variables missing for 19.3% ($n = 11$) of autistic sample and 8.57% ($n = 3$) of non-autistic sample.

TABLE 2 Impact of Oct. 7th attack and ensuing war on autistic and non-autistic samples.

	Autism ($n = 57$) % (n)	Non-autistic ($n = 35$) % (n)
Displaced ^a	5.26 (3)	2.86 (1)
Immediate surroundings impact		
Killed in Oct 7th attack ^a	19.3 (11)	20 (7)
Kidnapped ^a	7.02 (4)	14.29 (5)
Reported missing ^b	1.75 (1)	2.86 (1)
Serving in military (active duty or reserves) ^c	43.86 (25)	68.57 (24)
Child not currently in school ^c	22.81 (13)	20 (7)
Treatment services influenced ^d	47.37 (27)	
Impact on financial status		
Minimal	14.04 (8)	34.29 (12)
Moderate	24.56 (14)	8.57 (3)
Severe	5.26 (3)	2.86 (1)
None	33.33 (19)	37.14 (13)
Missing	22.81 (13)	17.14 (6)

^aData on variable missing for 19.29% ($n = 11$) of autistic sample and 11.43% ($n = 4$) of non-autistic sample.

^bData on variable missing for 24.56% ($n = 14$) of autistic sample and 14.29% ($n = 5$) of non-autistic sample.

^cData on variable missing for 21.05% ($n = 12$) of autistic sample and 11.43% ($n = 4$) of non-autistic sample.

^dQuestion only presented to autistic sample, data on variable missing for 22.81% ($n = 13$).

(assessing difficulty relaxing, nervous arousal, and being easily upset/irritable/over-reactive and impatient). Parents were asked to self-report on their mental health by rating the items on a 4-point Likert type scales ranging from 0 = 'Does not apply to me' to 3 = 'Applied to me very much or most of the time'. A total score for each scale is calculated by summing the scores of the relevant items (range 0–21 for each scale). The DASS-21 offers cut-off severity scores (i.e., normal, mild, moderate, severe, extremely severe) for each scale. A total score of negative emotional states can also be calculated by summing all 21 items (range 0–63). The DASS-21 has been shown to have good internal consistency, with Cronbach alpha

coefficients of $\alpha = 0.88$ for Depression, 0.82 for Anxiety, 0.90 for Stress, and 0.93 for Total score (Henry & Crawford, 2005). In the current sample, internal consistency was $\alpha = 0.86$ for Depression, $\alpha = 0.85$ for Anxiety, $\alpha = 0.91$ for Stress, and $\alpha = 0.94$ for Total score.

2.4 | Data analysis

Analyses were conducted in R (version 4.0.1). Sociodemographic characteristics of the sample were examined first, together with the

non-standardized questionnaire assessing the impact of the Oct. 7th attack and the ensuing war. Pearson correlations between study variables, child age, and parent age were then examined. Independent samples *t*-tests were conducted to compare differences between autistic and non-autistic samples regarding child posttraumatic stress, and parental depression, anxiety, and stress. Additional independent samples *t*-tests were conducted to compare differences in parental mental health (i.e., depression, anxiety, stress) in parents of autistic children before and after the Oct. 7th terrorist attack, using the pre-war cohort recruited through an independent study. Cohen's *d* was calculated to assess effect sizes (Cohen, 1977).

Given the sensitivity of trauma research and in line with ethical guidelines, participants were notified that they could skip any question that made them feel uncomfortable and withdraw from the study at any point, resulting in significant missing data across measures, which was dealt with through pairwise deletion. Thus, final sample sizes differ across analyses.

3 | RESULTS

Among autistic and non-autistic children, child age and posttraumatic stress were positively correlated, as were parent age and child posttraumatic stress. Child posttraumatic stress positively correlated with parental depression, anxiety, and stress. In addition, parental depression positively correlated with parental anxiety, as well as with parental stress. Parental anxiety positively correlated with parental stress. No significant correlations were found between child or parent age and parental depression, anxiety, or stress (Figure 1).

