TRANSGENERATIONAL TRANSMISSION OF TRAUMA: INVESTIGATING COGNITIVE, EMOTIONAL AND BEHAVIORAL FORMS OF TRANSMISSION AMONG MARMARA EARTHQUAKE SURVIVORS

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Approval of the Institute of Graduate School

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ABSTRACT

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The present study examined transgenerational transmission of trauma over 1999 Marmara Earthquake on children of survivors in terms of metacognitive, emotional and behavioral aspects. Transmission was inferred by looking at two things. First, whether parental earthquake-related memories were transmitted to the next generation was investigated. To do that, to what extent severity of parental exposure to earthquake was related to the child's inclusion of earthquake memory into his/her biographical knowledge about the parent was measured. Second, whether parental trauma was transmitted to the next generation via some metacognitive, emotional and behavioral outcomes was examined. Participants were assigned to trauma and comparison group based on whether their parents directly experienced the 1999 Earthquake in Kocaeli (Gölcük, İzmit, Karamürsel, Derince) or not. When adolescences were asked to recall 10 most important events from their parent's life, 65.6% of trauma group and 5.5% of comparison group included 1999 Marmara Earthquake events. However, trauma and comparison group children did not significantly differ from each other on metacognition, emotion regulation, internalizing and externalizing behavior problems. These results indicated that although earthquake related traumatic experiences were transmitted to the next generations through memories, negative impacts of these experiences did not reveal about themselves via next generations' metacognitive emotional and behavioral problems as measured by quantitative scales.

Keywords: Trauma, Transgenerational Transmission of Trauma, Marmara Earthquake

TRAVMANIN KUŞAK AŞKIN AKTARIMI: MARMARA DEPREMİNDE HAYATTA KALANLARIN BİLİŞSEL, DUYGUSAL VE DAVRANIŞŞAL AKTARIMININ İNCELENMESİ

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Bu çalışma, travmanın kuşak aşkın aktarımını Marmara depreminde hayatta kalanların çocukları üzerinden, metabiliş, duygu ve davranış düzeyinde incelemektedir. Travma aktarımı iki konu üzerinden çalışılmıştır. Birincisi, ailenin depremle ilgili anılarının gelecek kuşaklara aktarılıp aktarılmadığı araştırılmıştır. Bunun için çocukların ebeveynleri hakkındaki biyografik bilgilere 'depremle ilgili olayları' dahil edişinin ebeveynin depreme maruz kalmasıyla ne ölçüde ilişkili olduğu araştırılmıştır. İkincisi, ailenin yaşadığı travmanın sonraki kuşağa üstbiliş, duygusal ve davranışsal açıdan aktarılıp aktarılmadığı incelenmiştir. Katılımcılar, travma ve karşılaştırma grubuna ebeveynlerinin Kocaeli'deki (Gölcük, İzmit, Karamürsel, Derince) 1999 Marmara depremini doğrudan deneyimlemesi ya da bu depremi hiç yaşamamış olmasına göre atanmıştır. Adolesanlardan ailelerinin hayatından 10 önemli olay anlatmaları istendiğinde travma grubunun %65,6'sı, karşılaştırma grubunun ise %5,5'i 1999 Marmara depremiyle ilgili olay anlatmıştır. Buna karşın, gruplar arasında üstbilişler, duygu düzenleme, içsel ve dışsal davranış bozuklukları açısından anlamlı farklılıklar bulunmamıştır. Sonuçlar, depremle ilişkili travmatik deneyimlerin gelecek kuşaklara anılar yoluyla aktarılmasına rağmen, bu deneyimlerin olumsuz etkilerinin sonraki kuşaklarda, ölçek düzeyinde, üstbilişsel, duygusal ya da davranışsal problemler şeklinde ortaya çıkmadığına işaret etmektedir.

Anahtar Kelimeler: Travma, Travmanın Kuşak Aşkın Aktarımı, Marmara Depremi



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CHAPTER 1

INTRODUCTION

In one night 17.480 people lost their lives and 43.953 people got injured. Furthermore, there 133.863 buildings were collapsed and 600.00 people, including children, lost their homes (The United States Geological Survey Report, 2005). The 1999 Marmara Earthquake has admittedly been the greatest earthquake in the country in terms of its severity, magnitude, sphere of influence, loss of lives, and financial damage in the last century.

Natural disasters have brought about a huge amount of destruction in human life. From past to present, not only 1999 Marmara Earthquake, but also lots of other earthquakes influenced people all over the world e.g. 1939 Erzincan Earthquake and 2011 Van Earthquake in Turkey, 1975 Chile Earthquake, 1976 Tangshan Earthquake in China, 2000 Haiti Earthquake, 2004 Sumatra Earthquake in Indonesia, 2011 Tohuku Earthquake in Japan and 2013 Pakistan Earthquake (USGS, US. Geological Survey, 2017).

Material (e.g., financial loss) and psychological (e.g., losing one's family) consequences of these earthquakes remain effective in people's lives (Danieli, 1998; van der Kolk, 1994; Yehuda et al., 2005). There has been a vast amount of research on trauma and its influence on the victims' psychological and social well-being (Bezo & Maggi, 2005; Danieli, 1998; Daud, Skoglund & Rydelius, 2005; van der Kolk, 1994; Yehuda et al., 2005). It is known from the trauma literature that traumatic experiences are strongly associated with psychological problems such as Posttraumatic Stress Disorders (PTSD; Pearrow & Cosgrove, 2009; Yehuda, Bell, Bierer and Schmeidler, 2008), anxiety disorder (Zalihić, Zalihić & Pivić, 2008) and depression (Forrest, Edwards & Daraganova, 2018); Yehuda, Kahana, Southwick & Giller Jr, 1994).

Traumatic events are always engraved on people's mind, heart and memory but not every person is heavily affected by traumatic events, also traumas' sphere of influence is not same for every person in every condition. After traumatic events; social position, socioeconomic status, in a nutshell the whole life changes. By extension, transmission of the effects of those are inevitable for the next generations. Transgenerational transmission of trauma refers to the impact of trauma within the family across the generations (Figley, 2012; van der Kolk, 1994). For instance, children of survivors who have become impoverished after a traumatic event or a parent who has lost his/her job/home/loved people differentiate from others who have no loss or have not been exposed to any traumatic event. In the light of the related literature, both disaster-affected people (e.g. devastating earthquake survivors) and people who have been

exposed to human-caused traumas (e.g. terrorist attack survivors) pass down their experiences to the next generation (Braga, Mello & Fiks, 2012; Gökler, 2001; La Greca, Silverman, Vernberg, & Prinstein, 1996).

This transmitted trauma is also carried out across further generations and include "repeated and observable patterns" (Danieli, 1998, p. 10). These patterns refer to the roles and values which are internalized by the family members. This process of internalization can act in two opposing ways, positive or negative. It may cause traumainduced behaviors and/or vulnerability to mental illness (Bromet, Sonnega & Kesser, 1998); or it may facilitate coping by building resilience and/or increase personel/professional succes in next generations (Bar-on et al., 1998; Schulberg, 1997). Protective factors (e.g. family support, ethnicity) and risk factors (e.g. being woman, history of mental illness, lack of family and social support) for traumatic events should be reconsidered to clarify the direction of transmission process (positively or negatively) beyond generations. As a risk factor, a child who has been raised in an environment deprived of social and family support endorses his/her history; internalizes the trauma, and experiences it in a negative way. In contrast, another family who experiences a traumatic event develops their own way to cope with trauma related difficulties. The latter way of dealing with trauma is referred as resilience. Resilience is associated with affective coping strategies (Ungar, 2013). Therefore, it helps individuals to overcome negative impacts of the trauma (İkizer, 2014).

Previous literature also support that traumatic events effects not only the individuals who were directly exposed but also their families, friends, and caregivers (Leen-Feldner et al., 2013). In other words, a trauma can be transmitted to others. "Secondary traumatization" (Rosenheck & Nathan, 1985), "secondary traumatic stress" (Figley, 1995) or "vicarious trauma" (Lehrner & Yehuda, 2018) refers to emotional difficulties or distress which is transmitted from someone who was exposed to a traumatic event to significant others such as family members and/or close friends (Dekel & Solomon 2006). Being close to someone who was exposed to a traumatic event, sharing his/her feelings with him/her, helping trauma survivors, or even just knowing about a traumatic event might lead to secondary traumatization (Figley, 1998). People who are close to the survivor share the traumatic event, and may sometimes experience the secondary effects of trauma (Klarić, Kvesić, Mandić, Petrov & Frančišković, 2013; Remer & Ferguson, 1995); and therefore they are referred as "secondary survivor". Both secondary traumatization and secondary survivor concepts may indicate the trauma transmission.

The 1999 Marmara Earthquake deeply impacted the survivors' lives as indicated above. But what about their children who did not individually experience the Marmara Earthquake? Did Marmara Earthquake survivors' life experiences after the trauma put their stamp on the next generation? The young survivors of the 1999 Marmara Earthquake got older and some had children now. Those childrenmight have heard a lot of stories about their parents' earthquake experiences. How were those parental

narratives remembered by their children? Did parental biographies serve as a means of transmission of trauma to the next generation? In addition to those memories, has the trauma that parents lived through shape their children's assumptive worlds, emotion regulation skills, metacognitive abilities, and behavioral well-being? These are the main research questions in the present study. In other words, the present study investigated transgenerational transmission of trauma among the offspring of 1999 Marmara Earthquake survivors'. In order to study what is transmitted from parents to the child, two groups of children those with (i.e., parental exposure to Marmara Earthquake versus those without parental exposure to Marmara Earthquake) were compared to each other in terms of their metacognitive beliefs, emotion regulation skills, behavioral problems, and their knowledge about their parents' life events. We believe that identifying what is transmitted from parents to the child after a disaster would be an important step in understanding the processes that lead to/prevent transmission of PTSD.

Early studies on transmission of trauma have primarily focused on the World War II - especially the Jewish Holocaust (Danieli, 1998; Figley, 2012; Fossion et. al., 2015; Kidd, 2005; Lev-Wiese, 2007; Weingarten, 2004). Also, various studies were conducted with combat veterans' children (Kulka et al., 1990; Heart, 2003), immigrants (Lev-Wiesel, 2007; Phipps & Degges-White, 2014), victims of genocide such as Native Americans (Heart, 2003), survivors of Shoah (Schulberg, 1997), Cambodian families (Burchert, Stammel & Knaevelsrud, 2017), survivors of Holodomor (Bezo & Maggi, 2015), Jewish (Yehuda, Kahana, Southwick, Giller, 1994; Yehuda, Schmeidler, Siever,

Binder-Brynes, & Elkin, 1997), Rwandan (Roth, Neuner & Elbert, 2014). Besides, incidents of terrorist attacks and terrorist attacks (Yehuda et al., 2005), military coups (Toledo, 2014) and torture (Daud, Skoglund & Rydelius, 2005) were also studied in the transmission of trauma literature. The focal point of these studies is whether children of trauma survivors display symptoms of Posttraumatic Stress Disorder, depression, anxiety or behavioral problems (Fossion et al., 2015; Wittekind, Jelinek, Moritz, Muhtz & Berna, 2016). These studies demonstrated mixed results; while some reported increased psychopathology in the children of the trauma survivors (Bezo & Maggi, 2015; Daud, Skoglund & Rydelius, 2005), others have found no such evidence (Burchert, Stammel & Knaevelsrud, 2016; Yahyavi, Zarghami & Marwah, 2014; Zalihić, Zalihić & Pivić, 2008) and indicated the exact opposite: the psychopathology is not transmitted over generations (Felsen & Ehrlich, 1990; Jelinek, Wittekind, Kellner, Moritz, and Muhtz, 2013; Sigal & Weinfeld, 1987). For instance, Davidson and Mellor (2001) examined children of Australian Vietnam veterans and compared these children to civilian peers. They measured self-esteem, PTSD symptoms and family functioning. Results showed that there was no difference between two groups in terms of self-esteem and PTSD symptomatology. However veterans were found to have unhealthy family functioning and difficulties in solving problems functionally within their families or problems in general. Another study (Svob, Brown, Takšić, Katulić & Žauhar, 2016) examined transmission of trauma via war-related memories. Particularly, they studied xenophobia in Croatians after the Croatian and Bosnian wars with regards to socialdistance attitudes and war-related memories of second generations. They asked second

generation participants the events/memories which belong to their parents' lives. They compared whether children of conflict group were more likely to include war-related events than those of non-conflict group. Results demonstrated that almost one-half of the children in the conflict group recalled the Croatian war despite they, themselves, had not directly experienced the trauma directly.

There are also studies assessing transmission of trauma by adopting qualitative approach. For instance, Bezo and Maggi (2016) examined 1932-1933 effects of Holodomor genocide among three generations and designed a qualitative method (thematic analysis). They interviewed 45 survivors (semi-structured in-depth interviews) and their descending generations (children and grandchildren). According to the results, second and third generations had higher levels of mistrust and decreased self-worth; were more likely to feel shame, anger, anxiety; and had higher tendency to display survival mood (i.e., stockpiling of food, overeating, reverence for food) than first generation (Bezo & Maggi, 2016). Bar-on and his colleagues (1998) also used qualitative method to compare transmission of trauma after three distinct traumatic event: The Utrecht Study (Jewish survivors of World War II in The Netherlands), The Vancouver Study in Canada and Beer-Sheva Study in Israel. These studies demonstrated that parental overprotection was transmitted throughout the generations. Results also indicated that survivors were reluctant to share war-related memories with their children (i.e., conspiracy of silence).

