



Understanding the impact of extreme terrorist events on evacuees and non-evacuees: A study on child aggression and social problems

Mally Shechory-Bitton^a, Avital Laufer^b, Liza Zvi^{a,*}

^a Department of Criminology, Ariel University, Ariel, Israel

^b Behavioral Sciences, Netanya Academic College, Israel

ARTICLE INFO

Keywords:

Terrorism
Evacuees
Child aggression and social problems
PTS
Functioning
Resilience
Trust in authorities

ABSTRACT

This study aimed to examine differences between evacuee and non-evacuee parents regarding their experiences following the October 7th terror attack in Israel, and to assess how parental factors—such as exposure, PTS, functioning, resilience, and trust in authorities—were related to perceived behavioral problems in children. The study included 221 evacuee parents and 262 non-evacuee parents, recruited online through a professional survey company. We hypothesized that perceived child aggression and social problems would increase following the terrorist events, with evacuee parents reporting a greater increase in symptoms due to heightened instability and stress. Additionally, we expected higher levels of parental exposure, PTS, impaired functioning, lower resilience, and lower trust in authorities to be associated with increased child aggression and social problems. Results indicated that evacuee parents reported significantly more perceived aggression and social problems in their children, along with lower functioning, higher PTS, and lower trust in authorities. However, regression analysis revealed that higher parental exposure, PTS, and lower functioning were associated with increased perceived child aggression and social problems, regardless of evacuee status. These findings highlight the need for targeted interventions to support evacuated families, rebuild trust in authorities, and strengthen community resilience to mitigate long-term impacts.

Extreme terrorist events pose significant challenges to affected communities, impacting individuals' physical, psychological, and social well-being (Colombo et al., 2022; Shechory Bitton & Cohen Louck, 2021). The October 7th 2023 Hamas attack on Israel's southern territory has been the deadliest in the history of the State of Israel, making it the greatest Jewish tragedy since the Holocaust (Meir Amit Intelligence & Terrorism Information Center, 2023; Hasson-Ohayon & Horesh, 2024; Setoff, 2023). On October 7th, approximately 3000 terrorists invaded communities in the south of Israel, resulting in the deaths of approximately 1200 civilians and the kidnapping of 240 others, including infants and the elderly. The attackers committed numerous atrocities, exposing all Israeli citizens to an unprecedented level of violence and trauma and marking a significant national tragedy (Groweiss et al., 2024; Levi-Belz et al., 2024).

As a result of the attacks, 70,000 Israelis were forced to flee their homes in southern Israel, with authorities quickly arranging accommodations for evacuees in hotels, youth hostels, and kibbutzim. Simultaneously, Hezbollah attacked the north of Israel, prompting the evacuation of all residents near the northern border as well. In total,

over 300,000 residents were relocated to safer locations within the country. The evacuees fled without having the opportunity to take personal belongings, and most could not return due to the ongoing threat of attacks and missiles.

By January 2024, when the data for the current study were collected, these individuals had been evacuated for over three months and were expected to stay in shelters, with no return date. It is important to note that the evacuation following the October 7th attacks was conducted swiftly, with most residents being evacuated within a very short period. Therefore, this study primarily focuses on post-evacuation trauma, rather than a pre-evacuation phase, as the evacuees were exposed to both direct violence and the sudden displacement that followed.

Previous studies have indicated that military violence and terrorist events affect children's functioning and well-being and are associated with reported increases in behavioral problems (e.g., Baratz, 2023; Comer et al., 2016; Slone & Peer, 2021). For example, Laufer and Shechory Bitton (2020) found that children exposed to terrorism-related events showed higher rates of aggressive behavior than did their non-exposed counterparts. Similarly, Comer et al. (2016) demonstrated

* Corresponding author.

E-mail addresses: mally@bezeqint.net, mallys@ariel.ac.il (M. Shechory-Bitton), laufea@netanya.ac.il (A. Laufer), lisaz@ariel.ac.il (L. Zvi).

a significant association between exposure to terrorism and various psychological and behavioral problems, including aggression and conduct disorders.

Being evacuated from one's home and community disrupts social networks and support systems (Slone & Peer, 2021), which are especially important in the aftermath of traumatic events such as terror attacks. Cutting children off from their homes and social surroundings may be traumatic in and of itself and may intensify behavioral difficulties. Displaced children show higher rates of mental health problems and behavioral issues than do their non-displaced peers (Hazer & Fredeback, 2023; Flink et al., 2013).

Distinguishing between trauma from exposure to terror events and the stress of evacuation is challenging, as these experiences often occur simultaneously and reinforce each other. Research suggests that cumulative trauma exposure—including both violence and the disruption of daily life—can lead to more severe psychological outcomes (Chrisman & Dougherty, 2014). Evacuation trauma can be a significant source of stress, in addition to the trauma from direct exposure to violence. The stress of leaving home and familiar surroundings without the certainty of return, combined with ongoing security threats, can amplify psychological distress and behavioral problems in children. Evacuation trauma can disrupt children's sense of safety and stability, potentially exacerbating the effects of exposure to human-made disaster (Myles et al., 2018). Children may struggle to navigate changes in their environment, leading to challenges in peer relationships, school functioning, and social integration. This disruption of social cohesion and stability can contribute to heightened aggression and social problems among affected children.

Parental functioning has been found to play a critical role in shaping children's responses to traumatic events, mediating the impact of exposure on their behavioral and psychological outcomes (Cohen & Shulman, 2019; Shechory Bitton, 2013; Shechory Bitton & Laufer, 2017). Parents experiencing high levels of stress and impaired functioning may struggle to provide effective support and supervision, increasing the risk of behavioral difficulties in their children (Zamir et al., 2020). Parents' own experiences of post-traumatic stress (PTS) symptoms can directly impact their parenting behaviors and interactions with their children. Elevated levels of PTS may diminish parents' emotional availability and responsiveness, hindering their ability to effectively address their children's needs and behaviors (Chemtob et al., 2010).

Parents' resilience also plays a role in the association between their exposure to security threats and their well-being and functioning (Kimhi et al., 2017). Parents with higher levels of personal resilience demonstrate greater adaptability and coping strategies in the face of adversity, buffering against the negative effects of trauma exposure on both their own well-being and their children's adjustment (Bonanno et al., 2010).

