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# Mothering under political violence: Post-traumatic symptoms, observed maternal parenting practices and child externalising behaviour

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Using the family stress model as our conceptual framework, we explored whether observed maternal parenting practices (positive and coercive) account for the associations between mothers' post-traumatic stress symptoms and children's externalising behaviours. Mothers' self-reported post-traumatic stress symptoms, observed maternal practices, and reports of children's externalising behaviour were collected from 123 Israeli mothers and their children, who were exposed to ongoing rocket attacks in southern Israel. A structural equation model revealed that mothers' post-traumatic stress symptoms were linked with greater maternal coercive parenting practices, which in turn were associated with more externalising behaviours in children. The study highlights the crucial role of maternal distress and mothers' parenting skills in the development of externalising behaviours in children exposed to chronic political violence. These results suggest that prevention interventions designed to promote parenting skills for mothers exposed to political violence may be beneficial for children's healthy development.

Keywords: Political violence; Post-traumatic symptoms; Maternal practices; Child externalising behaviours.

Millions of children around the globe experience political violence, such as war and terrorism (Masten & Narayan, 2012). Political violence has been linked to a wide array of poor mental health and behavioural problems in children, including externalising behaviours (Betancourt et al., 2013; Cummings, Merrilees, Taylor, & Mondi, 2016; Dimitry, 2012). Externalising behaviours refer to a range of behavioural issues, such as hyperactivity, conduct problems, delinquent and antisocial behaviours, oppositional and non-compliant behaviours (Maughan, Christiansen, Jenson, Olympia, & Clark, 2005). Exposure to regional conflict is associated with cross-sectional reports of behavioural problems, such as risk-taking (Pat-Horenczyk et al., 2007) and alcohol use (Schiff, 2006), as well as with longitudinal reports of increased

violent and aggressive behaviours in Israeli adolescents exposed to rocket attacks (Henrich & Shahar, 2013), and in Palestinian youth exposed to ethno-political violence (Niwa et al., 2016).

Living under conditions of political violence exposes mothers and children to stressful and traumatic life circumstances, such as life threat and injury which may result in elevated levels of post-traumatic stress symptoms (PTSS). Consistent findings have indicated that in the context of trauma, maternal PTSS is a significant predictor of children's emotional and behavioural functioning (e.g. Betancourt, McBain, Newnham Elizabeth, & Brennan, 2015; Cummings et al., 2016). A recent meta-analysis reviewing 42 studies showed a small overall effect size (r = .25) between maternal PTSS and child

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distress and behavioural problems among mother—child dyads who were exposed to war (Lambert, Holzer, & Hasbun, 2014). Moreover, a recent study emphasised the lasting effect of maternal distress on children's mental health problems over a 4-year period within a post-conflict setting (Betancourt et al., 2015).

The family stress model (Conger, Patterson, & Ge, 1995) describes one key mechanism through which maternal distress affects children's behavioural problems. Specifically, maternal distress (e.g. depression, anxiety symptoms) associated with contextual stressors (e.g. divorce, poverty) may increase coercive practices (e.g. harsh parenting, inconsistent discipline) and decrease positive practices (e.g. positive engagement, constructive problem solving). Coercive interchanges between mothers and children, in turn, may contribute to behavioural problems and delinquency in children (Conger et al., 1995).

Research has underscored the major role maternal practices play in children's adjustment in the wake of political violence (Betancourt et al., 2015; Cummings et al., 2016; Masten & Narayan, 2012). Systematic reviews indicate that in contexts of political violence, punitive parenting is associated with antisocial and aggressive behaviours in children (Dimitry, 2012), but parental care or monitoring protects against anti-social behaviours and aggression of school-aged children (Masten & Narayan, 2012; Tol, Song, & Jordans, 2013). For instance, studies involving families residing in a conflict zone in Israel indicated that maternal reciprocity and sensitivity during parent-child interaction buffers the effect of exposure to political violence on psychopathology of young children (Feldman, Vengrober, Eidelman-Rothman, & Zagoory-Sharon, 2013). However, lower maternal emotional availability exhibited in dyadic interactions with toddlers was associated with greater externalising behaviours of their child (Cohen & Shulman, 2017). Among school-aged children, exposure to political violence was associated with behavioural problems only for children of mothers reporting high control (Tangir, Dekel, Lavi, Gewirtz, & Zamir, 2017). Finally, a longitudinal study demonstrated how self-reported positive parenting moderates the effects of exposure to political violence on children's post-traumatic symptoms over a 2-year span (Dubow et al., 2012).