Being qualitative or quantitative, transgenerational transmission of trauma literature mostly draw on human-caused traumas such as forced migration, terrorist attacks, and Holocaust (Costello, Angold, March & Fairbank 1998; Loo, 1994; Stewart, 1996). Human-caused traumatic events such as terrorist attacks, massacres, genocides and wars massively influence people at once and brings people onto other traumatic experiences such as poverty (Bezo and Maggi, 2015; Shakoor and Chalmers, 1991), permanent physical damage (Davidson & Mellor, 2001) and loss loved ones (Yehuda et al., 2005). Poverty, physical damage, and losing loved ones are all devastating consequences which have strong potential to carry the trauma to the next generations. Natural disasters also lead to destruction, loss of lives and have lasting effects on humans' ongoing life. For instance, just as in a war or a massacre, someone who experienced a natural disaster may start living in poverty (losing home, job, salary), have difficulty to fulfil even the most basic needs (sheltering, food and beverage etc.), undergo physical/financial/emotional damage and/or loss of loved ones like immediate family and friends (Bezo and Maggi, 2016). However, relatively, there are far less studies on transmission of trauma after natural disasters (Goodman & West-Olatunji, 2008) than those on transmission of human-caused traumas. In fact, most studies emphasize the severity of disorders after human-caused traumas as compared to natural disasters (Costello, Angold, March & Fairbank 1998; Loo, 1994; Stewart, 1996).

Possible mechanisms by which trauma can be transmitted are mainly explained by family theories in the literature. In addition, reminiscence of trauma-related stories and collective memory throughout generations indicate that memory might be another

important means of the transmission of trauma. Hence, describing these two-main approaches might be useful to clarify the mechanisms of the transgenerational transmission of trauma.

Transgenerational transmission of trauma in family theory research descends from the studies of Bowen (1966) and Boszormenyi-Nagy (1973). One of the prominent family theoreticians, Bowen (1966), focuses on the family patterns and how those patterns affect the next generation. Exemplifying this pattern, during the war there was shortage of food and the ancestors stocked the beverages. The child of the war-survivor might stock the food and beverages unconsciously with same hoarding pattern. This behavioral pattern may be accompanied by a cognitive pattern. Same child may interpret shortage of money as a catastrophe and might be depressed because of it ("we will starve or will be indigent"). Goldrick, Carter & Garcia-Preto (1999) also describes the transmission over the roles and define the members not only as a victim or a reactor to parents' experiences but also as an active player in interactions that repeat themselves. Family theories consider the transmission as an extension of family trajectory rather than a disorder (Fossion et al., 2015). Bar-on and his colleagues (1998) asserts that transmission of trauma is there and does not have to appear in a physical form such as psychopathology (i.e., conspiracy of silence among Holocaust survivors).

In addition to the patterns and roles within the family, the differentiation concept (Bowen, 1966; Hayes, 1991), and the concept of "unresolved issues" might be useful to explain how the transmission occurs between generations unconsciously (Almagor & Leon, 1989). Differentiation concept refers to the process of emotional separation of individuals from their families of origin. Unresolved issues refer to unfinished business such as unresolved loss or prolonged trauma and some researchers describe this process over attachment styles. Inability to mourn/lack of mourn/prolonged mourning may lead to some reactions such as fear, neediness or unpredictable behaviors. The survivor may not act properly in uncertain situation. Hence, the child of survivor may have difficulty to regulate his/her emotions or behaviors (should I cry, scream or be afraid?). So, this challenging process leads to transmission of some unresolved emotions or behaviors. The paradoxical contexts below exemplify how differentiation and unresolved issues explain the process of trauma transmission between generations: (1) Children of survivors might feel guilty, because they live in better conditions than their parents. They might have difficulty to emotionally differentiate themselves from their parents; (2) Survivor parents inculcate immaterial values into their children but children might overrate material things contrary to parents; (3) Children may be less appreciative of their possessions (i.e., material things) than their parents; (4) Parents see the traumatic events which they experienced as crucial incident and might avoid providing details about the event. It is called as "conspiracy of silence" and is referred to unresolved issues. Yet, children may be curious about these missing details or attune to the silence (Bar-on et al., 1998). Although the offspring have never experienced this kind of trauma which parents have; they might feel guilty, give importance to some possessions, have lack of empathy or behave harsh to their parents on talking about traumatic event. All these examples describe unconscious transmissions beyond generations which reveal themselves cognitively, emotionally and behaviorally. They think, feel or act this way *because of* their parents' trauma.

Collective memory literature suggests that trauma can also be transmitted to next generations via trauma-related memories. These studies indicated that traumatic events such as war, natural disasters, forced migration or terrorist attacks become part of a community's memory only if those events dramatically change many material aspects (i.e., where they live, what they do, where they go) of the most members' lives in the community (Brown, Schweickart & Svob, 2016; Gu, Tse & Brown, 2017). Svob and Brown (2012) also demonstrated that events that change one's life significantly (e.g., civil war) are more likely to be remembered by next generations.

As referred before, while the legacy may be a disorder or psychopathology for some; others may inherit cognitions, emotions or behavioral patterns from their parents or prior generations. Hence, even if we cannot talk about a psychopathology, it is likely that parental trauma might reveal itself on offsprings' cognitive, emotional or behavioral patterns.

One cognitive aspect which could be affected by parental trauma is metacognition. Metacognition has usually been measured in terms of positive beliefs, uncontrollability, cognitive confidence, beliefs about superstition, punishment and responsibility and cognitive self-consciousness (Wells and Cartwright-Hatton, 2004). Metacognition is also defined as 'thinking about thinking', and involves monitoring, interpreting and/or controlling of thoughts (Ferreri, Lapp & Peretti, 2011). Too much control on thoughts is considered as dysfunctional (Roussis & Wells, 2008). According to Wells (2002) people who are exposed to traumatic event use 'worry' as a coping technique to relieve the symptoms and this strategy is reinforced by one's metacognitive beliefs such as 'When I start worrying, I cannot stop', 'My worrying could make me go mad', 'I will be punished for not controlling certain thoughts', 'If I did not control a worrying thought, and then it happened, it would be my fault.' (Wells & Cartwright-Hatton, 2004). Research demonstrated that early emotional traumatic experiences disrupted adaptive metacognitive beliefs and were correlated with negative affect (Myers & Wells, 2015).

Jelinek and her colleagues (2013) studied transgenerational transmission among the Second World War survivors (displaced persons) and their children. Their results demonstrated that dysfunctional beliefs were correlated with PTSD in survivors, but PTSD were not transmitted to their children.

Aggression (Nadler, Kav-Venaki & Gleitman, 1985), guilt (Bar-on et al., 1998), fear (Debiec & Sullivan, 2014), anxiety (Heim & Nemeroff, 2001), depression (Fossion et al., 2015), shame, mistrust and sadness (Bezo & Maggi, 2015) are the most commonly

studied emotions in transgenerational transmission of trauma literature. The studies show that these emotions were the most transmitted ones to the next generations. Each emotion was observed intensely in the next generations.

There is no study which directly investigates the relationship between parental trauma and children's emotion regulation capacity. But, for instance, Bar-on and his colleagues' study (1998), implies that dysfunctional emotion regulation patterns can also be transmitted among generations via attachment figures. A traumatic event experienced by a primary caregiver triggers discomfort and feeling of threat for the infant/child because the infant/child usually receives unpredictable signals from his/her traumatized primary caregiver (Fonagy, 1999). In the absence of a proper parental guidance, the infant/child might have difficulty to regulate his/her emotions. In addition, maladaptive coping strategies and problem behaviors such as aggression, substance abuse or other risky behaviors can also pass on the next generation via genes and/or social learning mechanisms (Bezo & Maggi, 2015; Boney-McCoy &Finkelhor, 1996; Phipps & Degges-White, 2014).

Another aspect that could be influenced by parental trauma is belief in a just world. Belief in a just world refers to one's assumption that the world is a fair place and that people get what they deserve (Dalbert, 1999; Dalbert & Stoeber, 2006). Janoff-Bulman (1989) asserts three main categories related to assumptive world; perceived benevolence of the world, meaningfulness of the world and worthiness of the self; and she also

emphasized that these assumptions "learned and confirmed" with their experiences in many years (Janoff-Bulman, 2010; p. 5). Negative life events such as losing a loved one, being exposed to traumatic event (i.e. accident, natural disaster, war, torture) make people more vulnerable; and this vulnerability shatters people's assumptive world understanding. While people think "it can't happen to me" (Janoff-Bulman, 1989), they may be exposed to traumatic events. When people go through a rough patch, or are exposed to a traumatic event, the belief that "the world is a fair place" is shattered and they find it difficult to adapt themselves to the new situation. The parents' impaired sense of justice is reflected on their child-rearing attitudes and behaviors. Thus, after a while, the child begins to internalize his/her parents' impaired feelings of justice.

To sum up, even though there are many studies about the effects of trauma on its primary victims, less is known about how traumatic events influence the victims' social circle such as their family, friends, and caregivers throughout generations. These limited number of studies majorly investigated transmission of PTSD, depression, anxiety or related behavioral problems to children of Holocaust survivors, combat veterans and like. Besides the findings provided equivocal support. Furthermore, there is a lack of information about how traumatic transmission displays itself through some variables such as one's metacognitive beliefs, emotion regulation capacity, or even one's biographical knowledge about his/her parents.

The present study aimed to contribute to fill these gaps in the literature. Particularly, transgenerational transmission of trauma among 1999 Marmara Earthquake Survivors' children was studied. In order to study what was transmitted from parents to the child, two groups of children (trauma and comparison groups) were compared in terms of their metacognitive beliefs, emotion regulation skills, behavioral problems and their knowledge about their parents' life events.

Particularly, there were two groups referred as (1) Trauma Group: Children who were born within 4 years following the earthquake (i.e., between 2000-2005) and whose parents directly experienced 1999 Marmara Earthquake; (2) Comparison Group: Children who were born within 4 years after the earthquake (i.e., 2000-2005) and whose parents did not experience 1999 Marmara Earthquake. Transmission was inferred by investigation of two areas. First, whether parental earthquake-related memories were transmitted to the next generation was investigated. To do that, to what extent severity of parental exposure to earthquake was related to the child's inclusion of earthquake memory into his/her biographical knowledge about the parent was measured. Second, whether transmission of parental trauma to the next generation reflected itself through some emotional, behavioral and metacognitive outcomes was examined. Particularly, to what extent severity of parental exposure to earthquake was related to the child's metacognitive, emotional, behavioral, somatization and just world belief outcomes was analyzed.

The main hypotheses of the present study were presented below:

- 1. The frequency of mentioning 1999 Marmara Earthquake should be significantly higher in Trauma Group than in Comparison Group.
- 2. Metacognition, Just World Belief and Emotion Regulation scores are expected to be significantly lower in Comparison Group than in Trauma Group. Higher scores show negative metacognitive beliefs but higher scores show more positive assumptions about the world and better emotion regulation capacity.
- 3. Trauma group should score higher in behavioral and somatic problems than comparion group.

CHAPTER 2

METHOD

2.1. Participants

Data were collected from 70 adolescents (37 females and 33 males with an age range of 12 to 18) and their parents (including both mothers and fathers). There were two groups referred as trauma group and comparison group. Particularly, trauma group included 33 participants whose parents directly experienced the 1999 Marmara Earthquake and the comparison group included remaining 37 adolescents whose parents did not directly experience the earthquake. All participants were born between 2000 and 2005. Participants of the trama group were recruited from the province of Kocaeli (Gölcük, İzmit, Karamürsel, Derince) which were severely affected by the earthquake. On the other hand, participants of the comparison group were recruited from Antalya, Amasya, Denizli and Bartın which have almost no history of earthquake or other collective experiences of trauma but have similar characteristics with Kocaeli in terms of industrialization, and socio-demographical features.

Almost 10,000 kilometers (6,200 miles) road from Ankara to given cities was travelled in three months during data collection period.

70 adolescences were participants of the study (M=15.6; SE=0.16). Trauma group consisted of 18 females and 15 males with the mean age of was 15.25 (SD=1.48, Range = 12-18) and the comparison group consisted of 19 females and 18 males with the mean age of 16 (SD=1.11, Range: 14-18). Total education year may be seen in Table 2.1. All participants (children, mothers and fathers) birth and longest place where they have lived was coded as Kocaeli and other and shown in Table 2.2. Parents' age, total year of education (ranged in 5-18 years) is shown Table 2.3; job status (employed or other/unemployed/retired) and family income (1: 1001-1500 TRY; 2: 1501-3000 TRY; 3: 3001-5000 TRY; 4: 5001 and above) are shown in Table 2.4 for both groups.