Other dimensions, in addition to the parents' personal resilience, may also be important in this context: for instance, community resilience and trust in governmental institutions to help during a crisis. Strong community networks provide essential support and resources for families to navigate challenges and promote positive outcomes for children (Ungar, 2011). Along with community resilience, social trust in governmental institutions has been associated with higher well-being and less distress (Olagoke et al., 2020; Piosang & Grimes, 2022). Such trust may be especially important in crisis situations, as was found during the COVID-19 pandemic (Esposito et al., 2021). However, terror attacks have been found to be negatively correlated with trust in general, trust in governmental institutions, satisfaction with democracy, and satisfaction with the government (Colombo et al., 2022).

In light of the above, understanding the psychological and social consequences of terror attacks and forced evacuations is crucial. The unique circumstances faced by individuals after October 7th highlight the need for focused research on the aftermath of extreme terrorist events leading to domestic evacuations. Such studies are vital for shaping policies and interventions that support the well-being and

resilience of affected individuals and families. Therefore, the primary aim of this study was to examine the differences between evacuee and non-evacuee parents in terms of their experiences following the October 7th terror attack in Israel, and the impact of these experiences on their children. Specifically, we investigated how parental factors, such as exposure to trauma, post-traumatic stress (PTS), functioning, resilience, and trust in authorities, were related to perceived behavioral problems in children, including aggression and social issues. We hypothesized that evacuee parents would report greater increases in perceived child aggression and social problems due to the heightened stress and instability of their situation. Additionally, we explored the association between parental factors and children's behavioral difficulties.

We hypothesized the following:

- Increase in Child Aggression and Social Problems:** We anticipated an increase in child aggression and social problems following the extreme terrorist events. The disruption to normal routines, exposure to trauma, and heightened anxiety within the community were likely to have contributed to behavioral problems among the children. Although we expected an increase in these issues among both evacuees and non-evacuees, the group of evacuees would be likely to experience a more significant rise due to higher instability, the added stressor of having been evacuated from their homes, and the cut-off from their social surroundings.
- Association with Parental Factors:** We hypothesized that higher levels of parental exposure to events, higher levels of parental PTS, impaired parental functioning, lower personal and community resilience, and lower levels of trust in governmental authorities (trust), would be associated with an increase in perceived child aggression and social problems.

Method

Participants

Two hundred and twenty one (45.8 %) evacuated parents and 262 non-evacuated parents (54.2 %) non-evacuated parents. Parents were about 40 years old on average ($M = 39.67$, $SD=8$) with no group difference, $t(481) = 1.78$, $p = .076$. Most were Israeli-born (89.6 %), Jewish (99.8 %), married or in a relationship (84.1 %) with no group difference ($Z = 0.94$, $p = .347$), and employed (90 %). About half described themselves as secular (50.5 %), and the others were somewhat religious (26.3 %) or religious (23.2 %), with no group difference, $\chi^2(2) = 5.88$, $p = .053$. About two-thirds of the parents had a college/university degree, 66.9 %; this level of education was found to typify the non-evacuated group to a somewhat greater extent ($Z = 2.87$, $p = .004$).

Parents had close to three children on average, with a tendency among the evacuated parents to have more children than the non-evacuated group, $t(481) = 3.27$, $p = .001$. The distribution of the child's gender and age did not differ by group, $Z = 0.26$, $p = .794$ and $\chi^2(2) = 2.70$, $p = .259$, respectively. About half of the children were boys, about a third were up to 6 years old, about 43 % were 6–12 years old, and about 23 % were adolescents.

Instruments

Personal data were gathered regarding participants' gender, age, religiosity, level of education, employment status, marital status, number of children, children's age, and gender.

Child Behavior Checklist (CBCL) (Achenbach & Edelbrock, 1983, 1986). The CBCL (Achenbach, 1991) is a parent-report questionnaire in which parents rate their child's emotional and behavioral problems. This instrument is widely used to measure changes in a child's behavior over time. The CBCL has been normed with a large and diverse population of children and adolescents, demonstrating good criterion

validity, test-retest reliability, inter-rater reliability, and internal consistency (e.g., Goel et al., 2014), and it has been widely used in research including in Israel (e.g., Laufer & Shechory Bitton, 2020; Shechory Bitton & Laufer, 2018). In the current study, two subscales were used: the Social Problems Scale (9 items) and the Aggressive Behavior Scale (18 items). Each item is rated on a 0–2 scale to indicate how accurately it describes the child (0 = does not apply; 1 = sometimes applies; 2 = very true or often applies). Higher scores indicate more severe levels of disturbance. To determine whether there were any changes in the child's behavior following the events of October 7th, parents completed the questionnaires twice. They assessed their children's current behavior (in January 2024, the time of collecting the data for the study), and retrospectively evaluated their behavior before the onset of the attacks and the evacuation from their homes in October 2023. Parents in non-evacuated areas completed the CBCL questionnaire as the non-evacuee parents group. Internal consistencies for the subscales were as follows: current aggression, $\alpha = 0.92$; past aggression, $\alpha = 0.88$; current social problems, $\alpha = 0.75$; past social problems, $\alpha = 0.74$.

Exposure to Security Threats. Security threat exposure was measured in line with Gelkopf et al. (2012), and the measure included three scales (see also Stein et al., 2018). However, the description of the events corresponded to those that occurred during and following the October 7th attack, which included specific incidents such as kidnappings, not covered in the cited studies. Exposure was assessed as follows: All participants, evacuees and non-evacuees, were asked to report exposure to events during and following the October 7th attack: *Personal expose* was assessed as follows: [0] no exposure; [1] rocket falling/shooting was close to home; [2] witnessed difficult events and was uninjured; [3] own house was hit; and [4] was physically wounded. *Social exposure* (i.e., the experience of an almost fatal event occurring to someone close to you) was assessed as follows: [0] no exposure; [1] know people who witnessed difficult events but were uninjured/know people whose house was hit; [2] acquaintance was physically injured; [3] a family member was physically injured. *Loss of close others* was assessed as follows: [0] no loss; [1] acquaintance was killed or taken hostage; [2] family member was killed or taken hostage.

Post-Traumatic Stress Symptoms (PTS) symptoms were measured using the PTSD Checklist (Weathers et al., 2013). The 20 self-report items correspond to the 20 DSM-5 diagnostic criteria for PTSD and are divided into four symptom clusters: intrusion, avoidance, negative alterations in cognition and mood, and arousal (APA, 2013). Participants were asked to rate the degree to which they were bothered by each symptom in the past month, specifically following the October 7th events and their experiences since then, on a scale from not at all (0) to extremely (4). Item examples included: "Repeated, disturbing dreams of the traumatic experience" (intrusion); "avoiding memories, thoughts, or feelings related to the traumatic experience" (avoidance); "feeling distant or cut off from other people" (negative alterations in cognition and mood); and "having difficulty concentrating" (arousal). Reliability scores for the clusters were as follows: intrusion ($\alpha = 0.93$); avoidance ($r = 0.71, p < .001$); negative alterations in cognition and mood ($\alpha = 0.89$); and arousal ($\alpha = 0.85$). The overall PTS score had a reliability of $\alpha = 0.95$.