To test differences between autistic and non-autistic children in posttraumatic stress, parental depression, anxiety and stress, we conducted independent samples *t*-tests (Table 3, Figure 2). Given the differences between the preschool and school-age versions of the CATS, these age groups were examined separately. Autistic preschoolers showed significantly higher posttraumatic stress, compared to non-autistic preschoolers while autistic school-age children did not

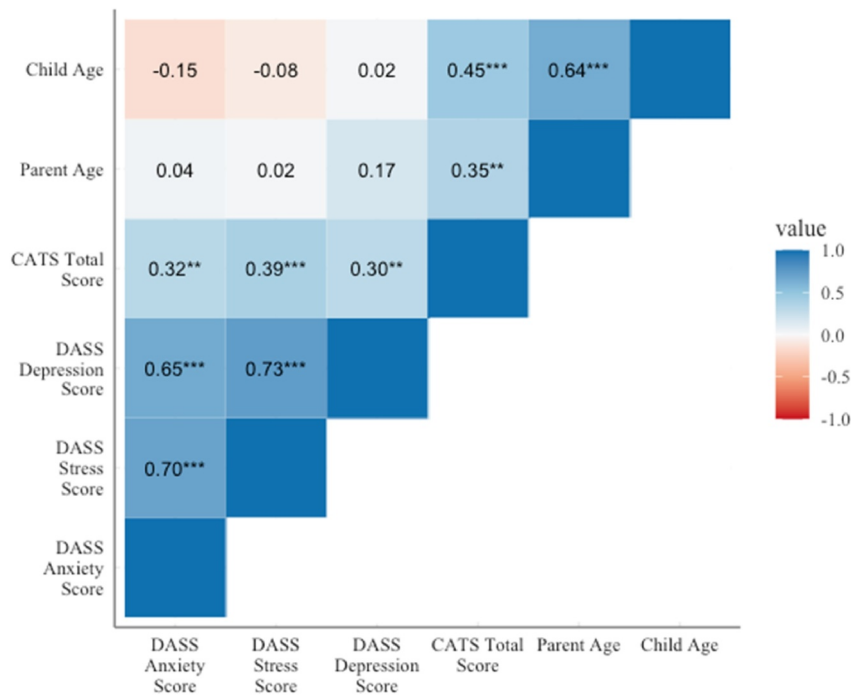


FIGURE 1 Correlation matrix of study variables. ** $p < 0.01$; *** $p < 0.001$. CATS, Child and Adolescent Trauma Screen; DASS-21, The Depression Anxiety and Stress Scale 21.

	Autistic		Non-autistic		<i>t</i>	<i>df</i>	<i>p</i> value	Cohen's <i>d</i> (95% CI)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
CATS total score								
Preschool children	29.5	10.3	23.3	5.61	2.37	33.7	<0.05	0.72 (0.02, 1.42)
School-age children	39.1	12.7	33.1	10.8	1.61	41	0.12	
DASS-21 depression scale	15.3	5.12	13.7	4.44	1.5	84	0.14	
DASS-21 anxiety scale	13.8	5.24	9.91	3.29	4.2	83.9	<0.001	0.84 (0.39, 1.3)
DASS-21 stress scale	19.1	5.71	16.1	4.79	2.52	84	0.01	0.56 (0.11, 1.0)

Abbreviations: CATS, Child and Adolescent Trauma Screen; DASS-21, The Depression Anxiety and Stress Scale 21.

TABLE 3 Comparing levels of child posttraumatic stress, and parental depression, anxiety and stress, between autistic and non-autistic samples.

show significantly higher posttraumatic stress, as compared to non-autistic school-age children. In all groups, the majority of participants reported trauma symptoms above the recommended clinical cut-off for PTSD on the CATS (81.48% of autistic preschoolers, 88.24% of non-autistic preschoolers, 83.3% of autistic school-age children, and 89.47% of non-autistic school-age children scored above the clinical cut-off). Parents of autistic children reported significantly higher levels of anxiety and stress than parents of non-autistic children, though no significant differences were found between parents of autistic children and parents of non-autistic children in reported levels of depression. Significantly, when the variable 'exposure to the event', measured by if the participant reported any impact to their immediate surroundings, was added to these analyses, it did not alter the results.