Table 2.1

Frequency of Gender, Age and Education Year of Groups

Group	Gender			Age		Education year (7 th -12 th grade)		
	Male	Female	M	SD	Range	M	SD	Range
Trauma	15	18	15.25	1.48	12-18	10.06	1.41	7^{th} - 12^{th}
Comparison	18	19	16	1.11	14-18	10.62	1.14	9 th -12 th

Table 2.2

Frequency of Birth and Place of Longest Duration of Residence

Group	Participant	Birth	Place	Longest Place			
		Kocaeli	Other	Kocaeli	Other		
		N (%)	N (%)	N (%)	N (%)		
Trauma	Child	29 (87.9%)	4 (12.1%)	31 (93.9%)	2 (6.1%)		
	Mother	22 (66.7%)	11 (33.3%)	31 (93.9%)	2(6.1%)		
	Father	20 (60.6%)	13 (39.4%)	30 (90.9%)	3(9.1%)		
Comparison	Child	3 (8.1%)	34 (91.9%)	1 (2.7%)	36(97.3%)		
	Mother	0% (0%)	37 (100%)	0(0%)	37(100%)		
	Father	0% (0%)	37 (100%)	0 (0%	37(100%)		

Table 2.3

Frequency of Parents' Age and Education Years

Group	Age Educat			cation	ntion			
		M	SD	Range		Λ	I	Range
					Primary	High	College	
Trauma	Mother	42.7	5.20	33-55	15	10	7	5-18
	Father	45.76	5.68	35-55	11	12	9	5-18
Comparison	Mother	42.25	4.88	34-54	17	10	9	5-16
	Father	47	4.57	41-56	5	15	16	5-16

Table 2.4

Frequency of Parents' Job Status Income of the Family

Group		Job Sta	Job Status (N) Fam			nily Income (N)		
		Employed	Other	1000- 1500	1501- 3000	3001- 5000	5001	
Trauma	Mother	8 (24.28%)	25(75.8%)	4	9	13	7	
	Father	28 (84.8%)	5 (15.2%)					
Comparison	Mother	12 (32.4%)	25(67.6%)	8	9	13	7	
	Father	30 (81.1%)	7 (18.9)					

Participants were assigned to trauma and comparison group based on whether their parents directly experienced the 1999 Earthquake in Kocaeli (Gölcük, İzmit, Karamürsel, Derince) or not.

Participants in comparison group, in contrast, included children whose parents did not directly exposed to the 1999 Earthquake in Kocaeli, Yalova, İstanbul or other neighboring regions, where the intensity of the tremor was severe. All mothers and fathers, individually, completed Earthquake Related Traumatic Experiences Questionnaire (Gökler, 2001) by considering their own experience about 1999 Marmara Earthquake.

2.2. Materials

Adolescents filled out following forms: Metacognition Questionnaire for Children and Adolescents (MCQ-C), General Belief in Just World Scale (GBJW), Regulation of Emotion Questionnaire (REQ), Achenbach Young Self Report (YSR), and finally Trauma Checklist; mothers and fathers filled out Socio-demographic Information for Parents, Trauma Checklist and Earthquake Related Traumatic Experiences Questionnair (EQRTE) respectively.

Reliability scores of each scale for the current sample were not calculated due to low sample size.

This form includes questions regarding the socio-demographic characteristics of the participants such as age, gender, level of education, marital and socioeconomic status for adolescences and parents (see Appendix A).

2.2.2. Reminiscence Session.

A blank paper was prepared for each adolescent and they were asked to recall memories that belong to their parents. Each memory were written separately and the participants were asked a question related to the earthquake memory in case of recall (i.e. "How often did your parents talk about this event with you?"). This question was adopted from Svob and Brown's (2012) study (see Appendix B).

2.2.3. Metacognition Questionnaire for Children and Adolescents (MCQ-C)

Metacognitive beliefs is measured by Metacognition Questionnaire for Children and Adolescents (MCQ-C) which was developed by Wells and Cartwright-Hatton (2004) and adapted for adolescent by Bacow, Pincus, Ehrenreich & Brody (2009) for the ages between 13 and 17. This questionnaire is based on 24-items and Turkish adaptation of the scale was done by Irak (2011).

There are five factors: positive beliefs ('If I worry about things now, I will have fewer problems in the future'); uncontrollability and danger ('Worrying might make me go crazy'); cognitive confidence ('I am always thinking about the thoughts in my head'); superstition, punishment and responsibility ('It is not a good idea to worry because worrying is bad for me'); and cognitive self-consciousness ('I often notice the thoughts that I have in my head') (Bacow, Pincus, Ehrenreich & Brody, 2009). The scale is rated on four-point scale ranging from 1 (do not agree) to 4 (agree very much). The total score ranges from 24 to 96. The higher the score the more dysfunctional the metacognitive beliefs. The Cronbach alpha value is .87 for the original scale, and .93 for the Turkish version (see Appendix C).

2.2.4. General Belief in Just World Scale (GBJW)

General Belief in Just World Scale was developed by Dalbert (1999) to measure one's beliefs about how fair the world is. The scale consists of 6-items (e.g. "I basically feel that the world is a fair place"; "I feel that people get what they

deserve"). Each item ranges from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicate higher tendency for general belief in a just world tendency. The scale was adapted to Turkish by Göregenli (2003). The Cronbach alpha value is .82 for the original version and .71 for the Turkish one (see Appendix D).

2.2.5. The Regulation of Emotions Questionnaire (REQ)

Individual differences on emotion regulation (recognizing, monitoring, evaluating and modifying emotional reactions) among adolescents is measured by The Regulation of Emotions Questionnaire (REQ) which was developed by Phillips and Power (2007). The scale consists of four sub-scales: internal-functional, internal-dysfunctional, external-functional and external-dysfunctional emotion regulation. The scale was adapted to Turkish by Duy and Yıldız (2014). Turkish form of the scale has 18-items rated on 5-point Likert scale (1: not at all; 5: always). Examples of the items are 'I think about people better off' (internal-dysfunctional), 'I review (re-think) my goals or plans' (internal-functional), 'I take my feelings out on others physically' (external-dysfunctional) and 'I ask others for advice' (external-functional). Internal and external dysfunctional scores were reversed. Higher scores indicate better emotion regulation capacity. Cronbach alpha values are .72, .76, .76, .66 for internal-dysfunctional, internal-functional, external-dysfunctional, external-functional, respectively for the original form; and .76, .68, .74, and .59 for the Turkish version, respectively (see Appendix E).

2.2.6. Achenbach Youth Self Report (YSR)

The Youth Self Report was developed by Achenbach and Edelbrock (1987) to assess psychological problems in children and adolescences aging from 11 and 18. The scale has two parts: the first one is "demographic questions information and competence", this part is composed of 7-items; and the second one is "behavioral and emotional problems", this part is composed of 112-items. Whereas the first part of this scale consists of 3 subscales which are "competence, sociability and school" and the scores obtained from this part generate total competence score; the second part is composed of two subscales which are "internalizing and externalizing" and the scores are taken from this part generate total problem score. Internalizing problems are represented by 3 subtests as anxiety/depression, social introversion/depression and somatic problems. Externalizing problems are represented by 2 subtests as disobedience to the rules and aggressive acts. In addition, there are three more subtests called social problems, thought problems and attention problems. These are not categorized as under the internalizing and externalizing problems parts. Three other subtests are obsessive compulsive disorder, post-traumatic stress disorder and positive characteristics. They are included to YSR by Rescorla and his colleagues (2007). Scores obtained from these 3 subtests are added to problem scores. The scale is rated on 3-point scale ranging from 0 (not true) to 2 (very true or often true). The last item of the scale is an openended question and refers to whether child/adolescent wants to add any feelings, thoughts or behaviors that were not included in the scale. The scale was adapted to

Turkish by Erol, Arslan and Akçakın (1995). Cronbach alpha values are between .55 and .75 for the original form and .92 for the Turkish version. For the purpose of the study only the second part (emotional and behavioral problems) of the scale used. Within the second part, the three subtests of internalizing subscale (anxiety/depression, social introversion/depression and somatic problems) and aggressive behavior, rule breaking behavior subtests from externalizing subscale were used (see Appendix F).

2.2.7. Trauma Checklist

Trauma Checklist has 10-items asking for possible traumatic events such as natural disasters, warfare exposure, robbery involving a weapon, physical abuse and being stalked (serious accident fire, explosion, natural disaster (e.g. earthquake, flood), being exposed to physical attack/assault, having been in military engagement or battlefield, imprisonment (e.g. fall into prison, captured as a prisoner of war, take hostage), being tortured, undergoing life-threatening disease, exposed to terrorist attack, unexpected death of a loved or immediate one, any traumatic event except of these ones. Participants were asked whether they have ever experienced these events or not. At the end of the checklist, they were instructed to report if they had any additional traumatic exposure. Participants were also asked to provide their estimated dates of each traumatic experience reported with the confidence level about their estimate (i.e., "exact" or "best estimate"). The questionnaire was taken from Gökler (2001) and revised for the present study (see Appendix G).

2.2.8. Earthquake-Related Traumatic Experiences Questionnaire (EQRTE)

This questionnaire involves 19 items and measures the severity of the earthquake exposure. EQRTE was adapted by Gökler (2002) by modifying Hurricane Related Traumatic Experiences Questionnaire (HURTE; La Greca, Silverman Vernberg & Prinstein, 1996). EQRTE consisted of 19-items; five more items related to the content were added to the scale included 24-items. The answers are provided in "Yes" or "No" format. The questionnaire consists of four factors representing perceived life threat (e.g. "think you might die"); displacement (e.g. "move from your home"); life threating experiences (e.g. "trapped under ruin") and witnessing traumatic scenes and loss (e.g. "see anyone else die"). Internal consistencies of the factors are .81, .69, .62 and .60 respectively. (see Appendix H).

2.3. Procedure

Before the data collection, first, written consent of the participants' was taken (see Appendix I, Appendix J). Parental consent were also obtained (see Appendix K). Next, participants filled out the Socio-demographic Information (see Appendix A).

To avoid triggering any earthquake memories before the reminiscence session, two things were done. First, both parents and adolescents were informed that this study is related to "transmission of memories in the family". The participants were debriefed about the real aim of the study after their participation (see Appendix L).

Second, data was first collected from adolescents. Particularly, adolescents were first asked to recall "10 most important events from one of their parent's life from any period, from the time their parent was born up to the present". Participants were informed that the events could be ordered based on which come to mind first. Participants were instructed that they can use only one birth-related event unless there is no something peculiar about the birth of a child.

After the reminiscence session, the 10 events were randomly re-presented and adolescents were asked to estimate the year of each memory. All participants were asked how frequent their parents mentioned the Earthquake event. Participants' responses were written by the researcher during the session. The reminiscence procedure was adopted from the Svob and Brown's (2012) study. Next, adolescents were given the Metacognition Questionnaire for Children and Adolescents (MCQ-C), General Belief in Just World Scale (GBJW), Regulation of Emotion Questionnaire (REQ), Achenbach Young Self Report (YSR), and finally Trauma Checklist.

After adolescents completed their questionnaires, the parents were given the sociodemographic Information, Trauma Checklist and Earthquake Related Traumatic Experiences Questionnaire respectively. They were asked to fill out the forms in a seperate rooms to make sure that they were not influenced by their children's responses. More detailed information about the questionnaires are provided under the 'Materials' section. All ethical rights of the participants and of their parents including their right to leave the experiment, right to be debriefed about the study were ensured throughout the entire data collection process (see Appendix M for Ethical Committee Approval). Families were paid for their participation. The pictorial presentation of the procedure is also provided in *Figure 2.1*.

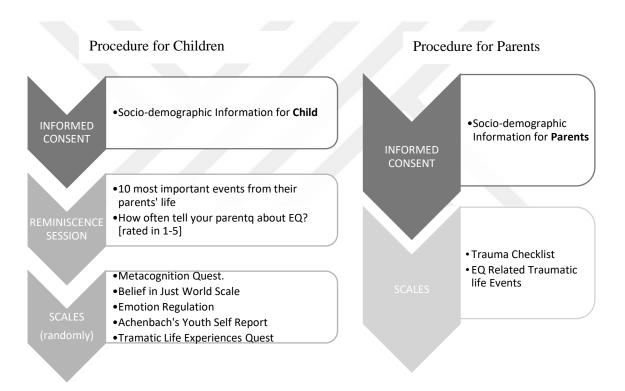


Figure 2.1. Procedure Schema for Adolescences and Parents

CHAPTER 3

RESULTS

3.1. Data Analysis

Three hypotheses were tested to examine transgenerational transmission of trauma.

Relevant results were provided under each hypothesis.

To determine whether the event recalled by the participants was related to 1999 Marmara Earthquake, all events were coded by two independent raters. Interrater reliability was 100%.

Parents scores on EQRTE also indicated statistically significant difference between trauma and comparison group, with the former having higher scores (M = 10.53; SE = 0.74) than the latter (M = 3.24; SE = 0.32), F(1,68) = 88.49, p = .000, $\eta = 0.57$).

3.1.1. Hypothesis 1: The frequency of mentioning 1999 Marmara Earthquake should be significantly higher in Trauma Group than in Comparison Group.

When adolescences were asked to recall 10 most important events from their parent's life, 65.6% of trauma group and 5.5% of comparison group included 1999 Marmara Earthquake related events. A chi-square test of independence was calculated to study the relationship between parental trauma exposure and inclusion of 1999 Marmara Earthquake event. A significant relationship was found (χ^2 (1) = 27.31, p = .000). Trauma group (65.6%) was more likely to mention earthquake than comparison group (5.5%).

When adolescences were asked to rate how frequently their parents' mention about Marmara Earthquake, there was a significant difference between the means of trauma (M = 2.41, SE = 0.14) and comparison group $(M = 1.92, SE = 0.15; F(1,66) = 5.53, p = .016, <math>\eta 2 = 0.02)$, with the former being higher than the latter.