Personal Resilience: Personal resilience was assessed using the short version of the Connor–Davidson Resilience Scale (CD-RISC-10) (Campbell-Sills & Stein, 2007; Connor & Davidson, 2003), which consists of 10 statements (e.g., able to adapt when changes occur; have close and secure relationships; believe one can deal with whatever comes and have control of one's life). Each statement is rated by respondents on a scale of 0 to 4, indicating the extent of their agreement following the October 7th events, from 0 (not at all) to 4 (true nearly all the time). This scale has been used among the Israeli population and has shown good predictive validity and internal consistency (Shechory Bitton & Laufer, 2021). Total CD-RISC-10 scores, representative of resilience, were utilized for this study ($\alpha = 0.92$).

Functioning: To assess the respondents' functioning we used a subscale selected from the Psychotherapy Outcome Assessment and

Monitoring System–Trauma Version (POAMS-TV) Assessment Questionnaire (Green et al., 2003). This self-report scale comprises 11 items that measure functioning in different life spheres: work, partner relationships, parental relationships, sexual functioning, social activities and friendships, quality of life, vulnerability awareness, health, and financial management. For each of the items, respondents were asked to report how they were functioning during the last month in these areas of life. Each item is rated on a 5-point Likert scale ranging from 1, very bad (dysfunctional) to 5, very good (optimal functioning). A global functioning score was obtained by averaging across items. This scale has been used among the Israeli population and has shown good predictive validity and internal consistency (Shechory Bitton, 2023). The Cronbach's alpha in the current study was 0.90.

Community Resilience: Was measured using six items, based on the short version of the Conjoint Community Resiliency Assessment Measure (CCRAM-10, Leykin et al., 2013). Via these items, participants' perceptions of community belonging and support were assessed (e.g., "I can depend on people in my town to come to my assistance in a crisis," "I feel a sense of belonging to my town"). Participants were asked to rate their agreement or disagreement with these statements following the October 7th events. The statements were rated on a 5-point Likert scale from 1 (disagree) to 5 (very strongly agree), with higher scores indicating perceptions of greater community resilience. The reliability was 0.91.

Trust in Governmental Authorities: Was measured using six items. Participants were asked to rate their agreement or disagreement with these items/statements following the October 7th events. The statements included: "The municipal authority functions properly"; "My community is organized for emergency situations"; and "I have confidence in the decision makers in the municipal authority, Israeli government, defense cabinet, Israel Defense Forces (IDF), and security forces." These statements were rated on a 5-point Likert scale, from 1 (disagree) to 5 (very strongly agree), with higher scores indicating greater trust. The α reliability was 0.77.

Data analysis

Data were analyzed with SPSS ver. 29. Descriptive statistics were used for the background characteristics and the study variables. As personal exposure and the child's perceived behavioral problems were positively skewed (skewness values = 1.21 to 2.45, SE = 0.11), they were log transformed. Repeated measures multivariate analysis of covariance (MANCOVA) was calculated for change in the child's perceived behavioral problems. The MANCOVA included time and group, controlling for parent's age and child's gender. Significant interactions were interpreted with estimated marginal means, using the Bonferroni correction. Finally, a change in the child's perceived behavioral problems was defined as residual gain scores, controlling for the extent of the behaviors in the past. Two multiple regressions were calculated for these change scores, with group, parent's age, child's gender, and parent's personal factors. Highest variance inflation factor (VIF) value in these regression analyses was 1.86. Sample size was calculated with G*Power 3 (Faul et al., 2007, 2009). For an analysis of covariance with two groups and several covariates, with a moderate-low effect size $f = 0.20$, $\alpha = 0.05$, and power = 0.90, the required sample size is $N = 390$ participants. This sample size provides a power of 0.99 for a repeated measures analysis of variance, using a $2 \times 2 \times 2 \times 3$ design (time x group x child's gender x child's age group), as well as for a regression analysis with up to 20 predictors.

Procedure

Participants for this study were recruited online in January 2024 through iPanel, a professional survey company specializing in online research. iPanel maintains a probability-based panel of approximately 100,000 members, representing Israeli society across various

demographic criteria. Participants received monetary compensation for their involvement. To ensure a balanced sample, demographic quotas were set before data collection. The inclusion criteria required participants to be parents of children under 18 who had either been evacuated from their homes or had not (non-evacuee parents). Participants received a questionnaire link via Qualtrics software. The recruitment letter explained the research purpose, provided researcher contact details, and assured participants of anonymity, confidentiality, and the right to withdraw at any time. Those who agreed to participate signed informed consent. The survey company offered vouchers in exchange for participation, and specific quotas were set for each demographic group. Once a quota was filled, no further participants from that group were sampled, ensuring a representative sample matching Israeli population characteristics.

To recruit approximately 500 participants, invitations were sent to individuals fitting the criteria. Only the first respondents had the opportunity to participate, reducing the relevance of nonresponse bias, as slower responders were not included. Research indicates only modest differences in outcomes between samples with high and low response rates (Curtin et al., 2000; Fosnacht et al., 2017). In total, 483 panel members completed the survey. The authors' university's ethics committee approved the study (protocol number AU-SOC-MSB-20231204).

Results

Descriptive results

Significant differences were found between the two parent groups (Table 1). Evacuated parents reported greater exposure to security threats following the October 7th attack compared to non-evacuated parents. This was evident across all three indicators we examined: personal exposure, loss of close others, and social exposure. Evacuated parents also reported lower levels of functioning and higher post-traumatic stress (PTS) compared to non-evacuated parents. No significant differences were observed in personal or community resilience between the groups. However, evacuated parents exhibited lower trust in governmental authorities than their non-evacuated counterparts did.

Table 1
Means, standard deviations, and t values for the study variables by group (N = 483).

(Range)	Total M (SD)	Evacuees M (SD)	Non-evacuees M(SD)	Difference
Personal exposure (0–4)	0.85 (0.92)	1.26 (1.02)	0.51 (0.64)	t(481) = 9.86 (p < .001)
Social exposure (0–3)	1.34 (0.92)	1.56 (0.83)	1.15 (0.95)	t(480.31) = 4.98 (p < .001)
Loss of a close other (0–2)	0.63 (0.57)	0.70 (0.57)	0.57 (0.57)	t(481) = 2.46 (p = .014)
Parental functioning (1–5)	3.33 (0.85)	3.21 (0.87)	3.43 (0.81)	t(481) = -2.92 (p = .004)
PTS (0–80)	26.40 (17.27)	29.96 (17.86)	23.40 (16.20)	t(481) = 4.23 (p < .001)
Personal resilience (0–40)	23.45 (7.91)	23.34 (8.28)	23.53 (7.60)	t(481) = -0.26 (p = .791)
Community resilience (1–5)	3.01 (1.03)	2.94 (1.01)	3.06 (1.03)	t(481) = -1.21 (p = .225)
Trust (1–5)	2.60 (0.82)	2.49 (0.84)	2.68 (0.80)	t(481) = -2.58 (p = .010)

Child behavioral problems

Prior to assessing the change in the parents' perceptions of their child's behavioral problems, their associations with the demographic variables were examined. None of the parental demographic variables were found to be associated with the child's perceived aggression or social problems, current or before. The only exception was parental age which was associated with the child's perceived current aggression (r = -0.12, p = .007). Thus, the parents' perception of change in the child's behavioral problems was analyzed with repeated measures MANCOVA, controlling for parent's age. The child's gender (1-boys, 0-girls) was entered as a covariate as well. Means and standard deviations for the parents' perceptions of their child's behavioral problems, prior to the current events and afterward, are shown in Table 2.

No group differences were found in child's perceived past aggression, t(480.88) = 1.72, p = .085, or past social problems (t(481) = 0.51, p = .609). However, an increase from past to present may be observed in both dimensions, in both groups, to a greater extent among the evacuated parents than among the non-evacuated group (Fig. 1). Indeed, both time x group interactions were significant – aggression: F(1, 479) = 22.42, p < .001, η² = 0.045; social problems: F(1, 479) = 31.06, p < .001, η² = 0.061 – revealing that the perceived increase among the evacuated parents was higher than among the non-evacuated parents, concerning both aggression (evacuated parents: F(1, 479) = 320.07, p < .001, η² = 0.401; non-evacuated parents: F(1, 479) = 155.54, p < .001, η² = 0.245), and social problems (evacuated parents: F(1, 479) = 204.15, p < .001, η² = 0.299; non-evacuated parents: F(1, 479) = 53.40, p < .001, η² = 0.100). As observed, the change in the non-evacuated parents was significant as well, yet its magnitude was higher among the evacuated parents (aggression: η² = 0.401 vs. η² = 0.245, social problems: η² = 0.299 vs. η² = 0.100). Finally, it should be noted that an examination of the interactions with child's gender and child's age group as independent factors, in addition to the group factor (evacuated parents/non-evacuated parents), did not reveal any significant findings.

Two multiple linear regressions were calculated to assess the extent to which the parents' personal variables were associated with the perceived change in their child's behavioral problems. For this purpose, the change in the parents' perception of their child's behavioral problems was defined as residual gain scores, controlling for the extent of these behaviors in the past. A higher score reflected a greater increase (i.e., worsening behavioral problems). Group (1-evacuated parents, 0-non-evacuated parents), parent's age, and child's gender (1-boy, 0-girl) were entered in the first step, and parents' exposure and personal variables were entered in the second step (see Table 3).

Both regression models were found significant, with 25 % of the variance being explained for the change in child's perceived aggression, and 23 % of the variance explained for the change in child's perceived social problems. The significant associations were rather similar in both cases. Higher personal exposure (β = 0.11 p = .017, and β = 0.10 p = .032), higher social exposure (β = 0.11 p = .030, and β = 0.11 p = .024), higher PTS (β = 0.12 p = .022, and β = 0.13 p = .012), and lower parent functioning (β = -0.27 p < .001, and β = -0.25 p < .001), were associated with an increase in both child's perceived aggression and social problems, respectively. Further, as noted above, the change was perceived as higher among the evacuated parents (β = 0.13 p = .002,

Table 2
Means and standard deviations for child's behavioral problems by group and time (N = 483).

	Evacuees (n = 221)		Non-evacuees (n = 262)	
	Past M(SD)	Current M(SD)	Past M(SD)	Current M(SD)
Aggression	4.40 (4.43)	10.94 (7.43)	4.24 (4.73)	7.57 (6.60)
Social problems	1.28 (1.73)	2.93 (2.81)	1.29 (2.08)	2.05 (2.53)

Ranges: child aggression 0–36, child social problems 0–18.

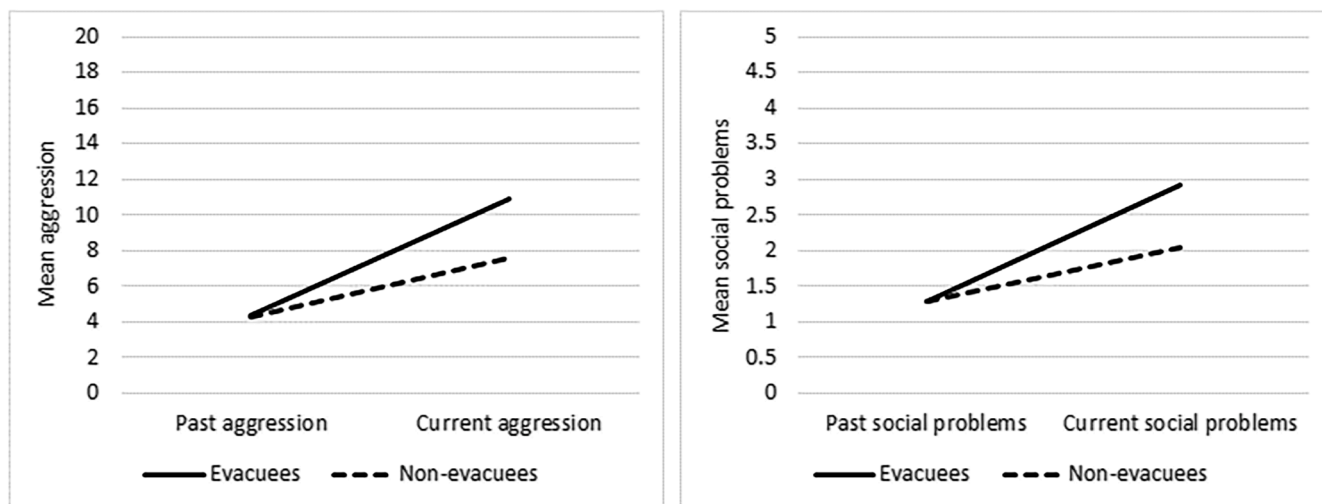


Fig. 1. Child behavior problems by group and time.