Parents of autistic children in the current sample exhibited significantly higher levels of depression, anxiety, and stress relative to parents of autistic children who participated in a similar study

before the October 7th terrorist attack (Table 4, Figure 3). Figure 4 shows the distribution of depression, anxiety and stress levels across all samples examined in the current study. While the majority of participants in the pre-October 7th sample reported normal levels of depression, anxiety, and stress, the majority of participants in the post-October 7th samples reported extremely severe levels in all three domains.

4 | DISCUSSION

The current study elucidates the experiences of families of autistic and non-autistic children in Israel following the 7 October 2023 terror attack and the ensuing war. In the 30 days following the attack, parents reported that both autistic and non-autistic children showed clinically significant posttraumatic stress symptoms, scoring above the recommended clinical cutoff on the CATS. Autistic children

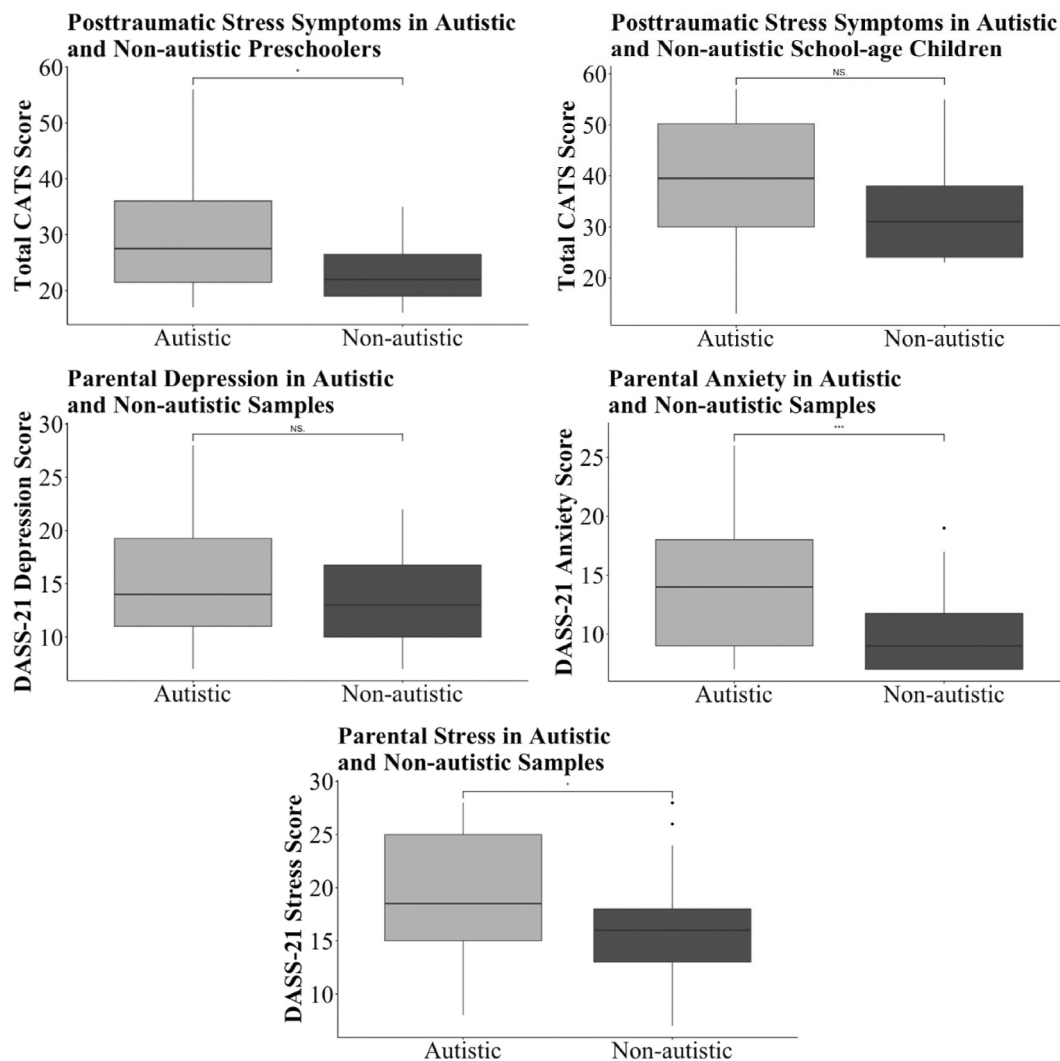


FIGURE 2 Comparison of child posttraumatic stress symptoms and parental mental health (depression, anxiety, stress) in autistic and non-autistic samples. * $p < 0.05$; *** $p < 0.001$. CATS, Child and Adolescent Trauma Screen; DASS-21, The Depression Anxiety and Stress Scale 21; NS, Not significant.

TABLE 4 Reported levels of parental depression, anxiety and stress in two independent cohorts: One of parents of autistic children before October 7th, and another during the 30 days following the October 7th terrorist attack.

	Pre-Oct 7th		Post-Oct 7th		<i>t</i>	<i>df</i>	<i>p</i> value	Cohen's <i>d</i> (95% CI)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
DASS-21 depression scale	2.93	3.9	15.29	5.12	13.99	95.25	<0.001	2.73 (2.19, 3.26)
DASS-21 anxiety scale	1.98	3.06	13.77	5.24	14.11	81.2	<0.001	2.77 (2.23, 3.3)
DASS-21 stress scale	5.31	4.77	19.08	5.71	13.49	99.58	<0.001	2.62 (2.1, 3.15)

Abbreviation: DASS-21, The Depression Anxiety and Stress Scale 21.

seem to be experiencing more posttraumatic stress, and their parents are reporting more pronounced negative emotional states, findings which should be of concern to the public health care system and treatment services in Israel. Particularly noteworthy is that, compared to a cohort of parents of autistic children prior to 7 October 2023, parents of autistic children reported alarmingly high levels of depression, anxiety, and stress, at levels 2-4 times higher than what was reported before the war.