3.1.2. Hypothesis 2: Metacognition scores are expected to be significantly higher but Just World Belief and Emotion Regulation scores should be lower in Trauma Group than in Comparison Group.

Before testing Hypothesis 2 and Hypothesis 3, first, the data was explored to see whether it met the assumptions of multivariate analyses.

The maximum Mahalanobis distance value (*Mahal D* = 40.48) of the data was larger than the critical Mahalanobis distance value (χ^2 (14) = 36.12, p = .000), indicating some outliers in the data. Two participants' data, whose Mahalanobis distance value greater than 36.12 were removed from the analysis.

As shown in Figure 3.1, linearity assumption was not violated. For each plot, there appeared to be a linear relationship.

control trauma TotalYSR TotalREQ Total GBJW

Figure 3.1. Scatter plots of MCQ, GBJW, YSR, and REQ by Group. Note. MCQ = Metacognition Questionnaire; GBJW: General Belief in Just World; REQ = Regulation of Emotion; YSR = Youth Self Report

TotalMCQ TotalGBJW TotalREQ TotalYSR

TotalMCQ TotalGBJW TotalREQ TotalYSR

As shown in Table 3.1., each dependent variable was normally distributed across trauma and comparison groups as assessed by Shapiro-Wilks test (p > .05).

Table 3.1

Normality Test Values of MCQ, GBJW, REQ and YSR

Variable		Statics	df	Sig.
Total MCQ	Trauma	.969	32	.483
	Comparison	.961	36	.227
Total GBJW	Trauma	.966	32	.409
	Comparison	.950	36	.104
Total REQ	Trauma	.950	32	.140
	Comparison	.970	36	.439
Total YSR	Trauma	.949	32	.131
	Comparison	.964	36	.289

As shown in Table 3.2. none of the correlations between scales exceeded .90, indicating no multicollinearity.

Table 3.2

Correlations between scales of MCQ, REQ, GBJW and YSR

Variable		Total MCQ	Total GBJW	Total REQ
Total GBJW	r	0.08		
	p	0.51		
Total REQ	r	-0.32	0.27	
	p	.00	0.03	
Total YSR	r	0.27	-0.28	-0.58
	p	0.02	0.02	.00

To test whether two variables (children's previous trauma and parents' additional trauma) can be used as covariates, two separate chi-square tests of independence were calculated to compare the children's previous trauma and parents' additional trauma between trauma and comparison group. Children's previous trauma ($\chi^2(1) = 1.38$, p = .24) and parents' additional trauma ($\chi^2(1) = 0.72$, p = .40) were not different in trauma and comparison groups. So, these two variables were entered as covariates in the analysis. After confirming that assumptions were not violated, one-way between subjects MANCOVA was conducted, with group being a between-subjects variable and subscales of MCQ, GBJW, REQ, and YSR scores as being dependent variables. Children's previous trauma and parents' additional trauma were covariates in the analysis.

3.1.2.1. Metacognition

Children in trauma and control group did not significantly differ from each other in positive beliefs, uncontrollability and danger, cognitive confidence, superstition, punishment and responsibility, cognitive self-consciousness aspects of emotion regulation after controlling for the effect of child's previous traumatic experience and parents' additional trauma (p > .05; Table 3.3).

3.1.2.2. Belief in Just World

As shown in Table 3.3., there was no significant effect of group on belief in just world scores after controlling for the effect of child's previous traumatic experience and parents' additional trauma (p > .05). This result suggests that parental trauma is not related to children's view about the world as a fair place.

3.1.2.3. Emotion Regulation

Children of trauma and control group did not significantly differ from each other in internal-functional, internal-dysfunctional, external-functional, external-dysfunctional aspects of emotion regulation after controlling for the effect of child's previous traumatic experience and parents' additional trauma (p > .05; Table 3.3). These results suggest that parental trauma does not influence children's emotion regulation skills.

Table 3.3

Mean Values of MCQ, GBJW and REQ Scores by Group

Scale		Group	M	SE	df	df error	F	P	η^2
	PB	T	11.56	.72	1	64	.08	.77	.001
		C	11.83	.55					
	UD	T	14.72	.56	1	64	.02	.88	.000
		C	14.49	.61					
	CC	T	11.94	.62	1	64	1.04	.31	.002
MCQ		C	10.91	.69					
	SR	T	14.90	.75	1	64	.51	.47	.008
		C	14.28	.75					
	CS	T	18.69	.50	1	64	3.42	.07	.051
		C	17.17	.58					
	Total	T	71.81	1.74	1	64	1.41	.24	.022
		C	68.68	1.75					
GBJW	Total	T	18.59	.74	1	64	.63	.43	.010
		C	17.62	.67					
	ENF	T	9.18	.55	1	64	.001	.98	.000
		C	9.20	.52					
	INF	T	14.37	.80	1	64	1.96	.17	.03
REQ		C	12.84	.75					
	EF	T	2.86	.36	1	64	.06	.80	.001
		C	2.75	.34					
	IF	T	16.09	.40	1	64	.001	.97	.000
		C	16.11	.38					
	Total	T	64.63	1.30	1	64	.58	.45	.009
N DI		<u>C</u>	66.00	1.23	11 1 '1'	. 1.1			••

Note. PB = positive beliefs; UD = uncontrollability and danger; CC = cognitive confidence; SR = superstition, punishment & responsibility; CS = cognitive self-consciousness; ENF = internal-functional; INF = internal-dysfunctional; EF = external-functional; IF: external-dysfunctional; AD = anxiety/depression; WD = social introversion/depression; So = somatic problems; AB = aggressive behavior; RB = rule breaking behavior; *p < .05

3.1.3. Hypothesis 3: Behavioral and Somatic Problems Scores should be higher in Trauma Group than in Comparison Group

Children in trauma group and children in comparison group received similar scores on internalizing problems (i.e., anxiety/depression, social introversion/depression and somatic problems) and externalizing problems (i.e., disobedience to the rules and aggressive acts) subscales of Youth Self Report after controlling for the effect of child's previous traumatic experience and parents' additional trauma (p > .05; Table 3.4).

Table 3.4

Mean Values of YSR by Group

Scale		Group	M	SE	df	df error	F	P	η^2
	AD	T	8.07	.81	1	64	.05	.82	.001
		C	8.41	.80					
	WD	T	5.06	.62	1	64	.33	.57	.005
YSR		C	4.68	.57					
	So	T	3.90	.62	1	64	.48	.49	.007
		C	3.50	.48					
	AB	T	7.75	.71	1	64	.39	.53	.006
		C	8.68	.88					
	RB	T	2.09	.37	1	64	1.64	.20	.025
		C	2.87	.42					
	Total	T	26.88	2.20	1	64	.06	.81	.001
		C	28.13	1.75					

Note. YSR = Youth Self Report; AD = anxiety/depression; WD = social introversion / depression; So = somatic problems; AB = aggressive behavior; RB = rule breaking behavior

CHAPTER 4

DISCUSSION

Relatively limited number of research focused on how traumatic events influence the next generations. These limited number of studies majorly investigated transmission of PTSD, depression, anxiety or related behavioral problems on to children of human caused trauma survivors. These findings ended up with inconclusive evidence. Furthermore, there is not much research on how parental trauma caused by a natural disaster is associated with children's metacognitive beliefs, emotion regulation skills, internalizing or externalizing problems, and one's biographical knowledge about his/her parents.

The present study contributed to the literature in two ways. First, transgenerational transmission of the trauma caused by the 1999 Marmara Earthquake trauma was studied by comparing two groups of children (trauma and comparison groups) in terms of their knowledge about their parents' life events. Second, trauma and comparison children were compared in terms of metacognitive beliefs, emotion regulation skills, and behavioral problems.

The first hypothesis was that when children were asked to report 10 important events from their parents' lives, children of trauma group should be more likely to include 1999 Marmara Earthquake event in their reports than those of non-trauma comparison group. Results indicated that while most children (65.6 %) in trauma group regarded Marmara Earthquake as an important part of their parents' biography, only three children in comparison group considered Marmara Earthquake event as a significant event in their parents' lives (5.5 %). Furthermore, children's ratings demonstrated that parents who experienced 1999 Marmara Earthquake narrated their experiences related to the earthquake to their children more often than parents who were not directly exposed. These findings suggest that parental traumatic knowledge is indirectly acquired by children and transmitted across generations, even when children did not experience the traumatic events directly. In addition, children reported that the earthquake event was more frequently talked about within the family in trauma gorup than in comparison group. These findings may imply that earthquake related narratives are common among the families of trauma group. Trauma narratives seem to be transmitted to the next generation.

However, the second hypothsesis of the study (i.e., children of trauma group should have more dysfunctional metacognitive beliefs, less emotion regulation skills, and that they are less likely to believe in a just world than children of comparison group) was not confirmed. When these results are interpreted together, they suggest a new line of discussion: Talking about the earthquake experience, in other words verbalization of

the traumatic memory, may facilitate processing of trauma (Hartman and Burgess, 1988, 1993). Dual Representation Theory (Brewin, Dalgleish and Joseph 1966; Brewin, 2001) proposes that traumatic experiences are stored in 'verbally accessible memory (VAM)' and 'situationally accessible memory (SAM)' seperately. SAM contains the material which is not subject to conscious processing at the time of encoding. Therefore when exposed to traumatic reminders, the unprocessed traumatic material repeatedly intrudes as fragmented pieces of sensory and emotional content. On the other hand, VAM system stores processed material which is accessible through voluntary recall and permits verbal narratives (Rubin, Boals and Berntsen, 2008). In PTSD, environmental cues similar to traumatic context easily trigger SAM but VAM is usually hard to access (Johnsen and Asbjørnsen, 2008; Yehuda et al., 1995; Yehuda et al., 2005). The traumatic metarial remains disintegrated between these two memory systems. However, talking about the earthquake facilitates the integration between these distinct memory systems; so that the traumatic memory becomes verbally accesible and integrated. In this way, the traumatic experience becomes no longer an unresolved issue (Almagor & Leon, 1989; Bowen, 1966; Hayes, 1991). In the current study, the higher rates of talking about the arthquake within the families of trauma group may imply that the parents who were exposed to the earthquake had resolved the trauma and therefore transmission of negative effects to the next generation was prevented. This may be the reason why the trauma group did not differ from the comparion group in terms of measured variables (i.e., dysfunctional metacognitions, emotion regulation, assumptive worlds, behavioral outcomes).

Processing of trauma may indeed explain why the trauma group did not differ from the comparion group in terms of metacognitive skills. Studies investigating transmission of trauma via metacognitive processes are relatively limited (Jelinek et al., 2013; Liotti and Prunetti, 2010; Roussis & Wells, 2008). On the other hand, some studies on primary trauma reported metacognitive deficits among trauma victims (Liotti and Prunetti, 2010). By definition, metcognition involves interpreting thoughts and/or controlling them; so the mind of an individual who is exposed to trauma is busy with the traumatic event and tries to process that event (Pynoos, Steinberg & Piacentini, 1999). From this perspective, metacognition is considered as an important predictor of emotional symptoms such as anxiety and/or tension (Wells, 2002, p. 42). When the post-traumatic stress level is high, fair world assumption is shaken and selfperception is impaired. As a result, it becomes difficult to integrate the traumatic event into memory (Foa and Rothbaum, 1998). Rigidity of the world assumptions is another disadvantage for processing the trauma (Brewin, Dalgleish and Joseph, 1996). In contrast, a survivor who can integrate his/her memory after the traumatic event is able to develop his/her metacognitive skills and to regulate his/her emotions easier (Bar-on et al., 1998; Wells, 2002). Thus, it can be thought that a traumatic event that is processed in memory would not damage one's metacognitive skills. So people are able to organize their feelings better, and assumptive world beliefs are less likely to be shattered. This may be the reason why the trauma group did not differ from the comparion group in terms of metacognition.

The last hypothesis was that children of trauma group should be more likely to develop internalizing and externalizing problems than those of comparison group. Contrary to the hypothesis, both groups of children did not differ from each other in terms of internalizing and externalizing problem scores. These findings suggest that parental trauma did not pass on to next generations as reflected in behavioral and somatic problems. As discussed above processing of trauma could be an explanation why the trauma group scored as well as control group in behavioral outcomes.

The findings summarized above imply that although parents' earthquake related memories are transmitted to children, possible negative effects of trauma do not pass on to children. Previous research provided equivocal support for transmission of trauma. The current results are consistent with studies which found no transmission of trauma across generations (Jelinek et al., 2013; Sigal & Weinfeld, 1987; Yahyavi, Zarghami & Marwah, 2014; Zalihić, Zalihić & Pivić, 2008), but inconsistent with some others which claim transgenerational transmission of trauma (Aker, Erdur-Baker, Ilgin Gokler-Danisman and Yilmaz, 2012; Bezo & Maggi, 2015; Boney-McCoy & Finkelhor, 1996; Burchert, Stammel & Knaevelsrud, 2016; Phipps & Degges-White, 2014).