Table 3
Multiple regression models for change in perceived behavioral problems (N = 483).

	Change in aggression			Change in social problems		
	B (SE)	β (p)	95 %CI	B (SE)	β (p)	95 %CI
Group (evacuees)	0.18 (0.06)	.13 (0.002)	0.06, 0.30	0.16 (0.05)	.14 (0.002)	0.06, 0.25
Parent's age	-0.01 (0.01)	-0.12 (0.002)	-0.02, -0.01	-0.01 (0.01)	-0.01 (0.771)	-0.01, 0.01
Child's gender (boy)	0.05 (0.05)	.04 (0.336)	-0.06, 0.16	0.03 (0.05)	.03 (0.445)	-0.05, 0.12
Personal exposure	0.16 (0.07)	.11 (0.017)	0.03, 0.30	0.12 (0.06)	.10 (0.032)	0.01, 0.23
Social exposure	0.08 (0.04)	.11 (0.030)	0.01, 0.15	0.07 (0.03)	.11 (0.024)	0.01, 0.13
Loss of a close other (exposure)	0.01 (0.05)	.01 (0.828)	-0.09, 0.12	0.02 (0.04)	.03 (0.573)	-0.06, 0.11
Parental functioning	-0.22 (0.04)	-0.27 (<0.001)	-0.30, -0.13	-0.16 (0.04)	-0.25 (<0.001)	-0.23, -0.09
PTS total	0.01 (0.01)	.12 (0.022)	0.001, 0.01	0.01 (0.01)	.13 (0.012)	0.001, 0.01
Personal resilience	-0.01 (0.01)	-0.05 (0.291)	-0.01, 0.01	-0.01 (0.01)	-0.04 (0.364)	-0.01, 0.01
Community resilience	-0.01 (0.04)	-0.01 (0.885)	-0.08, 0.07	-0.01 (0.02)	-0.01 (0.801)	-0.05, 0.04
Trust	-0.01 (0.05)	-0.01 (0.832)	-0.10, 0.08	-0.01 (0.04)	-0.02 (0.695)	-0.08, 0.06
Adj. R ²	.25			.23		
F(11, 471)	15.54, p < .001			13.81, p < .001		

and $\beta = 0.14$ $p = .002$, for perceived aggression and social problems, respectively), and, in addition, the change in the child's aggression was perceived as higher among younger parents ($\beta = -0.12$ $p = .002$).

Discussion

This study sought to explore the broader psychological and social repercussions of forced displacement, focusing on the interplay between evacuation and parental factors following the unprecedented October 7th Hamas terror attack. By examining the relationship between these traumatic events and children's behavioral issues, the study aimed to uncover how parental exposure, stress, and functioning contribute to the observed behavior difficulties in children. The study results indicate that parents of evacuated children reported significantly more perceived aggression and social problems after the evacuation than did the non-evacuee parents group. Parents' exposure, PTS, and parental functioning were associated with an increase in the child's perceived aggression and social problems for evacuees and non-evacuees alike.

As noted in former studies, terror attacks have harmful effects on the well-being and functioning of children (Baratz, 2023; Comer et al., 2016; Laufer & Shechory Bitton, 2020; Slone & Peer, 2021). In the current study, we found that both groups of parents (evacuated and non-evacuated) reported that their children had higher levels of aggression and social problems after the Hamas terror attack. This finding highlights the fact that terror is associated with fear and horror for both those directly exposed to the terror attack (evacuees) and those indirectly exposed via the media (non-evacuees) (Ben-Zur et al., 2012;

Robert et al., 2021). The aftermath of the October 7 events and the ongoing war that followed are constantly present in the existential reality of the entire Israeli society through media coverage. Children are particularly vulnerable to the cumulative and pervasive effects of media exposure to terrorism and violence, which can lead to emotional and psychosocial problems (Leiner et al., 2016). These findings highlight the potential public health risks of extensive media coverage of traumatic events and underscore the need for strategies to mitigate the negative impacts, especially for children (Leiner et al., 2016; Robert et al., 2021).

Beyond the malevolent effect of the terror, the study also revealed that the parents who were evacuated reported significantly higher levels of perceived problematic children's behaviors than did the non-evacuee group. Prior to the terror attack, the two groups did not differ in their child's perceived problematic behaviors. Parents who were evacuated also reported lower levels of parental functioning, higher PTS, and lower trust in governmental authorities than did parents in the non-evacuated group. These results are in line with studies indicating that being evacuated from one's home is a traumatic event associated with elevated levels of distress among parents and children (Hazer & Gredebäck, 2023; Flink et al., 2013). For example, young adults who were evacuated from the "Gaza envelope" (communities on the Israel-Gaza border) as adolescents reported higher levels of post-traumatic stress symptoms (PTSS) than did non-evacuees (Zerach & Tam, 2016). Evacuation-related stressors were found to predict PTSS, anxiety, and depression in mothers and children following Hurricane Irma in 2017, even after accounting for hurricane exposure (La Greca et al., 2022). These findings highlight the importance of addressing both child and parent factors in

interventions aimed at mitigating the psychological impact of evacuation.

The regression analysis indicated that higher parental exposure, PTS, and lower parental functioning, were associated with an increase in both the child's perceived aggression and social problems, regardless of the family's evacuee status. These findings highlight the association between parental distress and functioning and children's behavioral problems (Laufer & Shechory Bitton, 2023). Distressed parents tend to perceive their child's behavior as more negative and are less able to manage their children effectively. This often leads to negative parent-child interactions, which intensify the child's behavioral problems, creating a vicious cycle of escalating stress for both parent and child (Dubois-Comtois et al., 2021; Murphy et al., 2018).

This suggests that while the evacuation itself is significant, it is the cumulative trauma from both the displacement and exposure to terror events that contributes to the behavioral problems. The complex interplay between trauma from direct violence and the additional stress of evacuation reinforces the challenge of disentangling the effects of each (Myles et al. 2018). Although belonging to the evacuated group was associated with the child's behavioral problems beyond the level of exposure to terror, caution is needed in interpreting these results. The overlap between these traumatic dimensions makes it difficult to isolate the specific impacts of evacuation and terrorism exposure.

As for the resilience outcomes, although trust in governmental authorities was lower among the evacuee group, there was no difference between the groups regarding personal resilience or community resilience. Several studies in which resilience as a personal trait has been measured also found it to be relatively stable and less affected by stressors (Finkelstein & Laufer, 2021; Laufer & Isman, 2024). This aligns with the perceptions of Connor and Davidson (2003), who viewed resilience as a personality trait that manifests in the ability to exhibit stable healthy functioning despite the trauma. Hence, it is expected that personal resilience will maintain its level even in the face of stressful events, and not differ between the study groups. Similarly, community resilience is a dimension that reflects a person's connections with their neighbors and the extent of mutual aid in times of need (see also: Leykin et al., 2013). In the current study, this variable remained constant, indicating that in both groups, it was believed that people in the vicinity would help if needed, and this dimension was not harmed as a result of the evacuation.

Trust in governmental institutions, on the other hand, was harmed. Whereas one's expectation of help from neighbors is likely more emotional or short-term-instrumental in nature, there is an expectation of long-term-instrumental assistance from the authorities. Among the evacuees, the feeling seemed to be that although the people in their immediate environments helped them, the authorities responsible for extensive assistance were failing to do so. This lack of trust can be understood in light of the time at which the study was conducted and the situation that followed the Hamas attack. The attack came as a surprise, leading to a quick and disorganized evacuation. Children left school without preparation, and parents left their places of work and home in the same hurried manner. The study was conducted approximately three months after the Hamas attack (in January 2024), while the war was still ongoing. The evacuees had not returned to their homes, and the security threats remained.

The lower level of trust in governmental authorities among the evacuated parents supports the importance of trust, as discussed by Nilsen et al. (2019), highlighting how belief and trust in institutions can impact psychological health and well-being. Lower trust levels can hinder the utilization of available resources and social support, exacerbating stress and its impact on children. This finding underscores the need for rebuilding trust in authorities to facilitate post-traumatic recovery and resilience among affected families.

The study's limitations should be acknowledged, and going forward, researchers should explore similar dynamics in different cultural and geopolitical contexts to enhance the generalizability of the findings. One

limitation was that we were unable to differentiate between the effects of the evacuation and the effects of the terrorism exposure. The parents and children who were evacuated were also more exposed to war events than those who were not evacuated. As such, it is not really possible to fully separate these two traumatic dimensions. However, the regression data indicated that belonging to the evacuated group was significantly associated with the child's behavioral problems above and beyond the level of terrorism exposure. This finding may indicate that the evacuation itself was traumatic even when combined with the significant exposure to terror. While it is clear that the evacuation has significant impacts, it is important to recognize that the effects of evacuation and terrorism exposure are intertwined, making it challenging to fully isolate their individual contributions to behavioral issues. Although these findings point to the negative effect of the evacuation on the children's behavior, they should still be interpreted with caution. Longitudinal studies are needed to track the long-term impact of forced evacuations on both parents and children. Such studies can provide deeper insights into the enduring effects of trauma and the evolving needs of affected families. Further examination of resilience is also necessary to investigate why no differences in resilience were observed and to explore additional factors that may contribute to resilience in evacuated populations. Understanding the nuances of resilience can inform more effective support strategies for different groups. Additionally, incorporating qualitative interviews in future studies could offer richer contextual insights, enhancing our understanding of the lived experiences of evacuated families and the multifaceted nature of their challenges.

In conclusion, the study's unique contribution is in highlighting the importance of addressing the needs of evacuated families in the aftermath of extreme terrorist events. The critical role of parental factors in shaping children's responses to trauma underscores the necessity for targeted interventions that support both parents and children in these challenging circumstances.

The findings have several practical implications for designing interventions and support systems. Given the greater perceived increase in children's behavioral problems among evacuated families, these families should be prioritized for psychological and social support. Tailored programs that address the specific needs of these families can help mitigate the adverse effects of forced evacuations. Efforts to rebuild trust in governmental authorities and strengthen community resilience are vital. Programs aimed at fostering community cohesion and trust can be helpful in this context as well. Enhancing social support networks and shared coping mechanisms within communities can provide essential resources for families navigating post-traumatic challenges (Ungar, 2011). Providing mental health services to parents, particularly those exhibiting high levels of PTS and stress, is crucial. Support for parental functioning should be a central component of interventions. Addressing parental mental health can improve parents' capacity to support their children's adjustment and overall well-being.

Data availability statement

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

Ethics approval statement

The questionnaire and methodology for this study were approved by the Human Research Ethics Committee of the University of Ariel University (protocol number AU-SOC-MSB-20231204).

Permission to reproduce material from other sources

The article does not include any material reproduced from other sources. Therefore, no permissions are required for content reproduction

in this submission.

Declaration of competing interest

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding statement

No funding was received for the preparation of this manuscript.

References

- Achenbach, T. M. (1991). *Integrative guide to the 1991 CBCL/4-18, YSR, and TRF profiles*. Burlington, VT: University of Vermont, Department of Psychology.
- Achenbach, T. M., & Edelbrock, C. (1983). *Manual for the child behavior checklist and revised child behavior profile*. Burlington: University of Vermont, Department of Psychiatry.
- Achenbach, T. M., & Edelbrock, C. (1986). *Manual for the teacher's report form and teacher version of the child behavior profile*. Burlington: University of Vermont, Department of Psychiatry.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>
- Baratz, L. (2023). The 'Red Colour' that cracks children's souls: A glimpse of life in the 'Otef Gaza' in Israeli children's books how to cite. *Sumerianz Journal of Education, Linguistics and Literature*, 6(1), 20–29. <https://doi.org/10.47752/sjell.61.20.29>
- Ben-Zur, H., Gil, S., & Shamshins, Y. (2012). The relationship between exposure to terror through the media, coping strategies and resources, and distress and secondary traumatization. *International Journal of Stress Management*, 19(2), 132–150. <https://doi.org/10.1037/a0027864>
- Bonanno, G. A., Brewin, C. R., Kaniasty, K., & La Greca, A. M. (2010). Weighing the costs of disaster: Consequences, risks, and resilience in individuals, families, and communities. *Psychological Science in the Public Interest*, 11(1), 1–49. <https://doi.org/10.1177/1529100610387086>
- Campbell-Sills, L., & Stein, M. B. (2007). Psychometric analysis and refinement of the Connor-Davidson Resilience Scale (CD-RISC): Validation of a 10-item measure of resilience. *Journal of Traumatic Stress*, 20(6), 1019–1028. <https://doi.org/10.1002/jts.20271>
- Chemtob, C. M., Nomura, Y., Rajendran, K., Yehuda, R., Schwartz, D., & Abramovitz, R. (2010). Impact of maternal posttraumatic stress disorder and depression following exposure to the September 11 attacks on preschool children's behavior. *Child Development*, 81(4), 1129–1141. <https://doi.org/10.1111/j.1467-8624.2010.01458.x>
- Cohen, E., & Shulman, C. (2019). Mothers and toddlers exposed to political violence: Severity of exposure, emotional availability, parenting stress, and toddlers' behavior problems. *Journal of Child & Adolescent Trauma*, 12, 131–140. <https://doi.org/10.1007/s40653-017-0197-1>
- Colombo, E., Rotondi, V., & Stanca, L. (2022). The day after the bomb: Well-being effects of terrorist attacks in Europe. *Social Indicators Research*, 160, 115–132. <https://doi.org/10.1007/s11205-021-02800-w>
- Comer, J. S., Bry, L. J., Poznanski, B., & Golik, A. M. (2016). Children's mental health in the context of terrorist attacks, ongoing threats, and possibilities of future terrorism. *Current Psychiatry Reports*, 18, 1–8. <https://doi.org/10.1007/s11920-016-0722-1>
- Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76–82. <https://doi.org/10.1002/da.10113>
- Chrisman, A. K., & Dougherty, J. G. (2014). Mass trauma: Disasters, terrorism, and war. *Child and Adolescent Psychiatric Clinics*, 23(2), 257–279. <https://doi.org/10.1016/j.chc.2013.12.004>
- Curtin, R., Presser, S., & Singer, E. (2000). The effects of response rate changes on the index of consumer sentiment. *Public Opinion Quarterly*, 64(4), 413–428. <https://doi.org/10.1086/318638>
- Dubois-Comtois, K., St-Onge, J., St-Laurent, D., & Cyr, C. (2021). Paternal distress and child behavior problems in low-SES families: Quality of father-child interactions as mediators. *Journal of Family Psychology*, 35(6), 725–734. <https://doi.org/10.1037/fam0000830>
- Esposito, C., Di Napoli, I., Agueli, B., Marino, L., Procentese, F., & Arcidiacono, C. (2021). Well-being and the COVID-19 pandemic: A community psychology systematic review. *European Psychologist*, 26(4), 285–297. <https://doi.org/10.1027/1016-9040/a000468>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191. <https://doi.org/10.3758/bf03193146>
- Finkelstein, M., & Laufer, A. (2021). Resilience, growth, and posttraumatic symptoms among social workers who are "double exposed". *Social Work Research*. <https://doi.org/10.1093/swr/svab016>
- Flink, I. J., Restrepo, M. H., Blanco, D. P., Ortegón, M. M., Enriquez, C. L., Beirns, T. M., & Raat, H. (2013). Mental health of internally displaced preschool children: A cross-sectional study conducted in Bogotá, Colombia. *Social Psychiatry and Psychiatric Epidemiology*, 48(6), 917–926. <https://doi.org/10.1007/s00127-012-0611-9>
- Fosnacht, K., Sarraf, S., Howe, E., & Peck, L. K. (2017). How important are high response rates for college surveys? *The Review of Higher Education*, 40(2), 245–265. <https://doi.org/10.1353/rhe.2017.0003>
- Gelkopf, M., Berger, R., Bleich, A., & Silver, R. C. (2012). Protective factors and predictors of vulnerability to chronic stress: A comparative study of 4 communities after 7 years of continuous rocket fire. *Social Science & Medicine*, 74, 757–766. <https://doi.org/10.1016/j.socscimed.2011.10.022>
- Goel, K. S., Amaty, K., Jones, R. T., & Ollendick, T. H. (2014). Child and adolescent resiliency following a residential fire: The role of social support and ethnicity. *Journal of Child and Family Studies*, 23, 537–547. <https://doi.org/10.1007/s10826-013-9715-4>
- Green, J. L., Lowry, J. L., & Kopta, S. M. (2003). College students versus college counseling center clients: What are the differences? *Journal of College Student Psychotherapy*, 17(4), 25–37. https://doi.org/10.1300/J035v17n04_05
- Groweiss, Y., Blank, C., Hamdan, S., Neria, Y., & Levi-Belz, Y. (2024). The mental health impact of the October 7th terror attack on Jews and Arabs in Israel: A nationwide prospective study. *Psychiatry Research*, 337, Article 115973. <https://doi.org/10.1016/j.psychres.2024.115973>
- Hasson-Ohayon, I., & Horesh, D. (2024). A unique combination of horror and longing: Traumatic grief in post-October 7, 2023, Israel. *Journal of Traumatic Stress*. <https://doi.org/10.1002/jts.23026>
- Hazer, L., & Gredebäck, G. (2023). The effects of war, displacement, and trauma on child development. *Humanities and Social Sciences Communications*, 10(1), 1–19. <https://doi.org/10.1057/s41599-023-02438-8>
- Kimhi, S., Eshel, Y., Leykin, D., & Lahad, M. (2017). Individual, community, and national resilience in peace time and in the face of terror: A longitudinal study. *Journal of Loss and Trauma*, 22(8), 698–713. <https://doi.org/10.1080/15325024.2017.1391943>
- La Greca, A. M., Tarlow, N., Brodar, K. E., Danzi, B. A., & Comer, J. S. (2022). The stress before the storm: Psychological correlates of hurricane-related evacuation stressors on mothers and children. *Psychological Trauma: Theory, Research, Practice and Policy*, 14(S1), S13–S22. <https://doi.org/10.1037/tra0001052>
- Laufer, A., & Isman, E. (2024). Differential impact on parental quality of life: Comparing parents to children with autism spectrum disorder and those with other disabilities during the COVID-19 pandemic. *Child: Care, Health and Development*, 50(2), e13227. <https://doi.org/10.1111/cch.13227>
- Laufer, A., & Shechory Bitton, M. (2020). Are security tensions associated with parental assessment of current and past child behavior? *Journal of Child and Family Studies*, 29(6), 1582–1588. <https://doi.org/10.1007/s10826-019-01677-1>
- Laufer, A., & Shechory Bitton, M. (2023). Parents' perceptions of children's behavioral difficulties and the parent-child interaction during the COVID-19 lockdown. *Journal of Family Issues*, 44(3), 725–744. <https://doi.org/10.1177/0192513x211054460>
- Leiner, M., Peinado, J., Villanos, M. T., Lopez, I., Uribe, R., & Pathak, I. (2016). Mental and emotional health of children exposed to news media of threats and acts of terrorism: The cumulative and pervasive effects. *Frontiers in Pediatrics*, 4, 26. <https://doi.org/10.3389/fped.2016.00026>
- Levi-Belz, Y., Groweiss, Y., Blank, C., & Neria, Y. (2024). PTSD, depression, and anxiety after the October 7, 2023 attack in Israel: A nationwide prospective study. *EClinicalMedicine*, 68. <https://doi.org/10.1016/j.eclinm.2023.102418>
- Leykin, D., Lahad, M., Cohen, O., Goldberg, A., & Aharonson-Daniel, L. (2013). Conjoint community resiliency assessment measure-28/10 items (CCRAM28 and CCRAM10): A self-report tool for assessing community resilience. *American Journal of Community Psychology*, 52(3–4), 313–323. <https://doi.org/10.1007/s10464-013-9596-0>
- Meir Amit Intelligence and Terrorism Information Center (2023). <https://www.terrorism-info.org.il/en/>
- Murphy, K. L., Martin, M., & Martin, D. (2018). Parental Stress and Parent-Child Relationships in Recently Divorced, Custodial Mothers. *European Journal of Educational Sciences*, 5(2), 1–14. <https://doi.org/10.19044/ejes.v5no2a1>
- Myles, P., Swenshon, S., Haase, K., Szeles, T., Jung, C., Jacobi, F., & Rath, B. (2018). A comparative analysis of psychological trauma experienced by children and young adults in two scenarios: Evacuation after a natural disaster vs forced migration to escape armed conflict. *Public Health*, 158, 163–175. <https://doi.org/10.1016/j.puhe.2018.03.012>
- Nilsen, L. G., Thoresen, S., Wentzel-Larsen, T., & Dyb, G. (2019). Trust after terror: Institutional trust among young terror survivors and their parents after the 22nd of July terrorist attack on Utøya Island, Norway. *Frontiers in Psychology*, 10, 2819. <https://doi.org/10.3389/fpsyg.2019.02819>
- Olagoke, A. A., Olagoke, O. O., & Hughes, A. M. (2020). Psychological pathways linking public trust during the coronavirus pandemic to mental and physical well-being. *Frontiers in Psychology*, 11, Article 570216. <https://doi.org/10.3389/fpsyg.2020.570216>
- Piosang, T., & Grimes, A. (2022). Trust in institutions and subjective well-being: Evidence from the Philippines. *Asian Politics & Policy*, 14(4), 461–570. <https://doi.org/10.1111/aspp.12664>
- Robert, M., Stene, L. E., Garfin, D. R., Vandentorren, S., Motreff, Y., du Roscoat, E., & Pirard, P. (2021). Media Exposure and post-traumatic stress symptoms in the wake of the November 2015 Paris terrorist attacks: A population-based study in France. *Frontiers in Psychiatry*, 12, Article 509457. <https://doi.org/10.3389/fpsyg.2021.509457>
- Setoff, R. (2023). Why 10/7 was worse for Israel than 9/11 was for America, Oct 15, 2023. <https://www.washingtoninstitute.org/policy-analysis/why-107-was-worse-e-israel-911-was-america>. Accessed: July 27, 2024.
- Shechory Bitton, M. (2013). The impact of repetitive and chronic exposure to terror attacks on Israeli mothers' and children's functioning. *Israel Journal of Psychiatry and Related Sciences*, 50(3), 157–164.

- Shechory Bitton, M. (2023). Intimate partner violence in the shadow of COVID-19 and its associations with stress, function and support among the Israeli general population. *Stress and Health, 39*(3), 673–683. <https://doi.org/10.1002/smi.3217>
- Shechory Bitton, M., & Cohen Louck, K. (2021). Spousal coping strategies in the shadow of terrorism. *Journal of Interpersonal Violence, 36*(3–4), 1844–1864. <https://doi.org/10.1177/0886260517744191>
- Shechory Bitton, M., & Laufer, A. (2017). PTSD and PTG among Israeli mothers: Opposite facets of exposure to terrorism. *Stress and Health, 33*(5), 676–683. <https://doi.org/10.1002/smi.2754>
- Shechory Bitton, M., & Laufer, A. (2018). Children's emotional and behavioral problems in the shadow of terrorism: The case of Israel. *Children and Youth Services Review, 86*, 302–307. <https://doi.org/10.1016/j.chidyouth.2018.01.042>
- Shechory Bitton, M., & Laufer, A. (2021). Mental health and coping in the shadow of the COVID-19 pandemic: The Israeli case. *Frontiers in Public Health, 8*, Article 568016. <https://doi.org/10.3389/fpubh.2020.568016>
- Slone, M., & Peer, A. (2021). Children's reactions to war, armed conflict and displacement: Resilience in a social climate of support. *Current Psychiatry Reports, 23*, 1–9. [https://doi.org/10.1016/s0140-6736\(11\)60051-2](https://doi.org/10.1016/s0140-6736(11)60051-2)
- Stein, J. Y., Levin, Y., Gelkopf, M., Tangir, G., & Solomon, Z. (2018). Traumatization or habituation? A four-wave longitudinal investigation of exposure to continuous traumatic stress in Israel. *International Journal of Stress Management, 25*, 137–153. <https://doi.org/10.1037/str0000084>
- Ungar, M. (2011). Community resilience for youth and families: Facilitative physical and social capital in contexts of adversity. *Children and Youth Services Review, 33*(9), 1742–1748. <https://doi.org/10.1016/j.chidyouth.2011.04.027>
- Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). *The PTSD checklist for DSM-5 (PCL-5)*. Scale available from the National Center for PTSD. at www.ptsd.va.gov.
- Zamir, O., Gewirtz, A. H., Dekel, R., Lavi, T., & Tangir, G. (2020). Mothering under political violence: Post-traumatic symptoms, observed maternal parenting practices and child externalising behaviour. *International Journal of Psychology, 55*(1), 123–132. <https://doi.org/10.1002/ijop.12557>
- Zerach, G., & Tam, E. (2016). The relationships between family functioning and attachment orientations to post-traumatic stress symptoms among young adults who were evacuated from Gaza Strip settlements as adolescents. *Anxiety, Stress, and Coping, 29*(2), 153–172. <https://doi.org/10.1080/10615806.2015.1014998>