Two recent studies reveal the mediating role of maternal parenting practices in the associations between maternal PTSS and children's behavioural functioning in U.S. families with a father deployed to recent conflicts in the Middle East. Snyder et al. (2016) demonstrated that mothers' PTSS predicted their children's externalising symptoms through observed coercive practices over a year. Another study found that whereas fathers' PTSS were directly linked to child adjustment, the association between mothers' PTSS and child adjustment was

mediated by observed parenting (Gewirtz, DeGarmo, & Zamir, 2018).

#### The current study

The family stress model posits that maternal parenting practices explain the link between maternal distress and children's behavioural problem (Conger et al., 1995). Despite emerging literature emphasising the mediating role of maternal parenting in the association between her PTSS and her child's adjustment (e.g. Feldman et al., 2013; Gewirtz et al., 2018), the extant research remains limited in several ways. First, the research testing parenting behaviours in the context of political violence has relied almost exclusively on self-reports (e.g. Tangir et al., 2017), which may be limited by social desirability and common method variance (Heyman, Feldbau-Kohn, Ehrensaft, Langhinrichsen-Rohling, & O'Leary, 2001). Two studies used observations to assess mother-child interactions in the context of political violence (Cohen & Shulman, 2017; Feldman et al., 2013), but neither examined the mediating role of parenting practices in the link between maternal PTSS and children's outcomes, and both focused on very young children. Middle childhood is a significant period in the development of externalising behaviours, as children acquire the capacity to regulate aggressive behaviours, which at this age are likely to be more hostile and person oriented than in early childhood (Collins, Madsen, & Susman-Stillman, 2005). Two recent U.S. studies (Gewirtz et al., 2018; Snyder et al., 2016) examined the mediating role of observed maternal parenting practices in the link between PTSS of a parent and child's externalising behaviours among families in which a parent was deployed to war. However, living under constant security threat exposes families to unique stressors, quite different from deployment to a distant war. Living in a conflict zone requires family members to cope, in an ongoing way, with unpredictable life threats and uncertainty regarding safety (Pat-Horenczyk et al., 2013).

The current study aimed to examine the family stress model in the context of political violence, using a cross-sectional design. We tested whether observed maternal practices (positive and coercive) account for the association between PTSS in mothers and externalising behaviours in school-aged children using observations of mother-child interactions. Our study was conducted with Israeli mothers and children residing near the Israeli border with Gaza, an area which has been repeatedly exposed to rocket attacks from the Gaza strip over the past 17 years. Two hypotheses were examined. First, Mothers' PTSS will be correlated with child externalising problems. Second, Mothers' PTSS will be indirectly associated with child externalising behaviours through maternal practices, such that greater PTSS among mothers will be negatively associated with maternal positive

practices and positively associated with maternal coercive practices, both of which will, in turn, be linked with increased child externalising behaviours.

#### **METHOD**

#### **Participants**

The sample included 123 mothers and their school-aged children (one child per family), residing in the town of Sderot or in one of several Kibbutzim located within 10 km of Israel's border with Gaza, an area under constant exposure to rocket attacks over the past 17 years. The majority of the mothers (93.3%) reported living in the area for 6 years or longer (M = 22.15; SD = 12.89). All mothers were married (M = 16.91; SD = 5.99), with a mean of 3.7 children per family (SD = 1.24). Mothers' ages ranged from 31 to 55 (M = 40.6; SD = 5.77), and they reported an average of 15 years of education (SD = 2.75). Most mothers (65.6%) worked full-time and reported having adequate income, with only a few mothers reporting either insufficient (6.5%) or highly satisfactory (10.6%) income. Children's ages ranged between 7 and 12 years old (M = 10.13; SD = 1.22), of whom 50% were girls.

#### **Procedure**

The study was conducted as a collaborative endeavour of researchers at the University of Minnesota (USA), Bar Ilan University and Sderot's Resiliency Center (Israel); institutional review board approval was obtained from both universities. Data were collected from May 2012 to December 2013. Participants were recruited to the study using two main approaches: through advertising at the Sderot's Resiliency Center, emails to kibbutz leaders and through "snowball" sampling, in which participants referred other eligible families to the study. Families who indicated interest in participating received a phone call from the study coordinator to schedule an in-home assessment, during which informed consent, self-report questionnaires and observational data were gathered from mothers and children. Mothers and children were reimbursed with a gift card of the equivalent of US\$25 for participation.

Mothers and children participated in a series of structured Family Interaction Tasks (FITs), a validated procedure to assess observed parenting skills through parent—child interactions (Forgatch & DeGarmo, 1999). FITs included about 22 minutes of video-recorded interactions comprising five tasks. Two of the tasks were 5-minute problem-solving tasks in which mothers and children were instructed to resolve current issues or conflicts. Issues were selected separately by parents and children using the Issues Checklist that lists areas of frequent family conflicts (e.g. bedtime, cleaning bedrooms,

homework). Another two of the tasks were 4-minute game/teaching tasks, in which mothers were instructed to provide children the help they needed to complete a challenging game. Finally, one of the tasks was a 4-minute monitoring task, in which mothers were instructed to ask children about a time when they were away from adult supervision.

#### Measures

#### Externalising behaviours

Externalising behaviours were assessed by the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). Mothers filled out 10 items assessing externalising behaviours from the SDQ, including conduct problems and hyperactivity. Mothers rated items on a 3-point scale ranging from 0 (not true) to 2 (very true). The SDQ has been widely used across numerous populations and languages and showed strong psychometric properties (Stone, Otten, Engels, Vermulst, & Janssens, 2010). This study used the official Hebrew version of the SDQ as translated by the Israeli Ministry of Health and provided by the SDQ website. In the current study, Cronbach alpha for externalising problems was .75.

#### Post-traumatic symptoms

PTSS were assessed by the PTSD Inventory (Solomon et al., 1993). This 17-item scale assesses post-traumatic symptom severity defined by *DSM-IV* criteria (American Psychiatric Association, 2000). Mothers indicated the extent to which they had been bothered by each symptom over the past month in reaction to the Israel—Gaza conflict on a 4-point scale, from 1 (*not at all*) to 4 (*extremely*). The average score across all symptoms served as the overall PTSS severity score. The scale has demonstrated high internal consistency (e.g. Solomon et al., 1993), as well as high convergent validity when compared with diagnoses based on structured clinical interviews (e.g. Structured Clinical Interview for DSM-4 (SCID); Solomon et al., 1993). In the present study, Cronbach alpha was .92.

#### Maternal parenting practices

We used the Coder Impressions system (Forgatch, Knutson, & Mayne, 1992) to code the FITs. In prior studies, FITs codes demonstrated ecological validity, construct validity and sensitivity to change with at-risk families (Forgatch & DeGarmo, 1999; Gewirtz et al., 2018). Tapes were coded immediately after reviewing video footage from each of the interaction tasks. Coding training lasted for 60 hours, and bi-weekly recalibration meetings were conducted to minimise observer drift and continue training. Intraclass correlation coefficients

(ICCs) indicated good inter-rater reliability scores across the different dimensions of maternal parenting practices (ICC = .72-.88).

Maternal positive parenting was assessed using a composite of the following subscales: (a) Problem-solving outcome, a 9-item scale evaluating the quality of families' solutions to conflict, the extent of resolution, satisfaction at the outcome of the discussion and likelihood that the family would put this solution to use. Items were rated based on both conflict discussions using a 5-point Likert scale ranging from 1 (*untrue*) to 5 (*very true*) ( $\alpha = .86$ ); (b) Positive involvement, a 10-item scale evaluating parents' warmth, empathy, encouragement and affection was rated on a scale from 1 (*never*) to 6 (*always*) ( $\alpha = .74$ ); (c) Skill encouragement, an 8-item scale reflecting parents' ability to promote children's skill development through encouragement and scaffolding strategies ( $\alpha = .88$ ) was were rated based on teaching tasks from 1 (untrue) to 5 (very true); (d) Monitoring, measured by a 4-item scale assessing parents' supervision and knowledge of their child's daily activities ( $\alpha = .56$ ) was rated based on the monitoring task from 1 (untrue) to 5 (very true). The four positive parenting practice indicators were standardised to equalise the scales and then averaged to create a final Positive Parenting score, with higher scores reflecting more positive parenting.

Coercive discipline was measured by an 8-item scale assessing overly strict, authoritarian, erratic, inconsistent or haphazard parenting practices. Items were rated based on the entire interaction on a 6-point Likert scale ranging from 1 (*never*) to 6 (*always*). A mean score was obtained to create a summary score such that higher scores reflect more coercive parenting ( $\alpha = .65$ ).

#### **Control variables**

In order to control for alternative explanations of the relation between PTSS, parenting, and/or child's externalising behaviours, we included the following covariates, which have been previously linked with parents or child's functioning (Davis, Hanson, Zamir, Gewirtz, & DeGarmo, 2015; Tangir et al., 2017):

#### Socio-demographic background

Mothers completed a brief questionnaire regarding socio-demographic factors, including the age of the child, gender of the child (boy = 1; girl = 2) and mothers' years of education. We also controlled for the place of residence: Sderot, or a Kibbutz. Although both are located close to the border with Gaza and are exposed to rocket attacks, they differ: a Kibbutz is a collective community guided by ideals of social equality whereas Sderot is a small town. The socioeconomic status of Sderot's population is lower than the Israeli average (kibbutz = 1;

Sderot = 2). We used mothers' ratings of their perceived economic situation, ranging from 1 (not adequate) to 4 (very adequate).

#### Exposure to political violence

Because all participants live in a relatively small geographical area, the entire sample has been exposed to some degree of political violence. Thus, we assessed the *degree of exposure* to life-threatening events caused by political violence utilising five items adapted from a scale previously used to assess the security threat from political violence in the Israeli population (Pagorek-Eshel & Dekel, 2015). Mothers were asked five yes/no questions about: (a) whether their family or a friend experienced house damage from a rocket attack; and (b) whether they, a family member or a friend had been physically hurt in a rocket attack. A total score was obtained by counting the number of security threats, such that higher scores represent greater exposure to security threat from political violence.

#### Life events

The life event scale is a 10-item scale adapted from Solomon (1995). The scale assesses exposure to serious life events, such as car accident or a life-threatening illness. Mothers indicated whether they experienced the event on a nominal scale (1 = yes, 0 = no). A total score was computed by counting the number of life events, such that higher scores indicated greater exposure to negative life events.

#### Child's life events

We used seven items from the University of California at Los Angeles Post-traumatic Stress Disorder Reaction Index (Steinberg, Brymer, Decker, & Pynoos, 2004) assessing exposure of children to traumatic stressors. Children were asked to indicate on a nominal scale (1 = yes, 0 = no) whether they had experienced a traumatic event in the past (e.g. automobile accident, disease, a death of a relative, being injured in school). A total score was created by counting the number of events, such that higher scores indicated greater exposure to traumatic stressors (Steinberg et al., 2004).

#### Data analysis

We tested the hypotheses using structural equation modelling (SEM) via AMOS 21 (Arbuckle, 2013). Analyses were conducted in two stages. First, we fitted a model in which mothers' PTSS were linked directly with children's externalising behaviours. Second, we fitted a mediation model in which mothers' positive

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. PTSS mother	_											
2. Positive practices	09	_										
3. Coercive practices	.27*	44**	_									
4. Externalising behaviours	.38***	03	.25*	_								
5. Exposure	.45***	.05	08	.23*	_							
6. Life events—mother	.22*	.02	.02	.11	.23**	_						
7. Child's life events	.22*	.11	.03	.22*	.13	.23*	_					
8. Mother's education	33**	.05	15	13	16	06	.01	_				
9. Economic status	30**	.10	05	30	$26^{**}$	11	23 <sup>*</sup>	.35**	_			
10. Child's age	04	20	05	02	07	.06	09	.00	.08	_		
11. Child's gender	17	.07	18	$36^{*}$	14	.00	09	.09	.15	07	_	
12. Residency	.30**	09	.16	.28**	.27**	.04	.66	38**	30**	.09	31**	_
M	1.66	3.01	1.24	1.17	.64	1.32	1.12	14.73	2.51	10.13		
SD	.59	.43	.30	.75	.78	1.27	1.01	2.75	.67	1.22		

*Note:* PTSS = post-traumatic stress symptoms. The raw positive maternal composite score is used in this table. Gender of child (boy = 1; girl = 2), residency (kibbutz = 1; Sderot = 2).

and coercive parenting mediated the association between mothers' PTSS and children's externalising behaviours. The models were analysed controlling for each child's gender and age, mothers' education, economic status, residency (Sderot vs. Kibbutzim), mothers' and children's exposure to negative life events and exposure to political violence. Good model fit was evaluated by standard criteria including a non-significant (p > .05) chi-squared statistic, a Comparative Fit Index (CFI) and Normed Fit Index (NFI) more than 0.95, and a root mean square error of approximation (RMSEA) less than 0.08 (Kline, 2014).

#### Missing data

From the 123 participating families, 79 observations were coded (64%). From the remaining 44 families, 39 families did not participate in the observations because of scheduling issues and five families participated in the observation but the tapes were not coded because of recording problems. There were no missing data for mothers' PTSS scores and child's externalising behaviours. Models were estimated using full information maximum likelihood (FIML) to handle missing data. FIML uses all available information from the observed data in the SEM analyses, and is preferable to mean imputation, listwise or pairwise deletion. Also, unlike the latter methods that are appropriate for data that are missing completely at random, FIML can also be used when data are missing at random (MAR). A MAR mechanism means that missingness is unrelated to the unobserved values of the variable that is missing (Enders, 2010). In the current study, because missingness was determined by largely random factors (scheduling or technical issues) that are unrelated to the observed variable (i.e., parenting practices), there was no reason to suspect that missingness is not random. Nevertheless, although we could not examine whether missingness was predicted by observed parenting practices, we examined whether missingness was predicted by self-reported parenting practices measured by the Alabama Parenting Questionnaire short form (Elgar, Waschbusch, Dadds, & Sigvaldason, 2007). Supporting MAR, we did not find such an association, t(121) = -.578; p = .565 (Enders, 2010).

#### **RESULTS**

#### Preliminary analyses

Descriptive statistics and zero-order correlations for the study variables are presented in Table 1. Positive correlations were found between mothers' PTSS, exposure to political violence and child externalising behaviours.

## Hypothesis 1: Associations of parents' PTSS and child externalising behaviours

First, we tested our first hypothesis—that mothers' PTSS are correlated with their child's externalising behaviours. The model fit the data very well,  $\chi^2(df=1)=.354$ , p=.551, NFI=.99, CFI=1.00, RMSEA=.0(. In line with our hypothesis, we found that greater maternal PTSS were linked with greater mother-reported externalising behaviours in children ( $\beta=.27., p<.01$ ). In addition, being a girl was correlated with lower levels of externalising behaviours ( $\beta=-.29., p<.01$ ). This model explained 27.1% of the variance in children's externalising behaviours.

<sup>\*</sup>p < .05; \*\*p < .001; \*\*\*p < .0001.

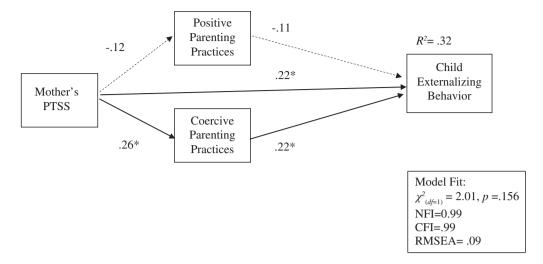


Figure 1. Mediation analysis of maternal positive and coercive parenting practices on maternal PTSS and child externalising behaviour *Note:* Study controls: child's age and gender, exposure to political violence, economic status, mother's' education, mother's life events, child's life events and residence. Entries are standardised structural coefficients. Dashed paths were not found to be significant. PTSS = post-traumatic stress symptoms.\*p < .05; \*\*p < .001.

## Hypothesis 2: The role of maternal positive and coercive parenting in the link between PTSS in mothers and children's externalising behaviours

Next, we specified a mediation model to test our second hypothesis (see Figure 1). We expected that greater maternal PTSS would be associated with less positive and more coercive maternal parenting behaviours. This, in turn, would be linked with more child externalising behaviours. This model fit the data very well,  $\chi^2(df = 1) = 2.01$ , p = .156, NFI = 0.99, CFI = .99, RMSEA = .09. Consistent with the second hypothesis, mothers who reported higher PTSS displayed more coercive parenting towards their children. Moreover, greater PTSS among mothers and more coercive parenting were associated with more externalising behaviours in children. However, positive maternal practices were not associated with either maternal PTSS or externalising behaviours of children. Perception of economic status ( $\beta = -.18$ ., p < .05) and child gender ( $\beta = -.23$ ., p < .01) were also correlated with children's externalising behaviours, such that higher perceived economic status and being a girl were correlated with lower levels of externalising behaviours. This model explained 32% of the variance in children's externalising behaviours.

Finally, we used a Bayesian estimation approach to test the significance of the indirect effect of maternal PTSS on children's externalising behaviour through coercive practices. This approach allows for testing indirect effects when bootstrapped confidence intervals (CIs) for indirect effects cannot be computed because of missing data (Bolstad, 2004). In this method, CIs are calculated based on the posterior distribution of a given

parameter (e.g. an indirect effect), which is obtained through computerised simulation (Markov Chain Monte Carlo—MCMC; Gamerman & Lopes, 2006). Contrary to the second hypothesis, the Bayesian 95% CI for the indirect effect of mothers' PTSS on children's externalising behaviours through coercive practices did include 0, and was therefore non-significant (95% CI [-.03, .38]).

#### **DISCUSSION**

Stress is an inevitable part of family life, but it may increase risk for maladaptation when it spills over and affects the family system. The family stress model highlights the significant role of contextual stressors in impairing maternal and child functioning (Conger et al., 1995). Our cross-sectional results partially support the family stress model, demonstrating how maternal PTSS related to ongoing political violence (rocket attacks) is associated with greater use of coercive parenting practices, which are linked to more externalising behaviours in children. Whereas previous studies testing the family stress model in contexts of violence using observed maternal parenting practices have been conducted among families with a parent deployed to war (e.g. Gewirtz et al., 2018; Snyder et al., 2016), our study broadens the scope of the current knowledge by testing the family stress model where both mothers and children are exposed to prolonged political violence.

The current model reveals that PTSS and maternal coercive parenting practices uniquely contribute to children's behaviours above and beyond the contribution of exposure to political violence. These findings underscore the likelihood that maternal parenting responses to traumatic events may be a better predictor of child

adjustment than the severity of the event itself (Cohen, 2008). Similarly, other contextual risk factors, including education level, children's life events or residency, were not associated with children's outcomes. These contextual factors, however, were associated with maternal PTSS, so perhaps poorer resources intensified maternal PTSS (Hobfoll et al., 2009). Post-traumatic distress may tax mothers' mental resources, making it more difficult to tolerate intense mother—child interactions (Paley, Lester, & Mogil, 2013), further leading to more hostile mother—child interactions (Conger et al., 1995).

The model indicated that maternal PTSS and economic status were directly linked to children's behaviours. These links may point to alternative mechanisms than parenting likely involved in the association between maternal PTSS and child's behaviours, such as poor psychosocial resources (Hobfoll et al., 2009), or difficulties witnessing a distressed parent (Paley et al., 2013). Also, given that mothers reported on child behaviours, the direct effects of maternal PTSS and economic status on children's behaviours may reflect the effects of their own distress—traumatic or economic—on more negative perceptions of their child's behaviours (De Los Reyes & Kazdin, 2005).

Although our model suggests that coercive practices account for the link between maternal PTSS and children's behaviours, the indirect effect was not significant. Potential factors explaining the lack of a significant effect include a small sample size, common method variance or intervening factors related to the current sample. Further, longitudinal studies, with larger sample sizes could elucidate the nature and presence of indirect effects in the PTSS-child behaviour relationship.

Contrary to expectations and prior studies (e.g. Snyder et al., 2016), observed positive parenting practices were not associated with mothers' PTSS. It is difficult to draw firm conclusions given our inability to reject the null hypothesis, but it is possible that mothers in our sample preserved positive parenting practices regardless of their distress. According to the "tend and befriend" theory, under stressful circumstances women tend to exhibit more caregiving behaviours towards their offspring (Taylor, 2006), a process mirroring a basic natural tendency of women to sustain maternal investment in the face of life adversity (Szepsenwol, Simpson, Griskevicius, & Raby, 2015). As such, when their children are coping with a long-lasting security threat, mothers may intentionally attempt to set aside their own emotional distress to keep providing children with warmth, support, structure and monitoring of their safety. Similar findings have been demonstrated among mothers in other high stress environments (i.e., homelessness; Gewirtz, DeGarmo, Plowman, August, & Realmuto, 2009). More research is needed to examine whether the context of a long-term security threat differs from short-term stress in the relations between mental health and maternal functioning.

Traumatic stress symptoms can cascade through the family system to affect the adjustment of family members (Cohen, 2008; Paley et al., 2013). Overall, our model suggests that the effects of exposure to political violence may reverberate between mothers and children, although only longitudinal studies can verify this. Specifically, exposure to ongoing rocket attacks and other traumatic life events were linked with reports of higher levels of PTSS in mothers, which were positively correlated with their child's externalising behaviours. Our model points to a possible mechanism underlying the transmission of psychological symptoms from mothers to children through coercive maternal practices. As such, our findings are consistent with the findings of prior studies linking mother and child maladjustment in the context of traumatic stressors (Gewirtz et al., 2018).

#### Limitations and future directions

The current study emphasises the importance of coercive maternal practices as a risk for children's externalising behaviours when families are exposed to ongoing traumatic stress. A major strength of the current study is the use of observations of mother—child interactions. However, several caveats should be considered when interpreting the results. First, using cross-sectional data, the direction of effects linking mothers' distress and children's dysfunction cannot be inferred. Emerging research has underscored the lasting effects of maternal distress in the context of political violence on children's emotional and behavioural function (e.g. Betancourt et al., 2015; Dubow et al., 2012(. Testing our model longitudinally is required to test the mechanisms through which maternal distress affect children's behavioural problems.

Second, our community-based sample included relatively well-educated and well-functioning mothers who reported having adequate economic resources. Because economic stress can be a major predictor of parenting and child outcomes (Conger et al., 1995(, it is important to explore our research question with more diverse populations. Likewise, more research is needed with clinical populations diagnosed with PTSD, who may exhibit more prominent disruptions in parenting.

Third, a relatively high proportion (36%) of observational data were missing. Although our data analysis complies with the guidelines of analysis of missing data, it is still possible that parents who did not participate in the observations share personal characteristics, such as being less organised, which may have changed the results.

Lastly, our study is limited in its exclusive focus on maternal behaviours. Mothers are more consistently involved with child discipline than fathers (Calzada, Eyberg, Rich, & Querido, 2004), especially in the context of life stressors (Szepsenwol et al., 2015), some scholars have asserted that most fathers play significant roles in

their children's development (Gray & Anderson, 2010), including in families affected by traumatic stress (Snyder et al., 2016). Future studies should investigate the effects of fathers' PTSS and their parenting practices on children's behaviours.

#### Clinical implications

The increase in political violence and war around the world highlights the need to provide mothers with interventions facilitating better mental health and maternal functioning. Interventions targeting PTSS may help support mothers dealing with ongoing political violence, as could the delivery of evidence-based parent training programs tailored for populations affected by traumatic stress (Gewirtz, Forgatch, & Wieling, 2008). Over the past four decades, several parent training programs have been developed that have shown to be effective in enhancing child behavioural functioning. For example, the Parent Management Training—Oregon Model (PMTO) was designed to prevent externalising behaviours among children by strengthening parenting practices (Forgatch & Patterson, 2010), and has established the effectiveness in the context of low-income single-mother families, remarried families and more (e.g. Forgatch, Patterson, & Gewirtz, 2013). Given the persistence of the Israeli-Palestinian conflict, implementation of the PMTO programme may be beneficial for preventing externalising behaviours in children exposed to ongoing security threats.

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