No differences between the groups in terms of measured variables could also be due to the methodological differences between the lietrature and the current study. As noted earlier, one difference between previous research and the current study is that the latter focused on trauma due to a natural disaster. Type of the trauma might be one reason why no support was found for the transmission of trauma in terms of metacognition, emotion regulation, world assumptions and behavioral problems. In case of human-caused traumatic events, when people try to find an answer to the questions why this trauma has happened to them, their answer is more likely to be associated with their identity, nationality, or ethnicity. Because, for instance, terrorist attacks are mostly organized against a nation as protests of ethnic or religious groups. What happened to them is actually associated with, a part of or threatening to their identity; it is affected by and significantly influences their identity. Thus, in humancaused traumatic events, it is very likely that survivors begin to question social justice and that their just world beliefs are shattered. In contrast, in traumatic events due to natural disasters such as major earthquakes, people are more likely to attribute the trauma to the acts of nature or God, chance or other uncontrollable external factors. Therefore, it is less likely that their assumptions about the justiness of the world is shattered. Anyone may experience a natural disaster such as earthquake or flood anytime, and survivors are less likely to associate these events with their social identity or self (Janoff-Bulman, 1989). Because, nature does not discriminate against people or take sides.

The participants of the study were also the offsprings of parents who were exposed to a collective trauma rather than an individual one. Literature reveals that disasterrelated collective traumatic experiences are more commonly shared among survivors, compared to victims of human-caused and/or individual traumas (Baxter, 2002; Benedek, Fullerton and Ursano, 2007). In human-caused traumas such as rape or torture, individuals may not have tendency to share what happened to them, nor do they explain it. People may feel ashamed of what happened to them (Bezo and Maggi, 2016) and this may lead to a tendency of withholding memories (conspiracy of silence). However, in case of a natural disaster, such as an earthquake, comes from nature, the survivors may feel less shame or guilt. So, conditions and outcomes may be slightly different from human-caused traumas. As we know from the trauma literature, traumatic events interfere with the continuity of human life and these traumatic events are disorganized in mind (Pynoos, Steinberg & Piacentini, 1999). What is done in psychotherapy is actually; to concert a meaningful story which includes a prelude, middle and a conclusion to organize this event in the mind of the person. So, sharing traumatic experiences collectively in natural disasters helps with information processing and closure. So, survivors might have an opportunity to integrate past and the future into their memory in natural disasters. People have more chance for collective mourning in natural disasters than in human-caused traumas. Collective mourning opportunity might also alleviate the negative impact of trauma on survivors and may contribute to the prevention of its transmission across generations (Campbell, 2018; Saunders and Aghaie, 2005).

Not only communal morning but also cooperation among people, social support and relatively protected just world belief may be the other factor that make recovery process faster in natural disasters as compared to human-caused traumas. Efforts of

reconstruction after natural disasters (i.e., an earthquake) may reduce the negative perceptions about the event. Survivor may feel "more vulnerable yet stronger" (Calhoun and Tedeschi, 1999, p. 143) at the same time. Facilitating posttraumatic growth: A clinician's guide. Routledge. They might develop various coping strategies/mechanisms to adapt to conditions (Bar-on et al., 1998; Schulberg, 1997) with the help of social support. People may feel helpless both in human-caused traumas and in natural disasters; however in the case of natural disasters, people are much more likely to support each other than in a war environment, an ethnic bloodbath, or abuse (physical or sexual).

Protective factors such as family, friends, governmental or nongovernmental support enable resistance against psychopathology or transmission of negative sides. All external sources may act as a facilitator of recovery. For instance, after the 1999 Marmara earthquake, people had social support from the government, periphery or other countries (i.e., Pakistan, Azerbaijan, İsrael, İran, United States of America, Iraq, Russia, Japan, Republic of Uzbekistan, Germany, Republic of Kazakhstan, Palestine, France, Greece), NGOs (i.e., UNICEF), international organizations (Karancı & Acartürk, 2005); a large number of people had received help in a short time. In 1999, immediately after the Marmara Earthquake, the children were able to start fall semester albeit with a delay of several weeks. Children could return to school despite all the difficulties, and it should be emphasized that education and training activities proceeded. The establishment of tent cities and the provision of psychological support to people in intensive care in cooperation with the state and international organizations

established trust (Karancı & Acartürk, 2005). Not only students but also adults could return to their daily routines in a relatively short time and recover faster compared to a war environment or any human-caused trauma situation. In contrast to any human-caused traumatic event, after 1999 Marmara Earthquake, people were more likely to find a solution or to bounce back via systemic interventions. So, improvement in social system reflected in the daily lives of people. The reason why transmission was not seen on a natural trauma in this case may be an outcome of a strong supportive environment.

Another difference between the current research and previous research is that transmission was investigated quantitatively in the present project. Transmission of trauma literature have mostly used qualitative methods such as semi-structured interviews or family interviews and mostly focused on capturing a common theme related to trauma (Bar-on et al. 2000; Bezo & Maggi, 2016; Costello, Angold, March & Fairbank 1998; Loo, 1993; Stewart, 1996). For example, Bezo and Maggi (2015) investigated transgenerational impact of the Holodomor genocide over three generations and they used semi-structured in-depth interview. Results of the study showed that children and grandchildren of survivors who were exposed to Holodomor genocide live in 'survivor mode' which is accompanied by drastic emotions such as mistrust, shame, anger and dysfunctional behavioral patterns such as stockpiling of food or reverence of food. All of these qualitative research supported transmission of trauma across generations (Bar-on et al., 1998; Bezo and Maggi, 2015; Braga, Mello

& Fiks, 2012; Costello, Angold, March & Fairbank 1998; Goodman & West-Olatunji, 2008; Loo, 1994; Nadler, Kav-Venaki & Gleitman, 1985; Stewart, 1996; Svob, Brown, Takšić, Katulić & Žauhar, 2016; Yehuda et al., 2005). In contrast, most of the quantitative studies were unable to support transgenerational transmission of trauma (Davidson and Mellor, 2001; Jelinek et al., 2013; Zalihić, Zalihić & Pivić, 2008; cf. Burchert, Stammel & Knaevelsrud, 2016; Fossion et al., 2015).

Transmission of trauma may not be directly observed as a pathology, a behavioral or an emotional problem when people are subjected to answer scale questions used by quantitative methods. In contrast, when children of trauma survivors narrated their lives via in-depth interviews used by qualitative methods, traces of acquired dysfunctional beliefs, emotions or cognitions from an earthquake victim parent might be better detected. For example, while anxiety scales might not be sensitive to differentiate between trauma-exposed and control group children, concepts and themes related to uncertainty, security, and death that they use when narrating their life stories are more likely to reveal the anxiety level differences between trauma and control group children. In fact, in the present study, when the children were asked to narrate their parents' lives, trauma group children were more likely to mention earthquake related events than control group children. This can be considered as a cue to transmission of traumatic memories within the family. However, as exemplified above, scales may not be sensitive enough to determine acquired vulnerabilities in

terms of dysfunctional beliefs, emotions or cognitions from an earthquake victim parent.

Apart from processing of trauma and methodological differences, protective factors such as post-traumatic growth may be another explanation of why two groups did not differ from each other. Post-traumatic growth represents a positive progress (noticing appreciation of life, relationships with others, new possibilities in life, personal strength, spiritual change) and a new understanding on human life after a traumatic event (Calhoun & Tedeschi, 1998). A survivor may get over the trauma and residues of trauma may not be passed on subsequent generations owing to given progress. Thus, one reason there was no transmission of trauma might be due to high post traumatic growth of parents in our sample.

In addition to the issues above, the qualities of sample may be biased. Most of the parents in trauma group received average scores on earthquake related traumatic experiences questionnaire. Therefore, the sample may not very well represent families who have severely exposed to the 1999 Marmara Earthquake. Sample size is another key point as well as the quality of sample. However, it should also be acknowledged that given the constraints, the sample of the present study is pretty hard to access.

The findings of the present study have obvious clinical implications. These findings force us to rethink about the existence, direction and form of the transmission of

trauma. Although there have been a limited number of empirical studies on transmission of trauma, it has been known that intra-family transmission reveals itself through unresolved issues just as observed and emphasized in clinical experiences and genogram studies used in family therapies (McGoldrick and Gerson, 1985; Hardy and Laszloffy, 1995). Therefore, where and how we look for the transmission is another important aspect for detecting its very existence. Although a psychopathology-based transmission was not examined in this study, scales which were used had capacity to detect the existence of a negative transmission in terms of metacognitive, emotional, behavioral aspects or shattered world assumptions. Further to where we look for the transmission, lack of differences between the groups with regard to given variables may direct us to the conclusion that the negative effects are not transmitted to next generations at least in case of a natural diseaster such as a devastating earthquake.

In sum, the present project indicated that although earthquake related traumatic experiences were transmitted to next generations through memories negative impacts of these experiences did not reveal about themselves via next generations' behavioral, metacognitive and emotional problems as measured by quantitative scales. One reason why negative impacts are prevented in next generations might be due to processing of trauma by survivors in our sample. Higher parental rehearsal ratings as well as high inclusion rate of earthquake as one of the parent's most important life story events support this possibility. Still, the results are conflicting with some of those in the literature. The contradictory findings in the present research might be related to

processing of type of trauma (i.e., natural vs human-caused) and methodology used (i.e., quantitative versus qualitative) and where we look for the trauma.

All in all, the fact that the transgenerational transmission of trauma is not observed despite these challenging conditions may be interpreted as a promising finding for future generations. Perhaps, the children are gifted with a skill to protect themselves from the negative sides of trauma or somehow families succeed in protecting their children. From this perspective, the present project brings about a new fruitful questions for future studies such as: 'What are circumstances under which a trauma is not passed onto the future generations?', 'What are the protective factors to hinder transmission of trauma across generations?'. Social support, parents' post-traumatic growth, coping strategies, effects of siblings might be some important ones to study for future studies.

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APPENDICES

Appendix A: Socio-demographic Information

Demografik Bilgi Toplama Formu (Anne Formu)

Doğum Tarihi:/	/	Yaş:	Ci	nsiyet:
Medeni Hali: () Evli	() Bekar	() Di	ul () Boşanmı	ış () Diğer
Eğitim Durumu: () İll	cokul (0-5 yıl) rtaokul (6-8 yıl)		() Lise (9-11 yıl) () Üniversite (11-	+) () Lisansüstü
Mesleğiniz/İşiniz: (Bel	irtiniz)			
Ailenizin aylık geliri:			() 1501-3000 TL () 3001-5000 TL () 5001 TL ve üz	
Çocuk sayısı:			() 3001 1L ve uz	CII
Doğduğunuz il / ilçe: .			./	
En uzun yaşadığınız il	/ ilçe:		/	
Belirli bir sağlık sorur Bedensel/Fiziksel Eng	() Hayı	ır	
Psikolojik, psikiyatrik	veya nörolojik tan	ıı aldın	ız mı? () Evet (Be () Hayır	lirtiniz)
LÜTFEN AŞAĞIDAK YANITLAYINIZ	İ KISMI ARAŞTIR	MAYA	. KATILAN <u>ÇOCU</u>	<u>ĞUNUZ IÇIN</u>
Çocuğunuzun belirli b	oir sağlık sorunu va	ar mı :	() Evet (Belirtiniz () Hayır	:)
Çocuğunuzun bedense	el/fiziksel engeli vai	r mı:	() Evet (Belirtiniz) () Hayır)
Çocuğunuz psikolojik	, psikiyatrik ya da	nöroloj	jik bir tanı aldı mı?	() Evet (Belirtiniz) () Hayır
Çocuğunuz düzenli bi	r ilaç kullanıyor m	u		() Evet (Belirtiniz) () Hayır
Çocuğunuz bilincini k	aybedecek düzeyde	e bir ka	ıfa travması geçird	i mi () Evet (Belirtiniz () Hayır

Demografik Bilgi Toplama Formu (Baba Formu)

Doğum Tarihi:/	/	Yaş:	Cinsiyet	t:
Medeni Hali: () Evli	() Bekar	() Dul	() Boşanmış	() Diğer
Eğitim Durumu: () İ	kokul (0-5 yıl) Ortaokul (6-8 yıl)	()	Lise (9-11 yıl) Üniversite (11+)	() Lisansüstü
	deni Hali: () Evli () Bekar () Dul () Boşanmış itim Durumu: () İlkokul (0-5 yıl) () Lise (9-11 yıl) () Ortaokul (6-8 yıl) () Üniversite (11+) sleğiniz/İşiniz: (Belirtiniz) () 500 TL ve altı () 1501-3000 TL () 501 – 1000 TL () 3001-5000 TL () 1001 – 1500 TL () 5001 TL ve üzeri cuk sayısı: () Evet (Belirtiniz) () Evet (Belirtiniz) () Hayır densel/Fiziksel Engel: () Var (Belirtiniz) () Evet (Belirtiniz) () Yok kolojik, psikiyatrik veya nörolojik tanı aldınız mı? () Evet (Belirtiniz) () Hayır	() Disansusta		
Ailenizin aylık geliri:	() 500 TL ve altı	()	1501-3000 TL	
Çocuk sayısı:			Joor III ve uzeri	
Doğduğunuz il / ilçe:		/		
En uzun yaşadığınız i	ll / ilçe:	/	•••••	
Belirli bir sağlık soru		` '	irtiniz)	
Bedensel/Fiziksel Eng	gel: () Var (Belirtin	•		
Psikolojik, psikiyatri	k veya nörolojik tar	nı aldınız mı	1.1	z)

Demografik Bilgi Toplama Formu (Çocuk Formu)

Doğum Tarihi://	Yaş:	Cinsiyet:
Eğitim Durumu/Sınıf:		
Doğduğunuz il / ilçe:		
En uzun yaşadığınız il / ilçe:	//	

Appendix B: Reminiscence Session

Hatırlama Kartları (Çocuk İçin)

YÖNERGE: Anne babanız için önemli 10 tane olay (anne babanızın doğumundan bu güne dek geçen zaman içinde) anlatınız. Her bir olayı tek tek kartlara yazarak ne zaman gerçekleştiğini belirtiniz.

