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# Mother–Child Relationships Following a Disaster: The Experiences of Turkish Mothers Living in a Container City After the 2011 Van Earthquake

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**Abstract** In this qualitative study, informed by ethnography and phenomenology, we aimed to explore the impact of mass trauma on mother-child relationships. Specifically, affected relational processes that might interrupt healthy parenting practices and child behavioral and emotional outcomes were explored. Fifteen Turkish mothers exposed to a massive earthquake in 2011 and relocated to a container city in the Van province, Turkey, were interviewed for this study in 2013. Data analysis was informed by elements of Spradley's Developmental Research Sequence (DRS) and interpretive phenomenological analysis. Findings indicated that psychological trauma resulting from the earthquake and consequent displacement disrupted and exacerbated mothers' ability to cope with distress. This, in turn, influenced mothers' ability to manage their negative emotions and resulted in more yelling, beatings, and higher aggression towards their children as well as a lack of positive emotional and physical engagement. Mothers perceived their own struggles as increasing their children's disruptive behaviors, such as being less compliant, becoming emotionally distant and modeling mothers' negative behaviors. The counseling mothers received at the local mental health center supported mothers in building greater physical and emotional connection with their children, regulating their negative emotions and gaining effective parenting skills to discipline their children. The current study represents a preliminary step towards understanding parenting experiences of Turkish mothers in mass trauma contexts.

**Keywords** Child outcomes · Disaster · Family · Parenting · Psychological trauma

# Introduction

In this paper, we will present the results from a qualitative study guided by elements of ethnographic and phenomenological principles to investigate the psychological and relational impact of the 2011 Earthquake in the Van province of Turkey. Specifically, the emphasis will be on understanding mothers' perspectives of how the earthquake affected mother-child relationships, parenting practices and child behavioral and emotional outcomes. The massive earthquake with a magnitude of 7.2 struck the Van community located in the Eastern province of Turkey in October 2011. More than 600 people were killed and 4000 were severely injured. A quarter of the entire houses in the city sustained severe damage or were completely destroyed, leaving 60,000 people homeless. ("About Van Earthquake" 2012). After the earthquake, the Turkish government, with the assistance of national and international aid agencies, first assembled tent cities and later constructed container cities, consisting of container-style housing units made up of tin to temporarily accommodate the earthquake struck families in Van. The displaced families struggled with loss of their financial resources and homes, separation from their family members and living in an isolated container city, which had severe infrastructure problems including electricity, heating and water.

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Prior to the earthquake, the Van province had historically battled severe stressors including disasters, political turmoil and socio-economic disparities. The existing contextual stressors combined with the lack of mental health services in the region exacerbated the psychosocial and economic difficulties resulting from the earthquake, increasing the vulnerability and risk factors for individuals and families. Despite being historically exposed to mass traumas and losses, family relations in trauma-exposed Turkish communities have rarely been studied. A few studies assessed the prevalence of psychopathology (i.e., posttraumatic stress disorder and depression) in adults and children survivors of major earthquakes (Altindag and Ozen 2005; Kilic and Ulusoy 2003; Basoglu et al. 2002) or internal resources (e.g., self-efficiency) that predicted psychological distress in trauma contexts (Sumer et al. 2005). However, these studies largely disregarded the systemic impact of mass traumas on families and communities.

An evolving body of research points to the impact of mass trauma going beyond individual level mental health distress and influencing relationships at the family level (Landau et al. 2008; Montgomery 2004; Nickerson et al. 2011; Wickrama and Kaspar 2007). Research conducted with highconflict and post-disaster communities has documented that mass level traumas disrupt the parent-child relationships and in turn affect children's psychological and emotional outcomes (Olema et al. 2014; Sriskandarajah et al. 2015; Wieling et al. 2015a, b; Weine et al. 2004). Studies found the link between exposure to traumatic life events and family violence, aggressive parenting and physical punishment (Catani et al. 2008; Saile et al. 2014), rejection, strictness and control, lack of intimacy and engagement, and difficulty expressing love towards the child (Shamai 2002; Aisenberg and Ell 2005). The parents' ongoing psychopathology was also found to serve as a proximal risk factor for child maltreatment (Black et al. 2001) while positive parenting and parental care buffered against mental health problems and maladjustment associated with post-traumatic stress in children (Gewirtz et al. 2008; Sriskandarajah et al. 2015).

Scheeringa and Zeanah (2001) found that parent's Posttraumatic Stress Disorder (PTSD) symptoms moderated the psychological effects of exposure to traumatic incidents on children. The study demonstrated that child's PTSD symptomology is exacerbated by the caretaker's PTSD symptoms as traumatic distress disrupts mothers' physical/emotional availability to the child and ability to manage difficult emotions. Several other studies acknowledge parental PTSD as a proximal risk factor for negative parenting, higher hostility and insensitivity towards the child and negative parenting practices as potential risk factors for child maladjustment in high stress contexts (Gewirtz et al. 2010; Haj-Yahia and Abdo-Kaloti 2003; Slone and Mann 2016). A recent study by Song et al. (2014) on Burundian former child soldiers and their children showed the intergenerational transmission of parental trauma to children through parental display of PTSD symptoms of numbness, dissociation and anxiety in their interaction with their children. Consistent with this literature, child survivors of Hurricane Katrina were reported to be at a higher risk for developing PTSD symptoms if their parents reported more maladaptive coping, which led to an increase in corporal punishment (Kelley et al. 2010).

There is only one empirical study (Kilic et al. 2003) to our knowledge that examined the relationship between parental mental health and child outcomes following mass trauma in Turkish communities. This quantitative study, conducted following the 1999 earthquake with survivor Turkish families, demonstrated that overall family functioning and paternal psychopathology (i.e., PTSD and depression) predicted the severity of child's PTSD symptoms. However, as the authors of the study stated, the mere existence of PTSD in parents does not help us to understand the complex relational processes families experience in the face of traumatic incidents. Therefore, the exploratory study described here is targeted at addressing the specific parental processes that mediate the relationship between parental psychopathology and child outcomes by investigating Turkish mother's perspectives on how psychological and relational stressors resulting from the 2011 earthquake affected parenting practices and their children's emotional and behavioral outcomes.