These findings are synchronous with the literature pointing to the vulnerability of autistic children to posttraumatic stress (Dodds, 2021; Kerns et al., 2015) and the unique challenges facing parents of autistic children (Hayes & Watson, 2013; Stein et al., 2011). Different aspects of autism may mediate this link, such as autistic children's dependence on routine and predictability, an aspect inherently impacted by the nature of terrorist attacks and modern warfare, suggesting that autistic children may benefit from specialised services after experiencing traumatic events. Furthermore, while parenting a child during war is challenging for all parents (e.g., Conway et al., 2013; Eltanamy et al., 2021; Hyland et al., 2023), these findings strengthen the notion that parents of autistic children are more vulnerable to negative impacts on their mental health and wellbeing (Hyland et al., 2023; Stough et al., 2017).

To the best of the research team's knowledge, this is the first study to examine the impact of war on autistic children. While studies have looked at children with disabilities (Stough et al., 2017), or with emotional and behavioural problems (Hyland et al., 2023), the unique characteristics of autistic children warrants this attention. The results of the current study point to a critical need to support all children and parents following the events of October 7th, and highlight the need of autistic children and their families, for specialised care and individualised support services.

While alarming, these results should be interpreted in the appropriate context. The sample size and characteristics of the sample limit the generalisability of the findings. For instance, highly impacted populations, such as families living along the Israel- Gaza border and along the Israel-Lebanon border, are under-represented in the current sample. Given the nature of recruitment to the current study, this is understandable, as in the current circumstances (i.e., displacement, ongoing security threats, disruption of family routine), these populations may be less likely to encounter and respond to recruitment efforts. Future work should strive to target these populations to assess their reactions to the traumatic events