Olay 1	Zaman?
Olay 2	Zaman?
Olay 3	Zaman?
Olay 4	Zaman?
Olay 5	Zaman?
Olay 6	Zaman?
Olay 7	Zaman?
Olay 8	Zaman?
Olay 9	Zaman?
Olay 10	Zaman?

EK SORU: Anne babanız depremden ne kadar sıklıkla bahseder?

Az	Nadiren	Orta	Fazla	Çok Fazla	
1	2	3	4	5	

${\bf Appendix} \; {\bf C:} \; {\bf Metacognition} \; {\bf Question naire} \; {\bf for} \; {\bf Children} \; {\bf and} \; {\bf Adolescents} \; ({\bf MCQ-C})$

MCQ-C

YÖNERGE: Aşağıdaki maddeleri dikkatlice okuyunuz ve size uygun olan seçeneği işaretleyiniz.

		Kesinlikle katılmıyorum			Kesinlikle Katılıyorum
		1	2	3	4
1.	Endişelenmek, gelecekteki problemlerden kaçınmama yardımcı olur				
2.	Endişelenmem benim için tehlikelidir				
3.	Aklımdan geçenlerle çok uğraşırım				
4.	Endişe ede ede kendimi hasta edebilirim				
5.	Bir problem üzerinde düşünürken zihnimin nasıl çalıştığının farkındayımdır				
6.	Eğer beni endişelendiren bir düşünceyi control edemezsem ve bu gerçekleşirse, benim hatam olur				
7.	Düzenliliğimi sürdürebilmem için endişe etmeye ihtiyacım var				
8.	Kelimeler ve isimler konusunda belleğime güvenim pek yoktu				
9	Ne kadar engellemeye çalışırsam çalışayım, endişe verici düşüncelerim devam eder				
10.	Endişelenmek kafamdaki düşünceleri düzene sokmama yardım eder				
11.	Endişe verici düşünceler aklıma geldiğinde onları görmezden gelemiyorum				
12.	Düşüncelerimi izlerim				
13.	Düşüncelerimi her zaman kontrol altında tutmalıyım				
14.	Belleğim zaman zaman beni yanıltır				
15.	Belirli düşüncelerimi kontrol etmediğim için cezalandırılacağım				
16.	Endişelerim beni delirtebilir				
17.	Düşündüğümün her an farkındayımdır				
18.	Zayıf bir belleğim vardır				
19.	Dikkatim zihnimin nasıl çalıştığıyla meşguldür				
20.	Endişelenmek bir şeylerin üstesinden gelmeme yardım eder				
21.	Düşüncelerimi kontrol edememek bir zayıflık işaretidir				
22.	Endişelenmeye başladığım zaman kendimi durduramam				
23.	Endişelenmek problemleri çözmede bana yardımcı olur				
24.	Bir yerleri hatırlama konusunda belleğime pek güvenmem				
25.	Belirli şeyleri düşünmek kötüdür				
26.	Belleğime güvenmem				
27.	Eğer düşüncelerimi kontrol edemezsem işlerimi sürdüremem				
28.	İyi çalışabilmek için endişelenmeye ihtiyacım vardır				
29.	Olayları hatırlama konusunda belleğime pek güvenmem				
30.	Düşüncelerimi sürekli gözden geçiririm				

Appendix D: General Belief in World

GBJW

YÖNERGE: Aşağıdaki maddelerden kendinize uygun olan derecelendirmeyi işaretleyiniz.

	Kesinlikle Katılmıyorum	Katılmıyorum	Biraz Katılıyorum Biraz Katılmıyorum	Katılıyorum	Tamamen Katılıyorum
Dünyanın aslında adil bir yer olduğunu düşünüyorum.					
2. İnsanların eninde sonunda ne hak ederlerse onu bulacaklarına inanıyorum.					
3. Adaletin her zaman adaletsizlikler karşısında galip geleceğinden eminim.					
4. Uzun vadede insanların adaletsizliklerin üstesinden geleceğine inanıyorum.					
5. Hayatın her alanındaki adaletsizliklerin (örneğin iş hayatında, aile hayatında, politik hayatta vs.) bir kural olmaktan ziyade birer istisna olduğuna inanıyorum.					
6. İnsanların önemli kararlar verirken adil olmaya gayret ettiklerine inanıyorum.					

Appendix E: The Regulation of Emotions Questionnaire (REQ)

EİDDÖ

olayl düşü bir it cüml olan seçer	Yaşamda zaman zaman insanların başlarına olumsuz, hoş olmayan lar gelir ve bu olaylara bazı tepkiler verilir. Bu tepkilerin bazıları ncelerle ilgili iken bazıları ise davranışlarla ilgilidir. Lütfen aşağıdaki her fadeyi dikkatlice okuyarak, sıkıntı verici, olumsuz bir olay yaşadığınızda lede verilen durum veya davranışı ne sıklıkla yaptığınızı size en uygun seçeneğe çarpı işareti (X) koyunuz. Lütfen her ifade için sadece bir neği işaretleyiniz ve hiçbir ifadeyi boş bırakmayınız. "Başıma olumsuz bir olay geldiğinde;	Hiçbir zaman	Nadiren	Bazen	Çoğu zaman	Her zaman
1	Duruma ilişkin düşüncelerimi yeniden gözden geçiririm.	()	()	()	()	()
2	Duruma ilişkin amaçlarımı veya planlarımı yeniden gözden geçiririm, düşünürüm.	()	()	()	()	()
3	Durum üzerinde düşünüp anlamaya çalışırım.	()	()	()	()	()
4	Bir dahaki sefere neyi daha iyi yapabileceğimi düşünürüm.	()	()	()	()	()
5	Öfkemi/üzüntümü sözel olarak (örn. bağırmak, tartışmak gibi) başkalarından çıkarırım.	()	()	()	()	()
6	Öfkemi/üzüntümü fiziksel olarak (örn. kavga etmek, vurmak gibi) başkalarından çıkarırım.	()	()	()	()	()
7	Başkalarını kötü hissettirmeye çalışırım (örn. kaba davranarak, onları görmezden gelerek).	()	()	()	()	()
8	Başkalarına zorbalık yaparım (örn. alay etmek, itmek, dedi kodu yapmak gibi).	()	()	()	()	()
9	Öfkemi/üzüntümü etrafımdaki eşyalardan çıkarırım.	()	()	()	()	()
10	Kendime zarar verecek veya kendimi cezalandıracak bir şey yaparım.	()	()	()	()	()
11	Bazı düşünceler ve duygular sürekli kafamı meşgul eder (örn. aynı şeyi düşünür dururum).	()	()	()	()	()
12	Başkalarının benden iyi durumda olduğunu düşünerek kendimi daha kötü hissederim.	()	()	()	()	()
13	Duygularımı içime atarım, saklarım.	()	()	()	()	()
14	Sanki ben ben değilmişim gibi gelir (ör., kendimi bir tuhaf hissederim, etrafımdaki şeyler tuhaf gelir).	()	()	()	()	()
15	Bu olaya ilişkin neler hissettiğimi birisiyle konuşurum.	()	()	()	()	()
16	Arkadaşlarımdan veya ailemden sarılmak, elimi tutmak gibi bedensel yakınlık ararım.	()	()	()	()	()
17	Hareketli bir şeyler yaparım.	()	()	()	()	()
18	Başkalarından tavsiye isterim.	()	()	()	()	()

Appendix F: Achenbach Youth Self Report (YSR)

 ${\bf YSR} \\ {\bf Y\ddot{O}NERGE: Aşağıdaki maddeleri dikkatlice okuyunuz ve kendinize en uygun olan seçeneği işaretleyiniz.}$

		Doğru Değil 0	Bazen ya da Biraz Doğru 1	Çok ya da Sıklıkla Doğru 2
1	Çok ağlarım			
2	Bazı hayvanlardan ve okul dışı ortamlardan ya da yerlerden korkarım (açıklayınız)			
3	Okula gitmekten korkarım			
4	Kötü bir şey düşünmekten ya da yapmaktan korkarım			
5	Mükemmel olmam gerektiğine inanırım			
6	Kimsenin beni sevmediğini düşünürüm			
7	Kendimi değersiz ve yetersiz hissederim			
8	Sinirli ve gerginim			
9	Çok korkak ve kaygılıyımdır			
10	Kendimi çok suçlu hissederim			
11	Sıkılgan ve utangacımdır			
12	Kendimi öldürmeyi düşünürüm			
13	Çok evhamlıyım, her şeyi dert edinirim			
14	Hoşlandığım, zevk aldığım çok az şey vardır			
15	Başkalarıyla beraber olmaktansa yalnız kalmayı tercih ederim			
16	Konuşmayı reddettiğim olur			
17	Sır vermem, düşüncelerimi kendime saklarım			
18	Çok utangaç ve çekingenim			
19	Fazla enerjik değilim			
20	Mutsuz, üzgün, çökkün ve bezginim.			
21	Başkalarıyla içli dışlı ya da samimi olmaktan kaçınırım			
22	Gece kabuslar, korkulu rüyalar görürüm			
23	Başım döner			
24	Kendimi aşırı yorgun hissederim			
25	Tıbbi bir nedeni bilinmeyen bedensel şikayetlerim vardır. Örneğin			
	a) Ağrılar, sızılar (baş ağrısı dışında)			
	b) Baş ağrıları			
	c) Bulantı, kusma hissi			
	d) Gözle ilgili şikayetler (açıklayınız)	-		
	e) Döküntüler ya da başka cilt sorunları			
	f) Mide-karın ağrısı ve kramplar			
	g) Kusma	-		
20	h) Diğer (açıklayınız)	+		
26	Çok tartışırım Başkalarına karşı kötü davranırım	+		
27		+		
28	Hep dikkat çekmek isterim	+		
30	Eşyalarıma zarar veririm Başkalarına ait eşyalara zarar veririm	+		
31	Anne babamın sözünü dinlemem	+		
32	Okulda söz dinlemem	+		
33	Çok kavga, dövüş ederim	+		
34	Insanlara fiziksel saldırıda bulunur, onlara vururum	+		
35	Cok bağırır, çağırırım	+		
36	İnatçıyımdır	+		
37	Duygu durumumda ani değişiklikler olur	+		
38	Şüpheciyimdir	+		
39	Başkalarıyla çok dalga geçer, onları kızdırırım	+		
40	Cok cabuk öfkelenirim	+		
41	Insanları canlarını yakmakla tehdit ederim			
42	Diğer çocuklardan daha gürültücüyüm			
	S			

		Doğru Değil	Bazen ya da Biraz Doğru	Çok ya da Sıklıkla Doğru
		0	1	2
43	Anne babamın izni olmadan içki içerim (açıklayınız)			
44	Hatalı davranışımdan dolayı suçluluk duymam, oralı olmam			
45	Ev, okul ya da diğer yerlerde kurallara uymam, karşı gelirim			
46	Başı belada olan çocuklarla dolaşırım			
47	Yalan söyler ya da aldatırım			
48	Yaşıtlarımdan çok, kendimden büyüklerle vakit geçirmeyi tercih ederim			
49	Evden kaçarım			
50	Yangın çıkartırım			
51	Evden bir şeyler çalarım			
52	Ev dışındaki yerlerden bir şeyler çalarım			
53	Küfürlü ve açık seçik komuşurum			
54	Cinsel konuları fazlaca düşünürüm			
55	Sigara içerim, tütün koklarım			
56	Dersleri asar, okuldan kaçarım			
57	Sağlık sorunum olmadığı halde madde kullarınırım (içki ve sigarayı katmayınız)			

Appendix G: Trauma Checklist

Birçok kişinin başından, yaşamının herhangi bir döneminde, oldukça stresli ve travmatik bir olay geçmiş ya da böyle bir olaya tanık olmuştur. Aşağıda belirtilen olaylar içinde, başınızdan geçen ya da birebir tanık olduğunuz olayların HEPSİNİ kendiniz için yanındaki kutucukları işaretleyerek belirtiniz. Hatırlıyorsanız olayın yaşandığı tarihi (yılı) ve bu tarihten ne kadar emin olduğunuzu ("Kesin Tarih" ya da Tahmini") işaretleyiniz. Bu olayın sizi ne kadar etkilediğini belirtiniz.

				ETK	İLE	NME	DÜZ	ZEYİ
				Hiç etkilemedi				Çok etkiledi
Stresli/Travmatik Olay	Yıl	Kesin	Tahmini	1	2	3	4	5
1. Ciddi bir kaza, yangın ya da patlama olayı								
2. Doğal afet (örneğin deprem, sel)								
3. Fiziksel bir saldırıya maruz kalma								
4. Askeri bir çarpışma ya da savaş alanında bulunma								
5. Hapsedilme (cezaevine düşme, savaş esiri olma, rehin alınma gibi)								
6. İşkenceye maruz kalma								
7. Yaşamı tehdit eden bir hastalık								
8. Terör saldırısına maruz kalma								
9. Sevilen ya da yakın birinin ani ve beklenmedik ölümü (Kim olduğunu belirtiniz, lütfen kısaca açıklayınız)								
10. Bunların dışında bir travmatik olay (kısaca açıklayınız)								

Appendix H: Earthquake-Related Traumatic Experiences Questionnaire (EQRTE) ERTEQ (Anne Formu)

YÖNERGE: Aşağıda depremle ilgili sorular yer almaktadır. Başınızdan geçen olay ya da olayları EVET/HAYIR kutularından size uygun olanı işaretleyerek belirtiniz.