### **Guiding Theoretical Frameworks**

In mass trauma contexts, entire families will share similar potentially traumatic experiences and losses (Nickerson et al. 2011; Walsh 2007; Saul 2014). Exposure to mass trauma situations may disrupt the social systems of individuals by compromising safety and care and may leave family members feeling incompetent, isolated and depressed in coping with the adversities (Gewirtz et al. 2008). These individual level experiences, aggravated by the prolonged exposure to cumulative stressors and the breakdown of social and institutional support, may cause interruptions in families' interaction patterns. Therefore, it is helpful to adopt an ecological approach (Bronfenbrenner 1979) while studying the impact of mass trauma because of its emphasis on the individual's inter-connectedness with the family and socio-cultural-economic systems (Landau et al. 2008).

Social Interaction Learning (SIL) Model (Patterson 1982) was chosen as the guiding framework for this study due to its ecologically oriented approach and specific focus on explaining parent-child relationships while taking contextual factors into account. SIL suggests parenting to be a significant mechanism that mediates the affect of adverse contexts and cumulative stressors on children's adjustment. According to the model, coercive parenting practices (e.g., negative reciprocity, escalation and negative reinforcement)

interrupt healthy child adjustment, while positive parenting skills (e.g., discipline, monitoring, positive involvement, skill encouragement, and problem solving) contribute to positive child outcomes. Contextual factors such as transitions, socioeconomic factors, stress, culture, parental adjustment and social and neighborhood support are conceptualized to influence child outcomes through their effect on parenting practices.

# **Guiding Questions**

The overall study explored: (1) perceived psychological and relational impact of the earthquake on mothers at the individual, mother–child, couple, and extended family levels; (2) risk factors associated with mothers' psychological wellbeing and mother–child relationship; and (3) resources that aided in mothers' adjustment post earthquake. For the scope of this paper, findings will be limited to how mothers perceived the earthquake and resulting displacement to affect their relationship with their children and their parenting practices.

# Methodology

### **Guiding Qualitative Frameworks**

Ethnography and phenomenology were used to provide key methodological guiding principles to this study. An ethnographic lens helped to underscore the cultural components of a population that has rarely been studied and placed emphasis on understanding cultural insider (member of the target cultural group)/cultural outsider (stranger to the target cultural group) processes. Limited participant observation through exposure in Van during data collection, in-depth conversations with key informants and professionals in the container cities, field notes and reflexive memoing contributed to the overall understanding of parenting norms in this culture, and how families were affected by the difficult living circumstances prior to and in the aftermath of the earthquake. The therapists and local staff at a Family Counseling Center (FCC) had already established a solid relationship with the community and served as the gatekeepers and key informants to access and connect with the target population.

Phenomenology was well suited for this research because of its emphasis on the meaning of lived experiences from the individuals' perspective (Creswell 2007). The aim of this study was to capture the lived experiences and perceived meanings of mothers related to their exposure to the earthquake and the resulting displacement that affected their family life. Phenomenology guided the formulation of our research questions to elicit the essence of mothers' family and parenting experiences post earthquake. Relevant methods underscored by Interpretive Phenomenological Analyses (IPA) (Smith et al. 2009) were incorporated into the analyses because of its emphasis on the double hermeneutic process, which refers to the two-ordered meaning making process between the data, participant and the researcher.

# **Setting and Recruitment**

Internal Review Board approval was obtained for this study prior to recruitment. The sample was recruited through several methods in collaboration with the FCC located within one of the major container cities. FCC was established after the earthquake to provide mental health services for the survivor families in Van. Four therapists and a project coordinator, who received training in Eye Movement Desensitization and Reprocessing, Experiential Play Therapy and psychoeducation on traumatic stress, crises intervention and family therapy were recruited to work at the FCC in Van. These therapists provided individual and family therapy to adults and children who resided at the container city and expressed a need for psychological support.

The center had the facility and infrastructure to conduct interviews and the necessary clinical support if additional mental health services were needed after the interviews. The first author, who conducted the interviews, is a Turkish couple and family therapist that had a longstanding partnership with FCC directors on various projects and developed a trusting professional relationship.

The first author contacted the therapists at FCC about the research study and collaborated on identifying mothers from their client list who met the inclusion criteria: (1) age range of 18-65; (2) exposed to the 2011 earthquake; (3) living in the container city at the time of the interview; (4) mother or caretaker of at least one child within the developmental school ages of 4-12 at the time of the study; (5) agreement to meet with the first author to get further information about participating in the study; and (6) had at least one session at FCC to allow the recruitment from the Center. The recruitment process involved FCC therapists initially identifying potential participants who met inclusion criteria and contacting them in person to explain the study and ask whether they would be interested in discussing the project further with the first author. Fifteen participants met inclusion criteria and gave consent to be contacted. These mothers were then invited to the center to meet with the first author to review purpose of the study and consent before interviews were conducted. All mothers consented to participate in the study.

### **Sampling and Participants**

The study relied on a purposive sampling technique, drawing its sample from the mothers still residing in the container city. These families were the most socio-economically disadvantaged and disaster-impacted group and therefore were selected as information rich families for an in-depth study of disaster experiences. No incentives were provided for the participants and potential risks were fully explained during consent.

The demographic and earthquake variables of the sample are illustrated in Table 1. In order to help place the sample within the context of Turkey, we also present general demographic information of Turkish women living in the Van province. The eastern region of Turkey is the most socio-economically disadvantaged area, which generates regional discrepancies in terms of women's illiteracy rates, average years of marriage and average number of children. For example, the overall illiteracy rate of Turkish women is 9.4%, while in the eastern province this percentage is drastically higher at 26.6%. The employment rate of women in the eastern province is 26%, and in the rural areas, even though 84% work in agriculture, 79% of those are working without any payment as free family workers. The average age at marriage for Turkish women is 21, as compared to 19.6 in the eastern province due to the high frequency of child brides and early marriages in the region. Compared to the average of the country where the number of children is 2.26, in the eastern province each family has an estimated of 3.4 children (Turkish Statistical Institute 2015).