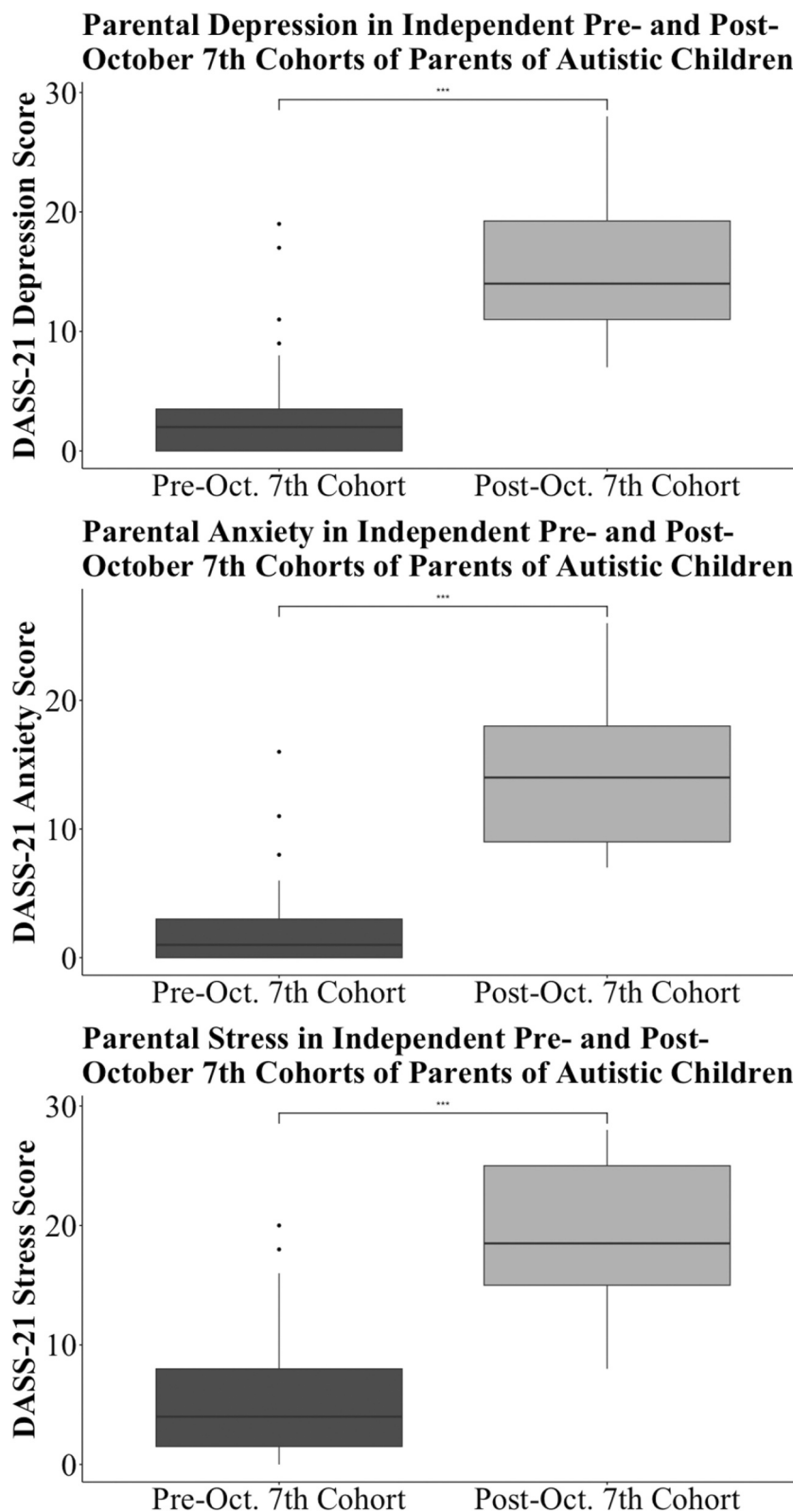
and to evaluate the effect of level of exposure more accurately on child and parent wellbeing.

Similarly, due to the circumstances under which the study was conducted, the recruitment methods and caregiver-report online questionnaire format chosen to reach a wide population in a time-efficient manner, it was not possible to verify child's diagnoses or collect data pre-7 October 2023. As such, pre-October 7th comparisons showing the magnitude of the differences between these two groups and possible changes in this magnitude are not plausible, and therefore the differences between autistic and non-autistic children and parents should be interpreted with caution. The cross-sectional analyses shown here are the first step of a longitudinal 1-year study assessing the ongoing effects of the terrorist attack and ensuring war on children and parents in Israel.

Additionally, due to the sensitive nature of the study and in line with ethical guidelines, a significant amount of data is missing. A larger sample, both of autistic and non-autistic children, would allow for more nuanced, properly powered statistical analyses. Future studies would also benefit from child self-report measures and clinical assessments of autism diagnosis. Moreover, reported differences between parents of autistic children before and after October 7th should be interpreted with caution, as these are independent cohorts, sample characteristics may differ and given the limited information available on the pre-October 7th sample, comparisons were not possible. Finally, the research team recognises the impact of the Israeli-Palestinian conflict and the ongoing war on children and parents on both sides of the conflict. While examining the influence of the conflict and recent events on Gazan civilians is warranted (e.g., Alibwaini & Thabet, 2019; Punamäki et al., 2018), it is beyond our capacity and therefore beyond the scope of the current research. We hypothesise, though, that the elevated negative impact of war on autistic children and their families compared to the general population is not unique to Israeli society, and tailored support for these populations is needed in all comparable contexts.

Future directions of the research team include a 1-year longitudinal perspective on the ongoing effects of the war, in which participants of the current study will be contacted bimonthly and asked to report on child posttraumatic stress symptoms, parental mental health, and any relevant changes in demographic characteristics. Information on siblings, parent posttraumatic stress, further questions assessing the impact of the war, and qualitative data on participant's experiences will also be collected and analysed. Furthermore, the

FIGURE 3 Comparison of mental-health (depression, anxiety, stress) in a sample of parents of autistic children pre-7 Oct. 2023 ($N = 55$) and an independent cohort post-7 Oct. 2023 ($N = 57$). *** $p < 0.001$. DASS-21, The Depression Anxiety and Stress Scale 21.



team will conduct a larger mixed-methods, cross-sectional study, aimed at reaching a wider population of both autistic and non-autistic children and their parents, in both evacuated and not evacuated communities, to better assess the experiences and needs of these populations in these difficult times.

5 | CONCLUSIONS

While these preliminary findings highlight the intense need for immediate and ongoing mental health support of all parents and children in Israel, they point to an inherent vulnerability among autistic

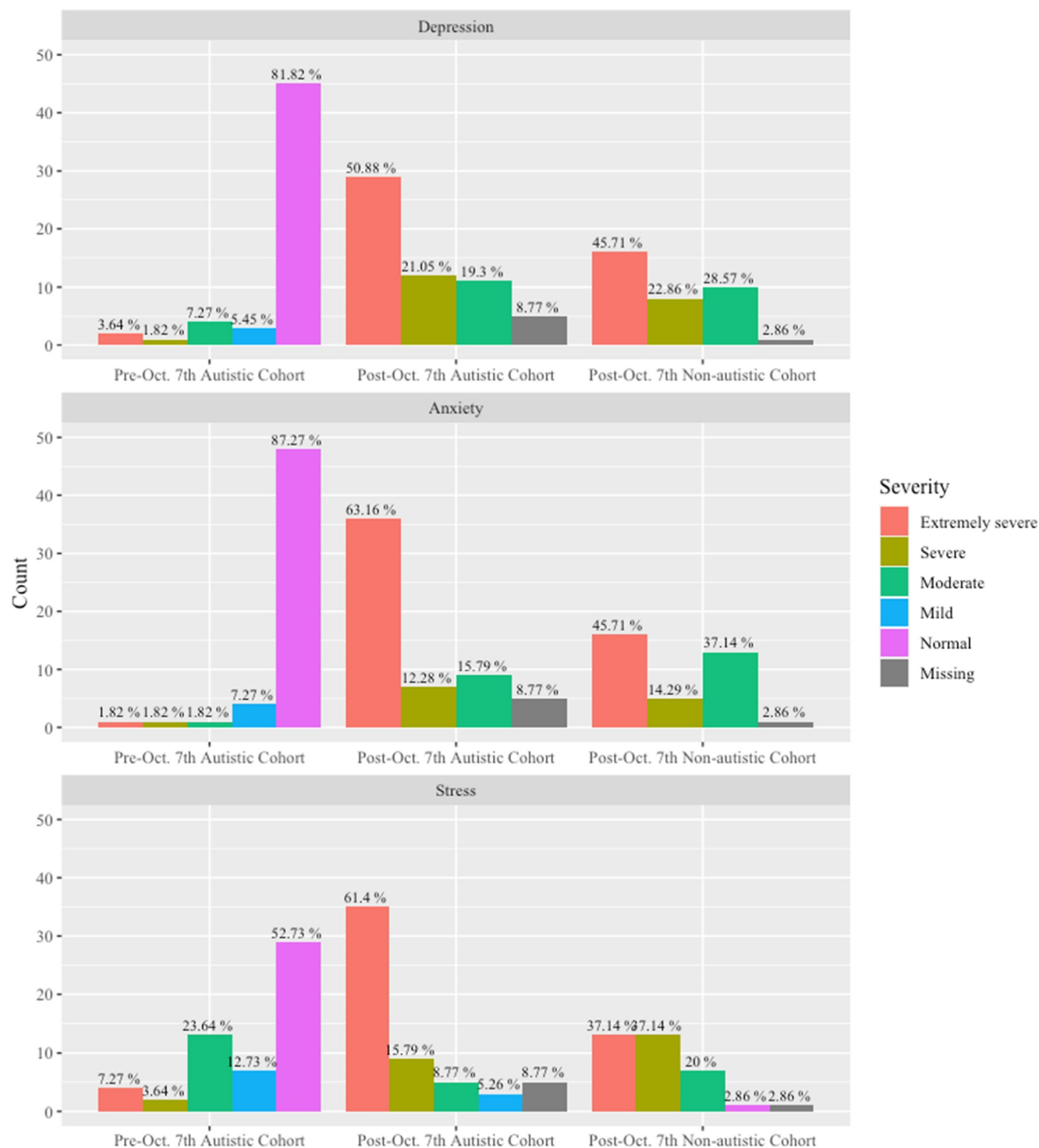


FIGURE 4 Distribution of depression, anxiety and stress severity levels reported on the DASS-21, across independent autistic cohorts (pre, $N = 55$, and post, $N = 57$, Oct. 7th) and a non-autistic post-Oct. 7th cohort ($N = 35$). DASS-21, The Depression Anxiety and Stress Scale 21.

children and their parents, which warrants targeted and additional support. This is also an indicator that in similar conflicts worldwide, the global community must take into account the specific needs of this population.

ACKNOWLEDGEMENTS

The authors acknowledge Erez Milstein for his statistical guidance, Shahar Ophir for his assistance in manuscript preparation, and participating families.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Judah Koller  <https://orcid.org/0000-0001-9342-9751>

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How to cite this article: Rozenblat, S., Nitzan, T., Matz Vaisman, T., Shusel, R., Rum, Y., Ashtamker, M., Golan, O., Dinstein, I., & Koller, J. (2024). Autistic children and their parents in the context of war: Preliminary findings. *Stress and Health*, 40(5), e3442. <https://doi.org/10.1002/smi.3442>

APPENDIX 1

NON-STANDARDIZED QUESTIONNAIRE ASSESSING THE IMPACT OF THE OCT. 7TH ATTACK AND ENSUING WAR

1. Have you been evicted from your home? Yes/no
2. If yes,
 - a. After how long?
 - b. What was the reason for the evacuation?
 - c. Where did you evacuate to? (friends, relatives, hotel, area in Israel, etc.)
3. Was anyone in your immediate surroundings killed on October 7th or in the ensuing war? Yes/no
 - a. If yes, what is the degree of closeness: Immediate family/distant family/friends
4. Was anyone in your immediate surroundings abducted? Yes/no
 - a. If yes, what is the degree of closeness: Immediate family/distant family/friends
5. Was someone in your immediate surroundings classified as missing? Yes/no
 - a. If yes, what is the degree of closeness: Immediate family/distant family/friends
6. Do you have relatives who serve in the army or who were recruited into the reserves? Yes/no
7. Is your child currently in their regular school/educational setting? Yes/no
8. *Do you have contact with one or more of the professionals who treated your child before October 7th? Yes/no
 - a. What is the nature of your contact? Phone calls\WhatsApp messages\treatment as usual\Other: _____
9. Who takes care of your child most of the day?
10. Since the beginning of the war, has at least one parent stayed at home regularly. Yes/no/partially

Consequences of the war on the family

11. Was your family's income impacted as a result of the war? Severely (decrease of more than 40%)/moderately (decrease of 20%–40%)/mildly (decrease of less than 20%)/no impact

12. How would you define the change in the following areas during the war on a scale of 1–9 (1-greatly improved ... 5-remained the same ... 9-greatly impaired)
 - a. Family routine
 - b. Marital relationship
 - c. Mood/emotional state of the parents
 - d. Concerns for the future
 - e. Parents' sleep quality
 - f. The amount of sleep the parents get
 - g. Shared interaction time with the children
 - h. Quality/degree of enjoyment of the time with the children
 - i. Social interaction, community belonging/involvement

Consequences of the war on the child

13. How would you rate the change in your child in the following areas since October 7th on a scale of 1–9 (1-greatly improved ... 5-remained the same ... 9-greatly impaired)?
 - a. Daily functioning (e.g., brushing teeth, going to the bathroom)
 - b. Eating and nutrition
 - c. The amount of sleep during the night
 - d. The quality of sleep during the night
 - e. Anxiety and fears
 - f. Changes in arousal levels
 - g. Frequency and intensity of tantrums and outbursts
 - h. Sensory regulation (dealing with noises, touch, etc.)
 - i. Verbal communication (requests and appeals to others)
 - j. Non-verbal communication such as eye contact and use of gestures
 - k. Joint game
14. *Since October 7th, how would you define your child's engagement in the following restricted and repetitive behaviours on a scale of 1–6 (1-much less ... 3-similar to usual ... 6-much more than usual)?
 - a. Repetitive sensory and motor behaviours (e.g., hand flapping, repetitive playing)
 - b. Adherence to routine and difficulties with change (e.g., performing rituals, sticking to a certain routine, resistance to change)
 - c. Engaging in interests that are non-normative in their intensity or focus
15. *To what extent do you estimate that engaging in these behaviours aids your child in functioning on a daily basis during this period on a scale of 1–5 (1-not helpful at all ... 3-no different than before October 7th ... 5-very helpful)?

Support

16. So far, how often have you received information about your child's care through social media, such as WhatsApp and

- Facebook? Dozens of times a day/several times a day/once a day/several times a week/rarely/none at all
17. *So far, how often have you received information through social media, such as WhatsApp and Facebook, about your child's care specific to his support needs due to his diagnosis? Dozens of times a day/several times a day/once a day/several times a week/rarely/none at all
 18. To what extent did the information from social media help you deal with the challenges of this time on a scale of 1–10 (1-helped a lot ... 5-helped a little ... 10-made coping difficult)?
 19. Do you have any support that you are currently receiving for child care? Yes/no
 - a. If yes, what kind of support? A relative who is with the child/financial assistance/volunteers/other, please specify: _____
 20. Is there any other support (online or face-to-face) that could help you during these times? _____
 21. **Which of the following has helped your child cope emotionally during these times: (Mark all relevant answers)
 - a. Performing physical activity
 - b. Watching TV series/programs that are not related to the situation
 - c. Social interaction
 - d. Telephone calls with support centres
 - e. Listening to music
 - f. Reading
 - g. Engaging in a creative activity
 - h. Meditation
 - i. Other: _____
 22. Which of the following has helped you as a parent in coping emotionally with the situation: (Mark all relevant answers)
 - a. Performing physical activity
 - b. Watching TV series/programs that are not related to the situation
 - c. Social interaction
 - d. Telephone calls with support centres
 - e. Listening to music
 - f. Reading
 - g. Engaging in a creative activity
 - h. Meditation
 - i. Other: _____
 23. Since the outbreak of the war, what has helped you the most in coping mentally, emotionally, and as a family?
 24. Since the outbreak of the war, what has been most difficult for you and your child?
- *Question displayed to parents of autistic children.
 **Question displayed to parents of children ages 7–17.