		EVET	HAYIR
1	Deprem anında aileden herhangi birinin yaralanabileceği aklınızdan geçti mi?		
2	Deprem anında aileden herhangi birinin ölebileceği aklınızdan geçti mi?		
3	Deprem anında ölebileceğiniz aklınızdan geçti mi?		
4	Deprem nedeniyle yaralanabileceğinz aklınızdan geçti mi?		
5	Deprem nedeniyle yaşadığınız yerden ayrılmak durumunda kaldınız mı?		
6	Deprem nedeniyle evinizden taşınmak durumunda kaldınız mı?		
7	Eviniz deprem nedeniyle ağır şekilde zarar gördü mü ya da yıkıldı mı?		
8	Deprem nedeniyle işinizi/mesleğinizi kaybettiniz mi?		
9	Deprem nedeniyle gelirinizde azalma oldu mu?		
10	Depremde enkaz altında kaldınız mı?		
11	Deprem sırasında üzerinize ağır bir şey düştü mü?		
12	Deprem nedeniyle yaralandınız mı?		
13	Deprem, sizde kalıcı bir fiziksel/bedensel engele yol açtı mı?		
14	Deprem sonrasında temel ihtiyaçlarınızı karşılamakta (barınma, sağlık, beslenme vb.) zorluk çektiniz mi?		
15	Içinde bulunduğunuz bina deprem esnasında ağır hasar gördü mü ya da yıkıldı mı?		
16	Deprem nedeniyle birinin ölümüne tanık oldunuz mu?		
17	Deprem nedeniyle birinin ağır şekilde yaralandığını gördünüz mü?		
18	Depremde birinci dereceden akrabalarınızdan (anne, baba, kardeş, çocuk, eş) yaralanan oldu mu?		
19	Depremde birinci dereceden akrabalarınızdan (anne, baba, kardeş, çocuk, eş) biri öldü mü?		
20	Depremde geniş ailenizden (birinci dereceden akrabalar hariç) yaralanan oldu mu?		
21	Depremde geniş ailenizden (birinci dereceden akrabalar hariç) biri öldü mü?		
22	Depremde sizin için önemli biri öldü mü (aile dışından biri)?		
23	Depremde değer verdiğiniz eşyalarınız kayboldu mu?		
24	Deprem, sosyal ağlarınızdan, ilişkilerinizden (eş-dost, akraba vb.) uzak kalmanıza neden oldu mu?		

ERTEQ (Baba Formu)

YÖNERGE: Aşağıda depremle ilgili sorular yer almaktadır. Başınızdan geçen olay ya da olayları EVET/HAYIR kutularından size uygun olanı işaretleyerek belirtiniz.

		EVET	HAYIR
1	Deprem anında aileden herhangi birinin yaralanabileceği aklınızdan geçti mi?		
2	Deprem anında aileden herhangi birinin ölebileceği aklınızdan geçti mi?		
3	Deprem anında ölebileceğiniz aklınızdan geçti mi?		
4	Deprem nedeniyle yaralanabileceğinz aklınızdan geçti mi?		
5	Deprem nedeniyle yaşadığınız yerden ayrılmak durumunda kaldınız mı?		
6	Deprem nedeniyle evinizden taşınmak durumunda kaldınız mı?		
7	Eviniz deprem nedeniyle ağır şekilde zarar gördü mü ya da yıkıldı mı?		
8	Deprem nedeniyle işinizi/mesleğinizi kaybettiniz mi?		
9	Deprem nedeniyle gelirinizde azalma oldu mu?		
10	Depremde enkaz altında kaldınız mı?		
11	Deprem sırasında üzerinize ağır bir şey düştü mü?		
12	Deprem nedeniyle yaralandınız mı?		
13	Deprem, sizde kalıcı bir fiziksel/bedensel engele yol açtı mı?		
14	Deprem sonrasında temel ihtiyaçlarınızı karşılamakta (barınma, sağlık, beslenme vb.) zorluk çektiniz mi?		
15	İçinde bulunduğunuz bina deprem esnasında ağır hasar gördü mü ya da yıkıldı mı?		
16	Deprem nedeniyle birinin ölümüne tanık oldunuz mu?		
17	Deprem nedeniyle birinin ağır şekilde yaralandığını gördünüz mü?		
18	Depremde birinci dereceden akrabalarınızdan (anne, baba, kardeş, çocuk, eş) yaralanan oldu mu?		
19	Depremde birinci dereceden akrabalarınızdan (anne, baba, kardeş, çocuk, eş) biri öldü mü?		
20	Depremde geniş ailenizden (birinci dereceden akrabalar hariç) yaralanan oldu mu?		
21	Depremde geniş ailenizden (birinci dereceden akrabalar hariç) biri öldü mü?		
22	Depremde sizin için önemli biri öldü mü (aile dışından biri)?		
23	Depremde değer verdiğiniz eşyalarınız kayboldu mu?		
24	Deprem, sosyal ağlarınızdan, ilişkilerinizden (eş-dost, akraba vb.) uzak kalmanıza neden oldu mu?		

Appendix I: Informed Consent for Adolescents



TED ÜNİVERSİTESİ TEDU UNIVERSITY 06420 ANKARA-TURKEY KATILIMCI NO: APPENDIX 9 (ÇOCUK FORMU) Tel: 90 (312) 585 00 00 Faks: 90 (312) 418 41 48

Sayın Katılımcı,

Bu araştırma, TED Üniversitesi, Psikoloji Bölümü'nde yüksek lisans öğrencisi Ayşenur Seyrekbasan tarafından yürütülmektedir. Araştırmanın amacı çocukların, anne babaları için önemli olan olaylara dair belleğini araştırmaktadır. Bu çalışmanın katılımcılarını 2000-2005 yılları arasında doğmuş bireyler ve bu bireylerin anne babaları oluşturmaktadır.

Bu araştırmaya katılımınızı onayladığınız taktirde, projenin katılımcısı olacaksınız. Çalışma kapsamında, araştırma ile ilgili ölçekleri doldurmanız istenecektir. Çalışma süresince ve sonrasında kimlik bilgileriniz proje dışındaki hiç kimseyle izniniz dışında paylaşılmayacaktır. Bu çalışma kapsamında elde edilecek olan bilimsel bilgiler sadece araştırmacılar tarafından yapılan bilimsel yayınlarda, sunumlarda eğitim amaçlı paylaşılacaktır. Toplanan veriler, isiminiz silinerek ve aileniz için her birinize (anne-baba-çocuk için) ayrı birer numara verilerek araştırmacının kişisel bilgisayarında şifreli bir dosyada tutulacaktır. Katılımınız için ailenize 50 Türk Lirası ödeme yapılacaktır.

Bu çalışmaya katılım gönüllük esasına dayalıdır. Bu projeye katılımınız **çocukların, anne** babaları için önemli olan olaylara dair belleği konusunda bilgilenmenize katkı sağlayabilir.

Uygulamada yer alan hiçbir aşama kişisel rahatsızlık verecek nitelikte değildir. Ancak herhangi bir nedenden ötürü kendinizi rahatsız hissederseniz, nedenini açıklamaksızın yarıda bırakıp araştırmadan çıkmakta serbestsiniz. Böyle bir durumda vermiş olduğunuz bilgilerin araştırmacı tarafından kullanılması ancak sizin onayınızla mümkün olacaktır. Bu çalışmaya katıldığınız için şimdiden teşekkür ederim.

Çalışma hakkında daha fazla bilgi almak ve yanıtlanmasını istediğiniz sorularınız için araştırmayı yürüten Ayşenur Seyrekbasan (E-posta: aysenur.seyrekbasan@tedu.edu.tr, Telefon: 05305273612) ve Yrd. Doç. Dr. Tuğba Uzer-Yıldız (tugba.uzer@tedu.edu.tr) ile iletişim kurabilirsiniz.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Bu proje kapsamında gereken ölçeklerin doldurulmasında yer alacağımı biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayımlarda kullanılmasını kabul ediyorum. Verdiğim bilgilerin; veri analizi, bilimsel makaleler, akademik sunumlar ve çevrimiçi bir eğitim ortamı dışında kesinlikle kullanılmayacağını biliyorum.

Projeye katılmak istiyorum	Evet / Hayır
Araştırma verileri aşağıdaki şekilde kullanılabilecektir:	
Çevrimiçi Eğitim ortamda	Evet / Hayır
Raporlar, makaleler, ilgili haberler gibi görsel ve yazılı materyallerde	Evet / Hayır
Ad Soyad:	
Katılımcının İmzası:	
Tarih	
Teşekkürler, Araştırmacının adı, soyadı ve imzası Ayşenur Seyrekbasan	

Appendix J: Informed Consent for Parents



TED ÜNİVERSİTESİ TEDU UNIVERSITY 06420 ANKARA-TURKEY

KATILIMCI NO: APPENDIX 10 (EBEVEYN FORMU) Tel: 90 (312) 585 00 00 Faks: 90 (312) 418 41 48

Evet / Havir

Sayın Anne Baba,

Bu araştırma, TED Üniversitesi, Psikoloji Bölümü'nde yüksek lisans öğrencisi Ayşenur Seyrekbasan tarafından yürütülmektedir. Araştırmanın amacı çocukların, anne babaları için önemli olan olaylara dair belleğini araştırmaktadır. Bu çalışmanın katılımcılarını 2000-2005 yılları arasında doğmuş bireyler ve bu bireylerin anne babaları oluşturmaktadır.

Bu araştırmaya katılımınızı onayladığınız taktirde, projenin katılımcısı olacaksınız. Çalışma kapsamında, araştırma ile ilgili ölçekleri doldurmanız istenecektir. Çalışma süresince ve sonrasında kimlik bilgileriniz proje dışındaki hiç kimseyle izniniz dışında paylaşılmayacaktır. Bu çalışma kapsamında elde edilecek olan bilimsel bilgiler sadece araştırmacılar tarafından yapılan bilimsel yayınlarda, sunumlarda eğitim amaçlı paylaşılacaktır. Toplanan veriler, isiminiz silinerek ve aileniz için her birinize (anne-baba-çocuk için) ayrı birer numara verilerek araştırmacının kişisel bilgisayarında şifreli bir dosyada tutulacaktır. Katılımınız için ailenize 50 Türk Lirası ödeme yapılacaktır.

Bu çalışmaya katılım gönüllük esasına dayalıdır. Bu projeye katılımınız çocukların, anne babaları için önemli olan olaylara dair belleği konusunda bilgilenmenize katkı sağlayabilir.

Uvgulamada ver alan hicbir asama kisisel rahatsızlık verecek nitelikte değildir. Ancak herhangi bir nedenden ötürü kendinizi rahatsız hissederseniz, nedenini açıklamaksızın yarıda bırakıp araştırmadan çıkmakta serbestsiniz. Böyle bir durumda vermiş olduğunuz bilgilerin araştırmacı tarafından kullanılması ancak sizin onayınızla mümkün olacaktır. Bu çalışmaya katıldığınız için şimdiden teşekkür ederim.

Çalışma hakkında daha fazla bilgi almak ve yanıtlanmasını istediğiniz sorularınız için araştırmayı yürüten Ayşenur Seyrekbasan (E-posta: aysenur.seyrekbasan@tedu.edu.tr, Telefon: 05305273612) ve Yrd. Doç. Dr. Tuğba Uzer-Yıldız (tugba.uzer@tedu.edu.tr) ile iletişim kurabilirsiniz.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Bu proje kapsamında gereken ölçeklerin doldurulmasında yer alacağımı biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayımlarda kullanılmasını kabul ediyorum. Verdiğim bilgilerin; veri analizi, bilimsel makaleler, akademik sunumlar ve çevrimiçi bir eğitim ortamı dışında kesinlikle kullanılmayacağını biliyorum.

Projeye katılmak istiyorum	Evet / Hayır
Araştırma verileri aşağıdaki şekilde kullanılabilecektir:	
Çevrimiçi Eğitim ortamda	Evet / Hayır
Raporlar, makaleler, ilgili haberler gibi görsel ve yazılı materyallerde	Evet / Hayır
Ad Soyad	
Katılımcının İmzası	
Tarih	
Teşekkürler,	
Araştırmacının adı, soyadı ve imzası	
Avsenur Sevrekbasan	

Appendix K: Parent Permission Form



TED ÜNİVERSİTESİ TEDU UNIVERSITY 06420 ANKARA-TURKEY KATILIMCI NO: APPENDIX 12 (EBEVEYN FORMU) Tel: 90 (312) 585 00 00 Faks: 90 (312) 418 41 48

Veli Onay Formu

Sevgili Anne/Baba,

Bu çalışma TED Üniversitesi yüksek lisans öğrencisi Ayşenur Seyrekbasan tarafından yürütülmektedir. Çalışmanın amacı, 2000-2005 yılları arasında doğan çocukların, anne babaları için önemli olan olaylara dair belleğini ve anıların kuşak aşkın aktarımını araştırmaktadır. Bu amaç doğrultusunda, çocuğunuzdan "Anne babanınızın hayatının herhangi bir döneminden (doğdukları andan bugüne kadar), 10 önemli olay anlatınız" sorusunu cevaplaması ve araştırma ile ilgili bazı ölçekleri doldurması istenmektedir. Çocuğunuzun verdiği yanıtlar araştırmacı tarafından not edilerek (her bir olay/anı ayrı ayrı kartlara yazılarak) toplanacaktır. Sizden çocuğunuzun katılımcı olmasıyla ilgili izin istediğimiz gibi, çalışmaya başlamadan çocuğunuzdan da sözlü ve yazılı olarak katılımıyla ilgili rızası mutlaka alınacaktır.