# Interviews

The first and second authors developed the semi-structured interview questions and a demographic survey for the study. The interviews were conducted in Turkish by the first author

<b>Table 1</b> Sample demographics $(N=15)$	Variables	M (SD)	(n) or Min.	Max.
	Age (Min., Max.)	39 (15.13)	25	70
	Income			
	Selling handicraft		4	
	Sales representative		1	
	Tea maker at school		1	
	Homemakers (never had an income)		9	
	Employment status at the time of the study			
	Unemployed		10	
	Education			
	Illiterate		3	
	Completed adult literacy courses after the earthquake		3	
	Elementary school		4	
	Middle school		3	
	Dropped out of high school		1	
	Received GDA after the earthquake		1	
	Marital status			
	Married		13	
	Divorced		1	
	Widowed		1	
	Years of marriage (M, SD) (Min, max)	17.60 (13.62)	4	50
	Age of marriage	19.33 (4.58)	13	27
	Number of children			
	One		3	
	Two		7	
	Three		2	
	Four or more		3	
	Family structure before the earthquake			
	Living with extended family		4	
	Living with nuclear family		11	
	Changed from extended to nuclear after the earthquake		3	
	Type of marriage			
	Arranged		11	
	Love		4	

and were video and audio recorded. Each interview lasted between 60 and 90 min. The grand tour questions (to ask about the phenomenon or cultural scene) and follow-up questions (to ask further details about an act, event or category) addressed in this portion of the study explored the ways in which mothers perceived family relationships to be affected as a result of the earthquake and related displacement. The guiding research question for this aim was "I am interested in understanding how you and your family have been affected by the earthquake and how your family relationships might have changed". Examples of follow-up questions included, "how were you affected in your role as a mother?" "did you notice changes after the earthquake in your relationship with your children?" and "did you notice changes after the earthquake in your parenting practicesgiving praise, encouragement, setting limits, monitoring, problem solving?"

### Analysis

Data analysis primarily followed Spradley's (1979) Developmental Research Sequence (DRS) 12-Step analytic model and the double hermeneutics process used in IPA (Smith et al. 2009). MaxQDA 11 qualitative data management software was used to assist with data management. Six Turkish transcribers selected from undergraduate psychology programs at two universities in Istanbul, Turkey, were trained by the third author, who is also Turkish, to transcribe 15 interviews verbatim based on audiotapes. After the transcriptions were completed, the two Turkish authors coded the data in Turkish and translated key findings into English. The second author served as a process and interpretive data auditor throughout the analysis.

### Trustworthiness

Guba (1981) outlined four criteria for achieving trustworthiness in qualitative research: credibility, transferability, dependability, and confirmability. In this study, researchers undertook several strategies to enhance trustworthiness including the development of an extensive audit trail, comprised of records describing how the study was conducted, that was reviewed by the second author and discussed throughout the study. Triangulation, which facilitates inquiry of the data through two or more sources, was sought between investigators in reviewing field notes, transcripts, videotaped observations and peer consultation. The researchers employed reflexive memoing to document their personal reflections on the research process. Both triangulation and reflexive memoing were used to enhance credibility and confirmability. Direct participant quotes were provided to strengthen data transferability. Careful documentation of each step of the study allowed for potential replication and interrogation of the analytic processes for dependability purposes.

# **Role of the Researchers**

Both ethnography and phenomenology recognize the importance of the emic/etic positionality of the researcher in acquiring a deeper knowledge on the studied phenomenon. The authors, employing ethnographic sensitivity and a double hermeneutics process, played an active interpretive role, where they held an empathic position by attempting to adopt the perspective of an insider, as well as a questioning stance by taking a step back from the data to investigate the phenomenon from various critical angles as an outsider. We were particularly curious about how mothers understood themselves in the process of sharing their experiences and creating new meaning as their stories unfolded in the process of the interview.

The first author was a doctoral student at the time of the study who was born and raised in Turkey in a middle class family. She had been immersed in clinical experiences working with individuals, families and communities impacted by mass traumas in her country. This author established the first connection with the clinical team at FCC and traveled to Van to conduct the interviews. The second author served as the academic advisor on this project and collaborated closely with the first author through all research phases. This author has an extensive research agenda directed at developing systemic and family-level preventive interventions for communities affected by traumatic stress, including lowincome and post-conflict settings. She identifies as a woman of color and was raised in a middle-income collectivistic country in South America, which contributed to her insider/ outsider perspectives on this group of women in Turkey. The third author is a Turkish clinician and academic who conducts clinical research in the areas of trauma, resilience and ambiguous loss. As native Turkish women, the first and third authors experienced being both insider and outsider status to the Van community. Together this collaborating team was positioned to engage in rich reflexivity about the shared lived experiences of these mothers in Van.

### Findings

In this paper, we focus on presenting results specifically related to how mother-child relationships were affected after the earthquake and resulting displacement. It is important to note that although the aim of the study was not meant to assess participant's experiences with FCC counseling services, mothers' responses were heavily influenced by their experiences with the center. This sample represents a unique population of mothers who received mental heath support while living in Van but we have limited information regarding the exact type of treatment they received (i.e. whether the support was related to trauma treatment, parenting practices, either or both) and how changes in mothers were achieved because treatments did not systematically incorporate a specific evidence-based or manualized intervention. However, all FCC therapists were trained in Eye Movement Desensitization and Reprocessing (Shapiro 2001) and reported focusing on positive parenting practices to guide their work with families.

# Mother-Child Relationships After the Earthquake and Resulting Displacement

All 15 mothers recognized several changes in their relationship with their children following the earthquake and resulting displacement. These changes were reported in terms of how mothers experienced their relationship immediately after the earthquake and displacement and also in contrast to what they noticed after they had counseling support from FCC. Seven children of the 15 mothers also had counseling support. Key changes were reported as: (1) changes in mother' parenting practices; and (2) changes in child outcomes. Mothers spoke about the increased struggles they faced while parenting their children after the earthquake and resulting displacement and highlighted the challenges in managing difficult feelings and being emotionally and physically present with their children. Alongside this struggle, some mothers reflected on their desire to establish a more positive connection with their children after they received support from FCC counselors. Mothers also disclosed observing an initial shift in their children's behaviors, mostly in response to changes in the way they interacted with their children after receiving counseling. Mothers reported an increase in children's noncompliant behaviors, increased emotional detachment and modeling their own mothers' negative behaviors. Mothers whose children received counseling services, and who disclosed experiencing a positive shift in their own parenting practices, observed improvements in their children's compliance. It is noteworthy to state that several mothers reported instances of family violence and harsh parenting practices with their children. The interviewer told mothers that she would share this type of sensitive information with their FCC therapist for further assessment and treatment if needed. We do not know if FCC ever reported any of these cases to child protection authorities but it is unlikely that the types of harsh discipline reported by these mothers would constitute grounds for investigation within the Turkish context.

### **Changes in Mothers' Parenting Practices**

### Increased Struggles

Eleven mothers reflected on two areas of challenges when parenting their children in the post disaster context: (1) difficulty managing negative emotions; and (2) lack of emotional and physical engagement. The first area of challenge was reported by nine of the 15 mothers. These included an increased tendency to yell at their children (n=6), beat (n=6), display anger outbursts (n=4), increased aggressive interactions (n=6), and less tolerance towards their children (n=6). All nine mothers reported an increase in *kizmak* (an expression used interchangeably for being angry, aggressive, or yelling at the child) in their interactions with their children. An interesting finding that needs to be appropriately understood is related to the contextual use and distinction that mothers made between different kizmak practices. Mothers reported displaying the behavior of kizmak either as a result of their inability to control their frustration or anger that may or may not be related to the child's behaviors, or as a discipline method aimed at changing a child's unwanted behaviors or to increase compliance. One mother spoke to her struggle in managing her anger and frustration after the earthquake and resulting displacement and how it spilled over into her relationship with her children: "I had never insulted my children or asked for anything by shouting before. Now, I scream over the littlest things. I am not pleased with myself. I have become ill tempered. That's not who I am". Sharing a similar experience, another mother expressed:

I turned into a more aggressive, nervous person. I'm angry with myself. I can't control myself. I can feel my veins pumping and am shaking. I have to first calm myself down to get close to my children...If I can control my anger, everything will get back on the rails. Because I know that I am the one who starts and stops everything. I'm aware of this but I can't change.

Another mother stated using *kizmak* as a discipline method shared: "The other day, I saw my son was constantly watching TV, not doing his homework. So I used kizdim (referring to warning him with angry tone). I am a disciplinarian, more than their father".

Mothers also made the distinction between physical punishments resulting from challenges of not dealing with negative emotions versus as a way to discipline their children for their disobedient behaviors. However, the frequency and intensity of beating were more intense as the mother "lost control," which meant not being able to deal with negative emotions. The frequency and intensity of physical punishment and yelling increased after the earthquake and resulting displacement and mothers struggled managing their aggression and being flexible and tolerant. One mother explained:

I used to have more compassion towards my children, but on the other hand I was mentally upside down. I became extremely angry. I started to be violent towards my child. I suffer from the guilty conscious afterwards but can't stop myself. I used to have psychological problems but three months after the earthquake it became worse.

The second area of challenges, reported by five of the 15 mothers, was the lack of emotional and physical engagement with their children (n=4), and struggling with expressing love and care for their children (n=3) following the earthquake. One mother reflected on how she gradually disengaged from her children emotionally and physically after the earthquake and resulting displacement: "I do not feel like looking after my children. I feel down. Everything feels like a burden. I do not even want to listen to them anymore". Sharing a similar experience, another reported: "I cannot show him (her son) my love. I keep thinking about it, we used to be different before all of these happened to us".

# Increased Positive Connection

Eleven mothers reported experiencing an increase in their positive connection with their children and attributed these changes to the benefits from the counseling at FCC and the fear of losing their children in death after the earthquake. The perceived improvement in mothers' parenting practices was captured in three major areas: (1) improved emotional regulation; (2) physical and emotional engagement with children; and (3) positive changes in general parenting practices. Six mothers spoke to the pattern of their inability to control their anger, which was followed with yelling at and beating the child, and how they started to yell less or beat less after the counseling support. In the words of one mother:

Before coming to counseling, I was like a living dead, I was fed up with life. After my husband's suicide, my sister passed away, the earthquake, losing my house. All the troubles came one after the other and I could not overcome them. Before starting counseling, I was giving up on me. Imagine someone who is afraid of her own shadow, I was like that. I was afraid of everything. Think of a mother who never smiled, cried all the time, worried and was stressful. Even if I had not wanted, my children were being affected by my behaviors. Sometimes, when I smile nowadays, my daughter says: "Mom, bad days are over, please let us not go back to those days, lets stay like this". My children are also aware of the changes in the way I look at life. For example, in the past, I used to 'kizmak' my children a lot. Now, I cannot say I do not yell at them at all, but not like I used to. I rarely yell at them and I do not beat them anymore. I used to beat my children before starting the counseling.

Six mothers reported that individual trauma treatment, including processing their traumatic memories related to the earthquake in sessions, helped alleviate uncontrollable anger outbursts, and led to greater maternal tolerance towards children. Some mothers identified different strategies to manage their destructive emotions: "The therapist told me to find things that I enjoy doing, so that I could use them as a shield. I go for a walk in the container city or listen to music to calm down". Another mother communicated that through counseling, she focused on expressing love and affection towards her children, which she had not experienced when she was growing up: "I want to be a patient mother. I was never showed love, but I want to be cared for and loved. In counseling, I realized that my children also want love, but I cannot show it at times".

The sessions at FCC supported the mothers and their families by teaching them new strategies to discipline their children such as effective communication skills. Five mothers, who disclosed utilizing yelling, kizmak and beating as a discipline method, stated benefiting from adopting a talking approach and trying dialogue with the children instead. As one mother shared:

Now I talk to them, tell them I have a headache, I am vulnerable and I cannot tolerate noise. And they stop fighting. In the past, I used to yell at them and beat them. But they would not stop, they would keep on fighting. It would not help, but rather hurt me and my children. The sweet tongue really helps. I realized that violence does not solve the problem or help them behave.

Another mother disclosed a similar experience: "For example, my son was a very naughty child, no matter if you beat him or yelled at him, it would not do any good. Now, I talk to him, and it seems to be working better". The increase in utilizing effective communication and experiencing its benefits, led to less use of beating and yelling by mothers as a discipline method. Mothers also pointed that they did not use rewards and encouragement before the earthquake as a part of their parenting, however after FCC sessions they started to observe how their children responded positively to encouragements, "thank you" acknowledgements, and how these promoted an increase in desired child behavior and compliance. Six mothers reported more physical and emotional engagement with their children as a result of reciprocal decrease in mother aggressive behavior and increase in child compliance.

Besides the positive impact of counseling on mothers' parenting practices and mother-child relationship, the fear of losing their children to the earthquake promoted emotional connection between three mothers and their children. One mother disclosed that she connected with her younger son at a deeper emotional level after the earthquake, when she felt an intense fear of losing him:

At the time of the earthquake, H (referring to her child) was staying with my sister in law. When the earthquake struck, I ran outside to look for him. Before that, he was not that important to me, he was an unplanned/ unwanted pregnancy. I had many problems related to this pregnancy. I was under a lot of stress at the time and my son turned out to be a stressful child, always distressed and crying. When I was looking for him right after the earthquake, I bonded with him at a greater, a very different level.

# **Changes in Child Outcomes**

Twelve of the 15 mothers reported observing behavioral and/ or emotional changes in their children following the earthquake and resulting displacement. These changes were associated with the earthquake trauma and the changes in mothers' interactions with their children. Eight mothers spoke about the increased struggles they observed in their children such as lack of compliance, becoming emotionally distant from the mother and modeling mother's negative behaviors after the earthquake. On the other hand, seven mothers also realized improvements in their children's compliance and associated these positive changes with the positive changes in their own parenting behaviors.

### Increased Struggles in Child

Three major emotional and behavioral challenges were reported in children's relationship with their mothers: lack of compliance, becoming emotionally distant from the mother, and modeling mother's negative behaviors. Six mothers reported a noticeable increase in their children's externalizing behaviors such as yelling at the parents, getting into arguments and fights with their siblings, hitting the mother, anger outbursts, and bad temper after the earthquake. These changes were associated with the psychological impact of the earthquake and displacement: "He (child) started to have such a bad temper after the earthquake. Of course, he was also greatly affected by the earthquake". Several mothers also reported a realization that their children were modeling their own aggressive behaviors (e.g., yelling and beating) therefore there appeared to be a link between their children's externalizing behaviors and an increase in their aggressive and harsh parenting practices. One mother pointed to this

association as: "Lately, I have been more aggressive, as I told you. Then [child] started to get mad at us too. She has started to yell as well. She does exactly what I do, tries to hit her brother and hurt him." Another mother also spoke to this point: "He [child] also started to yell. I do not know maybe he learns it from the cartoons he watches, but most probably it is because of my behaviors." Four mothers who observed their children's emotional detachment perceived this as a response to their own yelling and emotional withdrawal after the earthquake. As one mother stated: "After the earthquake, I was supposed to grow closer to my children, but when I cannot and when my children expect me to, I yell at them more. And that makes my child draw away from me more".

### Improvements in Child

Seven mothers reported that their children became more *compliant* and *cooperative* when asked to fulfill expected responsibilities and behaviors such as completing homework, helping with chores, not fighting with siblings, not demanding parents buy things they could not afford, going to bed on time, not throwing temper tantrums and helping the mother to take care of siblings. Mothers associated the positive outcomes in their children's behaviors with the positive changes in their own parenting practices and emotion management skills as a result of counseling. One mother spoke to this link as:

Now, I tell my daughter to go to bed around 9 PM. Sometimes, she continues watching television. Then I say: "Child, it is enough, it is time for sleep now. If you do not get enough sleep, you will not be able to grow up. You should go to bed early, so you can wake up early and watch a cartoon in the morning". And she listens to me. Now, when I turn off the television, she does not say "I will turn it on and watch it now.

With the encouragement of counselors, mothers also generated creative and effective strategies to increase children's compliance. One mother utilized a fun way to convince her child to clean up his toys by referring to a Turkish cartoon character, Pepee, created to educate children ages 4–5. This mother mentioned that instead of yelling at her child to clean up his room (which had not resulted in the child's compliance), she decided to try a different way: "I tell my child: "Look how tidy Pepee keeps his room. Let's clean up these toys together and keep your room clean, just like Pepee does". And it works. Together, we clean up the room".

Another mother disclosed that she suffered for a long time from the intense guilt and regret of having to threaten her child by showing the child a needle to scare and prevent him from approaching the hot stove in the container. After several sessions at FCC, the mother started to explain to her child the reasons why he should stay away from the stove in the container, which was used to cook meals, and reported the change in her child as: "In the past, when I showed him the needle, he would stop playing with the stove. Now, he stays away from the stove without me showing him the needle. I talked to him again and again and it worked". One mother shared thanking her child increased her level of compliance and response to the mother's requests: "Sometimes I ask him to bring me a glass of water. When he does, I thank him and he becomes very happy. I think he likes being appreciated when he does what I asked him".

### Discussion

Several paramount points were shared by study participants that have clinical and research implications for professionals who work with families affected by mass traumas. First, the narratives of the Turkish mothers highlighted the complex array of contextual factors that are associated with parenting practices and child emotional and behavioral responses following disasters. Patterson's (1982) SIL model proposes that background stressors, as distal factors (i.e., stressors related to larger systems of peers and community), interrupt youngsters' healthy adjustment to adversities to the extent that parental psychosocial wellbeing is disrupted by these contextual factors. The quality of parenting may be eroded by the challenges of mothers' adjustment to contextual stressors, leading to an increase in coercive behavioral patterns, thus hindering positive parenting practices (Forgatch and Knutson 2002). In line with the SIL model, our study demonstrated that the cumulative stressors in mothers' lives prior to the disaster, exacerbated by exposure to the earthquake and related contextual risk factors after the disaster, such as economic (loss of home/jobs/income), emotional (displacement, isolation in the container city) and structural (lack of access to healthcare and schools), deterred mothers' ability to cope with distress and in turn negatively impacted mother-child relationships. Mothers' emotional reactivity led to an increase in their coercive parenting behaviors and a decrease in positive involvement with their children. Mothers reported that the majority of yelling, beating and anger outbursts towards their children resulted from not being able to "manage" their anger, frustration or sadness. Several mothers linked difficulties related to expressing love and care to their own distress and the lack of perceived emotional engagement from their own parents when they were growing up, leaving them ill equipped to acknowledge and attend to their children's emotional needs.

Second, mothers associated the negative changes in their children's behaviors with the earthquake trauma and difficulty adjusting to the container city, as well as with the changes in their own parenting behaviors. Mothers also recognized that the improvement or decline in children's compliance and emotional engagement varied according to the nature of their own interactions with their children. As suggested by the concept of negative reciprocity in the SIL model, the aversive behaviors of parents are learned and utilized by the children. Consistent with this concept, mothers in our study reported children as modeling mothers' coercive interaction patterns (e.g., yelling, beating, aggression) (Patterson 1982) and their externalizing behaviors increased in parallel to mothers' negative parental behaviors. Negative reciprocal behaviors such as mothers' coercive behavior and children's noncompliance, escalated the conflicts between the parent and the child, leading to an increase in the frequency and intensity of mothers' anger outbursts and physical punishments and children's noncompliance and emotional detachment from the mother.

The counseling services at the FCC were perceived as a crucial resource, promoting mental health care for family members, helping mothers buffer against intense contextual stressors, providing them emotional, psychological and social support to survive in the highly adverse environment of the container city, as well as encouraging the enactment of healthy parenting strategies and mother-child relationships. The mothers were supported in breaking the existing coercive parenting patterns, replacing them with alternative positive parenting skills such as problem solving through dialogue, emotional involvement and encouragement (Patterson 1982). The increase in mothers' positive interactional patterns with their children reinforced children's compliance and emotional connectedness and in turn reduced parental distress and promoted stronger parent-child relationships. Although resilience is readily seen in communities affected by mass traumas, the lasting negative effects of traumatic stress on individual and family health is ubiquitous across multiple generations unless active steps are taken to mitigate those adversities. Indeed, persistent intergenerational transmission of family violence accompanied by harsh parenting practices and low positive involvement between parents and children is one dimension of a complex set of consequences related to traumatic stress resulting from mass traumas in conjunction with the adversities that permeate low-income settings. This study adds to the growing literature documenting the deleterious effects of mass traumas (human-caused and natural disasters) on parent-child relationships and points to the need for clinicians, researchers and policy-makers alike to attend to family-level interventions designed to address immediate and long-term disruptions in individual and relational functioning. The first feasibility studies of parenting interventions with families exposed to mass traumas in displaced refugee communities (Ballard et al. 2017) and in post-conflict settings (Wieling et al. 2015a, b) show promise of the potential for culturally and contextually adapting existing evidence-based family interventions to promote positive and interrupt negative parenting practices. Similar to what was documented in Van, these studies showed that trauma-affected parents will engage in targeted family interventions and that changes in parenting practices and child outcomes are possible. Much more research is needed across trauma and population contexts utilizing randomized controlled studies that would eventually result in the first evidence-based treatments in the field for families exposed to mass traumas.

The rising tensions in the current national and international social political context along with global population displacement reaching the highest levels ever recorded in human history, ongoing wars, and persistent natural disasters thought to be associated with global warming, urge the field to advance family-based prevention and intervention research as well as translational science directed at effectively disseminating and implementing interventions to reach some of the most vulnerable families worldwide. A relevant implication of the growing need to support families affected by traumatic stress is for clinical and public health fields to systemically incorporate topics related to traumatic stress and displacement into academic training programs to better prepare future clinicians and researchers to respond these needs and raise capacity building to support families after displacement. Collaborative and interdisciplinary teams of scholars will increasingly be needed to address the array of systemic complexities inherent in mass trauma contexts.

### Limitations

This study presents five primary limitations. First, interviewing only mothers who had at least one counseling session at the FCC hindered the information that would have been received from the population who struggle with traumatic stress without any psychological support. Unfortunately, we do not have data on the mental health treatment that participants received including the number of sessions and the specific type of trauma and parenting interventions delivered. The first author who conducted the interviews also recognized that several participants used some of the terms (e.g. trauma, discipline, stress) that they learned in counseling sessions, which may have affected their narratives of their trauma related experiences of parenting. Second, it was also recognized that at the beginning of interviews, some mothers had the tendency to engage in socially desirable responses (e.g., I never yell at my children or beat them, I do not have any problems with my children). This limitation was overcome to a certain extent after some trust was established between the interviewer and the participant and the interviewer's normalization of the challenges of raising a child in such adverse circumstances. Third, member checks could not be conducted because the authors did not have the opportunity to return to Van to revisit the participants. This limitation was partially addressed by using interpretive summaries of the information learned along the interview process and employing double hermeneutics to generate questions and reflections about how mothers attributed meaning to their experiences. Fourth, this study did not distinguish between the psychological affect of the earthquake and being homeless and having to reside in a container city on mothers' parenting practices. It was challenging to differentiate the two experiences since they merged into one another right after the earthquake, however future studies might elicit parents to reflect on this difference during the interviews. Another limitation was the portions of the initial study aim and interview protocol were inadvertently altered because mothers were heavily influenced by their experiences with FCC counseling sessions. This influenced the flow and direction of the study to be more of a representation of how mothers' perceived their relationship with children before and after counseling. Finally, including direct observations of children's behavior and parent-child interactions following the earthquake could have strengthened our systemic understanding of family dynamics for these participants.

# Conclusion

Study results indicated that supporting Turkish mothers in their psychosocial needs as well as promoting positive parenting practices may help buffer both mothers and children from the negative effects of trauma-related adversities. Helping parents manage their negative emotions and recognizing and improving parenting practices matter profoundly in mediating the negative emotional and behavioral impacts of parental distress on children (Mogil et al. 2015). This study is the first step towards understanding the perceived relational impact of mass trauma experiences on mother-child relationship in Turkish contexts. Much more work is needed to assess and understand the roles of other psychological mental health components, such as posttraumatic stress, depression, and a host of maladaptive coping mechanisms as part of a systemic treatment approach post mass disasters (Witting et al. 2016). Turkish mental health providers might glean from this study a better understanding of the importance of recognizing the effects of traumatic stress at the family level, empowering mothers in trauma contexts both as affected individuals and as helpers and supporters of their children. These findings have implications for policy makers to promote research and local programs to provide psychosocial support for parents in trauma-affected regions in hopes of preventing long-term mental health problems in children.

#### **Compliance with Ethical Standards**

**Conflict of interest** The authors have no conflict of interest pertaining to this submission to the Journal of Contemporary Family Therapy.

### References

- About Van earthquake. (2012). Retrieved from https://www.afad.gov. tr/ar/9845/About-Van-Earthquake.
- Aisenberg, E., & Ell, K. (2005). Contextualizing community violence and its effects: An ecological model of parent-child interdependent coping. *Journal of Interpersonal Violence*, 20(7), 855–871. doi:10.1177/0886260505276833.
- Altindag, A., & Ozen, S. (2005). One-year follow-up study of posttraumatic stress disorder among earthquake survivors in Turkey. *Comprehensive Psychiatry*, 46(5), 328–333. doi:10.1016/j. comppsych.2005.01.005.
- Ballard, J., Wieling, E., & Forgatch, M. (2017). Feasibility of implementation of a parenting intervention with Karen refugees resettled from Burma. Journal of Marital and Family Therapy.
- Basoglu, M., Salcioglu, E., & Livanoglu, M. (2002). Traumatic stress responses in earthquake survivors in Turkey. *Journal of Traumatic Stress*, 15, 269–276. doi:10.1023/A:1016241826589.
- Black, D. A., Heyman, R. E., & Smith Slep, A. M. (2001). Risk factors for child physical abuse. Aggression and Violent Behavior, 6, 121–188. doi:10.1016/s1359-1789(00)00021-5.
- Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.
- Catani, C., Jacob, N., Schauer, E., Kohila, M., & Neuner, F. (2008). Family violence, war, and natural disaster: A study of the effect of extreme stress on children's mental health in Sri Lanka. *BMC Psychiatry*, 8(33), 1–10. doi:10.1186/1471-244X-8-33.
- Catani, C., Schauer, E., & Neuner, F. (2008). Beyond individual war trauma: Domestic violence against children in Afghanistan and Sri Lanka. *Journal of Marital and Family Therapy*, 34(2), 165–176. doi:10.1111/j.1752-0606.2008.00062.x.
- Creswell, J. W. (2007). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage.
- Forgatch, M. S., & Knutson, N. M. (2002). Linking basic and applied research in a prevention science process. In H. Liddle, G. Diamond, R. Levant & J. Bray (Eds.), *Family psychology: Sciencebased interventions* (pp. 239–257). Washington, DC: American Psychological Association.
- Gewirtz, A., Forgatch, M., & Wieling, E. (2008). Parenting practices as potential mechanisms for child adjustment following mass trauma. *Journal of Marital and Family Therapy*, 34(2), 177–192. doi:10.1111/j.1752-0606.2008.00063.x.
- Gewirtz, A. H., Polusny, M. A., DeGarmo, D. S., Khaylis, A., & Erbes, C. R. (2010). Posttraumatic stress symptoms among National Guard soldiers deployed to Iraq: Associations with parenting behaviors and couple adjustment. *Journal of Consulting and Clinical Psychology*, 78(5), 599–610. doi:10.1037/ a0020571.
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technol*ogy Journal, 29, 75–91. doi: 10.1007/BF02766777.
- Haj-Yahia, M. M., & Abdo-Kaloti, R. (2003). The rates and correlates of the exposure of Palestinian adolescents to family violence: Toward an integrative-holistic approach. *Child Abuse & Neglect*, 27(7), 781–806. doi:10.1016/s0145-2134(03)00119-4.
- Kelley, M. L., Self-Brown, S., Le, B., Bosson, J. V., Hernandez, B. C., & Gordon, A. T. (2010). Predicting posttraumatic stress symptoms in children following Hurricane Katrina: A prospective analysis of the effect of parental distress and parenting practices. *Journal of Traumatic Stress*, 23(5), 582–590. doi:10.1002/jts.20573.
- Kilic, C., & Ulusoy, M. (2003). Psychological effects of the November 1999 earthquake in Turkey: an epidemiological study. Acta Psychiatrica Scandinavica, 108(3), 232–238. doi:10.1034/j.1600-0447.2003.00119.x.

- Kilic, E. Z., Ozguven, H. D., & Sayil, I. (2003). The psychological effects of parental mental health on children experiencing disaster: The experience of Bolu earthquake in Turkey. *Family Process*, 42(4), 485–495. doi:10.1111/j.1545-5300.2003.00485.x.
- Landau, J., Mittal, M., & Wieling, E. (2008). Linking human systems: Strengthening individuals, families, and communities in the wake of mass trauma. *Journal of Marital and Family Therapy*, 34(2), 193–209. doi:10.1111/j.1752-0606.2008.00064.x.
- Mogil, C., Hajal, N., Garcia, E., Kiff, C., Paley, B., Milburn, N., & Lester, P. (2015). FOCUS for early childhood: A virtual home visiting program for military families with young children. *Contemporary Family Therapy: An International Journal*, 37(3), 199–208. doi:10.1007/s10591-015-9327-9.
- Montgomery, E. (2004). Tortured families: A coordinated management of meaning analyses. *Family Process*, 43(3), 349–371. doi:10.1111/j.1545-5300.2004.00027.x.
- Nickerson, A., Bryant, R. A., Brooks, R., Steel, Z., Silove, D., & Chen, J. (2011). The familial influence of loss and trauma on refugee mental health: A multilevel path analysis. *Journal of Traumatic Stress*, 24(1), 25–33. doi:10.1002/jts.20608.
- Olema, D. K., Catani, C., Ertl, V., Saile, R., & Neuner, F. (2014). The hidden effects of child-maltreatment in a war-region: Predictors of psychopathology in two generations living in Northern Uganda. *Journal of Traumatic Stress*, 27(1), 35–41. doi:10.1002/jts.21892.
- Patterson, G. R. (1982). Coercive family process. Eugene, OR: Castalia.
- Patterson, G. R., Forgatch, M. S., & DeGarmo, D. S. (2010). Cascading effects following intervention. *Development & Psychopathology*, 22, 949–970. doi:10.1017/S0954579410000568.
- Saile, R., Ertl, V., Neuner, F., & Catani, C. (2014). Does war contribute to family violence against children? Findings from a two-generational multi-informant study in Northern Uganda. *Child Abuse* & Neglect, 38(1), 135–146. doi:10.1016/j.chiabu.2013.10.007.
- Saul, J. (2014). Collective trauma, collective healing: Promoting community resilience in the aftermath of disaster. NY: Routledge.
- Scheeringa, M. S., & Zeanah, C. H. (2001). A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress*, 14(4), 799–815. doi:10.1023/a:1013002507972.
- Shamai, M. (2002). Parents' perceptions of their children in a context of shared political uncertainty: The case of Jewish settlers in the West Bank before and after the Oslo peace agreement. *Child and Adolescent Social Work Journal*, 19(1), 57–75. doi:10.102 3/a:1014055423279.
- Shapiro, F. (2001). Eye movement desensitization and reprocessing: Basic principles, protocols and procedures. New York: Guilford Press.
- Slone, M., & Mann, S. (2016). Effects of war, terrorism and armed conflict on young children: A systematic review. *Child Psychiatry And Human Development*. doi:10.1007/s10578-016-0626-7.
- Smith, J. A., Flowers, P., & Larkin, M. (2009). Interpretive phenomenological analysis: Theory, method, and research. London: Sage.
- Song, S. J., Tol, W., & Jong, J. (2014). Indero: Intergenerational trauma and resilience between Burundian former child soldiers and their children. *Family Process*, 53(2), 239–251. doi: 10.1111/ famp.12071.
- Spradley, J. (1979). The ethnographic interview. New York: Holt, Rinehart and Winston.
- Sriskandarajah, V., Neuner, F., & Catani, C. (2015). Predictors of violence against children in Tamil families in Northern Sri Lanka. *Social Science and Medicine*, 146, 257–265. doi: 10.1016/j. socscimed.2015.10.010.
- Sriskandarajah, V., Neuner, F., & Catani, C. (2015). Parental care protects traumatized SriLankan children from internalizing behavior problems. *BMC Psychiatry*, 15(1), 203. doi: 10.1016/j. socscimed.2015.10.010.
- Sumer, N., Karanci, A. N., Berument, S. K., & Gunes, H. (2005). Personal resources, coping self-efficacy, and quake exposure as

predictors of psychological distress following the 1999 earthquake in Turkey. *Journal of Traumatic Stress*, *18*(4), 331–342. doi:10.1002/jts.20032.

- Turkish Statistical Institute (2015). Istatistiklerle kadin. Retrieved from http://www.tuik.gov.tr/PreHaberBultenleri.do?id=18619.
- Walsh, F. (2007). Traumatic loss and major disasters: Strengthening family and community resilience. *Family Process*, 46(2), 207– 227. doi:10.1111/j.1545-5300.2007.00205.x.
- Weine, S., Muzurović, N., Kulauzović, Y., Besić, S., Lezić, A., Mujagić, A., Muzurović, J., Spahović, D., Feetham, S., Ware, N., Knafl, K., & Pavković, I. (2004). Family consequences of refugee trauma. *Family Process*, 43(3), 147–160. doi:10.1111/j.1545-5300.2004.04302002.x.
- Wickrama, K. A. S., & Kaspar, V. (2007). Family context of mental health risk in tsunami- exposed adolescents: Findings from a pilot study in Sri Lanka. *Social Science and Medicine*, 64(3), 713–723. doi:10.1016/j.socscimed.2006.0.
- Wieling, E., Mehus, C., Mollerherm, J., Neuner, F., Achan, L., & Catani, C. (2015a). Assessing the feasibility of providing a parenting intervention for war-affected families in Northern Uganda.

Family and Community Health, 38, 253–268. doi: 10.1097/ FCH.00000000064.

- Wieling, E., Mehus, C., Möllerherm, J., Neuner, F., Achan, L., & Catani, C. (2015b). Assessing the feasibility of providing a parenting intervention for war-affected families in Northern Uganda. *Family and Community Health*, 38(3), 253–268. doi:10.1097/ FCH.0000000000064.
- Wieling, E., Mehus, C., Yumbul, C., Möllerherm, J., Ertl, V., Laura, A., Forgatch, M., Neuner, F., & Catani, C. (2015a). Preparing the field for feasibility testing of a parenting intervention for war-affected mothers in Northern Uganda. *Family Process*. doi:10.1111/ famp.12189.
- Wieling, E., Mehus, C., Yumbul, C., Möllerherm, J., Ertl, V., Laura, A., Forgatch, M., Neuner, F., & Catani, C. (2015b). Preparing the field for feasibility testing of a parenting intervention for war-affected mothers in Northern Uganda. *Family Process*. doi:10.1111/ famp.12189. Advance online publication.
- Witting, A. B., Jensen, J., & Brown, M. (2016). Evaluating the utility of MFT models in the treatment of trauma: Implications for affect regulation. *Contemporary Family Therapy*, 38(3), 262–271.