Çocuğunuzdan alacağımız cevaplar tamamen gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir. Elde edilecek bilgiler sadece bilimsel amaçla (yayın, konferans sunumu, vb.) kullanılacak, çocuğunuzun ya da sizin isminiz ve kimlik bilgileriniz, hiçbir şekilde kimseyle paylaşılmayacaktır. Ölçekleri doldurararak bize sağlayacağınız bilgiler, anıların kuşak aşkın aktarımını araştırmamızda bize önemli bir katkıda bulunacaktır. Çalışmaya katılımınız karşılığında size 50 Türk Lirası ödeme yapılacaktır.

Çocuğunuzun cevaplayacağı soruların onun psikolojik gelişimine olumsuz etkisi olmayacağından emin olabilirsiniz. Yine de bu formu imzaladıktan sonra hem siz hem de çocuğunuz çalışmadan ayrılma hakkına sahipsiniz. Katılım sırasında sorulan sorulardan ya da herhangi bir nedenden ötürü çocuğunuz kendisini rahatsız hissettiğini belirtirse; kendi belirtmese de araştırmacı çocuğun rahatsız olduğunu öngörürse çalışmaya sorular tamamlanmadan derhal son verilecektir. Şayet siz çocuğunuzun rahatsız olduğunu hissederseniz, böyle bir durumda çalışmadan sorumlu kişiye çocuğunuzun çalışmadan ayrılmasını istediğinizi söylemeniz yeterli olacaktır. Bu çalışmayla ilgili daha fazla bilgi almak isterseniz araştırmayla ilgili sorularınızı aşağıdaki e-posta adresini kullanarak araştırmacı Ayşenur Seyrekbasan ve TED Üniversitesi Psikoloji Bölümü Öğretim üyelerinden Yrd. Doç. Dr. Tuğba Uzer-Yıldız'a yöneltebilirsiniz. Bu çalışmaya katılımınız için şimdiden teşekkür ederiz.

Saygılarımızla,

Ayşenur Seyrekbasan Yrd. Doç. Dr. Tuğba Uzer-Yıldız Psikoloji Bölümü Psikoloji Bölümü TED Üniversitesi, Ankara TED Üniversitesi, Ankara e-posta: ayşenur.seyrekbasan@tedu.edu.tr e-posta: tugba.uzer@tedu.edu.tr

Yukarıdaki bilgileri okudum ve çocuğumun bu çalışmada yer almasını onaylıyorum (Lütfen alttaki iki seçenekten birini işaretleyiniz.

Evet onaylıyorum	Hayır, onaylamıyorum
Annenin adı-soyadı:	Bugünün Tarihi:
Çocuğun adı soyadı ve doğum tarihi:	
(Formu doldurup imzaladıktan sonra araştı	rmacıya ulaştırınız).

Appendix L: Informed Consent for Post-participation



TED ÜNİVERSİTESİ TEDU UNIVERSITY 06420 ANKARA-TURKEY KATILIMCI NO: APPENDIX 11 (ÇOCUK VE EBEVEYN) Tel: 90 (312) 585 00 00 Faks: 90 (312) 418 41 48

KATILIM SONRASI BİLGİ FORMU

Bu araştırma daha önce de belirtildiği gibi TED Üniversitesi Psikoloji Bölümü Yüksek Lisans öğrencisi Ayşenur Seyrekbasan tarafından Yrd. Doç. Dr. Tuğba Uzer-Yıldız danışmanlığındaki yüksek lisans tezi kapsamında yürütülmektedir. Çalışmanın amacı 1999 Marmara Depremi'ne tanıklık etmiş anne babaların, depremden sonra doğan çocuklarının bilişsel, duygusal ve davranışsal özelliklerini incelemektir.

Alanyazın, anne babaların tanık olduğu olayların, çocukları etkilediğini ve bu olayların kuşaklar boyunca aktarıldığını ifade etmektedir. Kuşak aşkın aktarım olarak adlandırılan bu durum, kendini düşünce duygu ve davranış düzeyinde değişimlerle gösterebilir. 1999 Marmara Depremi'nin kuşak aşkın aktarımı, bu araştırmanın esas amacını oluşturmaktadır. Depreme tanıklık etmiş ve etmemiş kişilerin depremden sonra doğmuş çocukları düşünce, duygu ve davranış bileşenleri açısından karşılaştırılacaktır. Bu sebeple önce çocuklardan veri toplanmış; anne babalarının hayatlarının belirli bir döneminde geçmiş 10 önemli olay anlatmaları istenmiştir. Bu soruyla, anne ya da babasından herhangi biri depreme tanıklık etmiş çocukların, depremi yaşamamış ailelerin çocuklarına göre, depreme dair bir anıyı paylaşmaları beklenmektedir.

Bu sebeple, çalışmanın amacı "2000-2005 yılları arasında doğan çocukların, anne babaları için önemli olan olaylara dair belleğini ve anıların kuşak aşkın aktarımını araştırmak" olarak sunulmuş; depremin ve buna bağlı bileşenlerin kuşak aşkın aktarımının çalışıldığı bilgisi, araştırmanın doğası gereği başlangıçta sizlerle paylaşılmamıştır.

Bu çalışmadan alınacak ilk verilerin Mayıs 2018 sonunda elde edilmesi amaçlanmaktadır. Elde edilen bilgiler <u>sadece</u> bilimsel araştırma ve yazılarda kullanılacaktır. Çalışmanın sağlıklı ilerleyebilmesi ve bulguların güvenilir olması için çalışmaya katılacağını bildiğiniz diğer kişilerle çalışma ile ilgili detaylı <u>bilgi paylaşımında bulunmamanızı</u> dileriz. Bu araştırmaya katıldığınız için tekrar çok teşekkür ederiz.

Araştırmanın sonuçlarını öğrenmek ya da daha fazla bilgi almak için aşağıdaki isimlere başvurabilirsiniz.

Ayşenur Seyrekbasan (E-posta: aysenur.seyrekbasan@tedu.edu.tr) Yrd. Doç. Dr. Tuğba Uzer-Yıldız (E-posta: tugba.uzer@tedu.edu.tr)

Appendix M: Ethical Committee Approval

TED ÜNİVERSİTESİ İNSAN ARAŞTIRMALARI ETİK KURULU

11.09.2017

Sayı:68

Konu: Etik Kurul Kararı

Sayın

Ayşenur Seyrekbasan Sosyal Bilimler Enstitüsü, Gelişim Odaklı Klinik Çocuk ve Ergen Psikolojisi Yüksek Lisans Programı Öğrencisi

TED Üniversitesi İnsan Araştırmaları Etik Kurulunun **07.09.2017** tarih ve **2017/72** sayılı kararı ekte sunulmuştur.

Prof. Dr. Melike SAYIL

TED Üniversitesi

İnsan Araştırmaları Etik Kurul Başkanı

TED ÜNİVERSİTESİ İNSAN ARAŞTIRMALARI ETİK KURULU

ETİK KURUL KARARLARI

Toplantı Tarihi: 07.09.2017 Toplantı Sayısı: 2017/68

TED Üniversitesi İnsan Araştırmaları Etik Kurulu **07.09.2017** Perşembe günü saat 11.00'de toplanarak aşağıdaki kararları almıştır.

Karar:(72) TED Üniversitesi, Sosyal Bilimler Enstitüsü, Gelişim Odaklı Klinik Çocuk ve Ergen Psikolojisi Yüksek Lisans Programı öğrencisi Ayşenur Seyrekbasan'ın sahibi olduğu "Travmanın Kuşak Aşkın Aktırımı: Marmara Depreminde Hayatta Kalanların Bilişsel, Duygusal ve Davranışşal Aktarımının İncelenmesi" başlıklı yüksek lisans tez çalışmasına ilişkin 03.08.2017-1116 tarih ve sayılı etik kurul onay talebi görüşülmüş ve araştırma kapsamında uygulanacağı beyan edilen veri toplama yöntemlerinin araştırma etiğine uygun olduğuna OYBİRLİĞİ ile karar verilmiştir.

Prof. Dr. Melike SAYIL

Başkan

Prof. Dr. Ali CÉNGİZKAN Üye

Prof. Dr. Berin GÜR

Üye

Doç. Dr. Cem AKGÜNER

Üye

Yrd. Doç. Dr. Mana Ece Tuna ÖZCİVANOĞLU

M. Getine

Üye

Yrd. Doç. Dr. Tekin KÖSE

Üve

Yrd. Doç. Dr. Elif KARSLI

Üye

Yrd. Doç. Dr. Aylin Çakıroğlu ÇEVİK

Üye

Appendix N. Curriculum Vitae

1. PERSONAL INFORMATION

Surname, Name: Güngör, Ayşenur

Nationality: Turkish (TC)

Date and Pace of Birth: 29.11.1990, Gölcük

E-mail: aysenur.seyrekbasan@tedu.edu.tr, aysenurseyrekbasan@gmail.com

2. EDUCATION

Degree	Institution	Year of Graduation
MS	TED University	2016-2018
MS	Hacettepe University	2012-2014
BS	Hacettepe University	2008-2012
College	Muammer Dereli Anadolu Öğretmen Lisesi	2004-2008

3. WORK EXPERIENCE

Year	Place	Enrollment
2017-present	Başkent University	Research Assistant
2017-2018	Gülhane Training and Research Hospital	Intern Psychologist
2015-2017	Rota Çocuklar	Psychologist
2014	Küçük Şeyler Akademi	Psychologist

4. FOREIGN LANGUAGE

English

5. PRESENTATIONS SUBMITTED AT CONGRESSES

Güngör, A., Uzer, T., Gökler-Danışman, I. (2018, April). *Investigating transgenerational trauma via children's biographical memory: 1999 Marmara Earthquake.* Poster presented at the biennial meeting of the New Directions in Social Cognition Research, Bilkent University, Ankara.

Güngör, A., Gökler-Danışman, I., Uzer, T. (2018, Mayıs). *Travmanın kuşak aşkın aktarımı: Marmara Depremi'nde hayatta kalanların bilişsel, duygusal ve davranışsal aktarımının incelenmesi*. Paper presented at the meetng of th, 28. Ulusal Çocuk ve Ergen Ruh Sağlığı ve Hastalıkları Kongresi, İstanbul.

Güngör, A., Uzer, T., Gökler-Danışman, I. (2018, July). *Transgenerational transmission of trauma:the link between children's life stories about their parents and dysfunctional cognitions, emotions and behavioral patterns*. Poster presented at the biennial meeting of the *Autobiographical Memory and Self*, Aarhus University, Denmark.

6. CONTINUING EDUCATION

Play Therapy (2018)

by Prof. Dr. Ferhunde Öktem & Prof. Dr. Gülsen Erden (39 hours)

Workshop on Approach to the Trauma through Psychodrama (2018)

by Bahar Gökler (6 hours)

WAIS-IV - Wechsler Adult Intelligence Scale-Fourth Edition (2018)

by Esra Güven (PhD.), Cihat Çelik (MS.) & Assoc. Prof. Dr. Sait Uluç (18 hours)

Family Therapy Supervision (207-2018)

by Prof. Dr. Ayşe Yalın (21 hours)

Workshop on Secure Base Scripts (2017)

by Assoc. Prof. Dr. Sait Uluç (6 hours)

WISC-IV – Wechsler Intelligence Scale for Children (2017)

by Assoc. Prof. Dr. Serap Özer (Spring semester at TED Üniversity)

Psychodynamic Supervision

by Assoc. Prof. Dr. Sedat Işklı & Çağay Dürü (PhD.) (40 hours)

MMPI Minnesota Multiphasic Personality Inventory (2015)

by Assoc. Prof. Dr. Sedat ışıklı (30 hours)

Cognitive Behavioral Therapy (2015)

by Prof. Dr. Hakan Türkçapar (50 hours)

Intervention to Trauma (2014)

by Assoc. Prof. Dr. Sedat Işklı & Çağay Dürü (PhD.) (46 hours)

Appendix O. Tez Fotokopisi İzin Formu

<u>ENSTİTÜ</u>
Lisansüstü Programlar Enstitüsü
YAZARIN
Soyadı :Güngör
Adı : Ayşenur
Bölümü : Psikoloji
<u>TEZİN ADI (İngilizce):</u> Transgenerational Transmission of Trauma: Investigating
Cognitive, Emotional And Behavioral Forms of
Transmission Among Marmara Earthquake Survivors
TEZİN TÜRÜ: Yüksek Lisans X Doktora
1. Tezimin tamamından kaynak gösterilmek Çartıyla fotokopi alınabilir.
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir
bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir.
3. Tezimden bir (1) yıl süreyle fotokopi alınamaz.

TEZİN KÜTÜPHANEYE TESLİM TARİHİ: