A new generation:

How refugee trauma affects parenting and child development

(met een samenvatting in het Nederlands)

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A new generation: How refugee trauma affects parenting and child development

Een nieuwe generatie: Hoe trauma's van vluchtelingen ouderschap en de ontwikkeling van het kind raken

(met een samenvatting in het Nederlands)

Proefschrift

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To my children Tifara and Isandro,
and the hope that is born with every new generation

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Chapter 1

Introduction

"What is believed to be essential for mental health is that the infant and young child should experience a warm, intimate and continuous relationship with his mother in which both find satisfaction and enjoyment."

(Bowlby, 1951, p. 179)

Imagine yourself on a journey. You started your journey in a large city, maybe Amsterdam. It is a good place to start a train journey because there are many trains to pick and many destinations to reach. You were not exactly sure what made you choose a particular train, but you got on and the journey started. First, you saw other lines tracking alongside, but then they diverged and the landscape opened up. Sometimes the journey was pleasant as the sun shone and you saw children playing in their gardens. At other times night fell, and you felt lonely, or even scared as an unpleasant fellow traveler embarked. Sometimes you decided to change train, because of what happened or just because you felt confident to do so. You were never sure what destination you were going to reach, but always sure that there was no way back.

Now, imagine your life as a train journey. Bowlby (1973) believed that the railway metaphor was a good way to understand the pathways by which people develop. Early in life, there are many pathways along which a person might develop, and a variety of destinations at which the person might arrive (Sroufe & Jacobvitz, 1989). As people navigate through life, alternative pathways either keep them on a particular developmental course or deviate them from routes previously established. Environmental circumstances, and especially interpersonal experiences, canalize the developmental route. Bowlby believed that early experiences within the family are particularly influential in shaping how a child regulates his/her behavior and expectations in present relationships and as new ones are constructed (Coppola, Vaughn, Cassibba, & Costantini, 2006). If a child is to function appropriately in a specific caregiving environment, he/she needs to organize him/herself or calibrate to that environment. According to this railway metaphor, early experiences in the family help to shape development and which of many possible routes an individual will travel (Fraley & Shaver, 2008).

What is believed to be essential for the mental health of a child is the experience of a warm, intimate and continuous relationship with his mother wrote Bowlby. The quality of the interaction with the parent is a crucial and unique experience for a child – an experience in which he/she can find him/herself to be loved and from which he/she can learn to love. It is precisely this

kind of experience that establishes a solid foundation for a secure organization and a safe journey. Harlow (1962) poignantly describes mothers who never had real mothers of their own and had no substituting experiences: "Helpless, hopeless, heartless mothers devoid or almost devoid, of almost any maternal feelings." (p. 9) Even though Harlow is describing monkeys, it is not difficult to capture the overriding importance of the nature of experiences in a child's life, how these experiences set in motion a developmental pathway, and how these experiences perpetuate over generations.

Before a child's journey started, there was another journey, the journey of the parents. What if this journey was maybe not devoid of love, but still quite a horrendous journey? People all over the world flee from their homeland and seek refuge in foreign countries because their life is threatened as a consequence of their political or religious convictions or even the simple fact that they belong to an ethnic or social group that is discriminated against. Such dangerous political and social circumstances drive them to forced migration and an application for asylum, through which they may regain hope for new perspectives.

Refugees are distinguished from asylum seekers who still have to cope with the uncertainty of whether their claim for a refugee status will be admitted or rejected. In 2011 14.630 persons applied for refugee status in the Netherlands. The largest groups of asylum- seekers came from Afghanistan, Iraq, Iran and Somalia (CBS, 2012). In that same year, worldwide an estimated 4.3 million people were newly displaced as a result of persistent or new conflicts and persecution. Of this group 800,000 people fled over international borders, the highest number in more than a decade. The number of forcibly displaced people worldwide exceeded 42 million (UNHCR, 2012).

Asylum seekers and refugees have suffered many hardships and ordeals. In their home country they often lived under life-threatening circumstances such as poverty and lack of medical care. In times of conflict they have been exposed to, for example, serious injury, combat situations, rape, imprisonment, torture, separation and even the murder of close relatives. Typical of these traumatic events is the interpersonal nature of the experience. As a consequence of these events they are forced to migrate, which most often means extremely unsafe travel conditions, hostile reception in the host-country, acculturation stress and a long-term threat of deportation.

There is evidence of a strong relation between the multiple and chronic extreme experiences of asylum seekers and refugees and the diagnosis of

Posttraumatic Stress Disorder (PTSD), which was previously defined as the consequence of a traumatic event or series of these events characterized by intrusive memories of the trauma and symptoms of avoidance and numbing, and hyper-arousal (American Psychiatric Association, 2000). Recently, the symptom clusters have been redefined into four clusters: intrusive memories, avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity (American Psychiatric Association, 2013). PTSD often co-occurs with other clinical presentations such as depression, anxiety disorders (Fazel, Wheeler, & Danesh, 2005; Lindert, Ehrenstein, Priebe, Mielck, & Brähler, 2009; Momartin, Silove, Manicavasagar, & Steel, 2004) or complicated grief that can persist after violent loss (Craig, Sossou, Schnak, & Essex, 2008; Schaal, Elbert, & Neuner, 2009; Schaal, Jacob, Dusingizemungu, & Elbert, 2010). Even though refugees resettled in western countries are ten times more likely to have PTSD than age-matched general populations, the vast majority of refugees are resilient. In a review study of 6743 adult refugees from seven countries 9% of the adults were diagnosed with PTSD and 5% with major depression, with evidence of much comorbidity in the larger studies (Fazel et al., 2005). A Dutch study on Iraqi asylum seekers reported a PTSD prevalence rate of 37% (Laban, Gernaat, Komproe, Schreuders, & De Jong, 2004).

Complex PTSD may be the result of exposure to repeated or prolonged experiences or multiple forms of interpersonal trauma. Complex PTSD is characterized by the core symptoms of PTSD in conjunction with five domains of disturbances in self-regulatory capacities (emotion regulation difficulties, disturbances in relational capacities, alterations in attention and consciousness (e.g., dissociation), adversely affected belief systems, and somatic distress or disorganization) (Cloitre et al., 2011; Herman, 1997). The consequences of trauma can be profound but do not end at the individual level. The deleterious effects of traumatic events on mental health and functioning have been well documented in asylum seeker and refugee populations (De Jong et al., 2001; Lie, 2002; Steel, Silove, Bird, McGorry, & Mohan, 1999).

It is dark, so dark, too dark. Aisha is on the ground, a heavy weight on top of her. She struggles, struggles for life. She wants to scream, but she can't breathe, something presses into her neck. Breathe, breathe, she can't, she struggles. Suddenly she screams, and she wakes up, bewildered. It takes some time before she realizes she is in her bed. Then she notices her son, standing next to her. His eyes are wide-open, the look on his face tense. She cannot bear how he stares. Even though she is still working on catching her breath, she screams 'go away you devil!'. He crawls back

into his bed, which is standing quite close to hers. When Aisha lies down again, she can hear him sobbing in bed. After quite some time, she manages to calm down. Then it sinks in; he is just a boy and not one of these evil men. The momentarily relief she felt evaporates in an overwhelming cloud of guilt: I am a bad mother.[1]

Trauma and loss have a significant impact on asylum seeker and refugee families as a whole that extends beyond individual mental health (Nickerson et al., 2011). To provide a warm, continuous, and intimate relationship is quite a challenge when a parent suffers from PTSD symptoms. For example, a parent could be easily triggered to re-experience intrusive memories of the traumatic event when a child lively expresses its emotions in a developmentally normal way, such as an outburst of rage or screaming (Davies, Slade, Wright, & Stewart, 2008; Kaitz, Levy, Ebstein, Faraone, & Mankuta, 2009; Schechter et al., 2008). The symptoms of PTSD may distract parents or lead to misinterpretation of their children's behavior. Subsequently, the parent is less able to focus on, and respond to, the needs of the child. In families, the relational aspects of adjustment after war and violence may be most salient in young children because of their relatively greater dependence on caregivers (Schechter & Zeanah, 2001). Nevertheless, despite the recognition of the reciprocal relationship between the mental health of asylum seeker and refugee parents and their children, most research has so far focused on individual responses (International Committee of the Red Cross, 2001).

It is a strange, but somehow familiar sound that wakes Moses up in the night. It is dark, and it takes time before he can see his mother in her bed. They like to have their beds close to each other; it reassures her. When Moses sees his mother, he immediately can tell something is wrong. She is lying in her bed moving frantically. She must be really sick. She opens her mouth. Does she want to say something? He doesn't understand. His heart starts pounding. Maybe she wants him to get a doctor? He doesn't know what to do. His body feels heavy and weak. What if she dies? He stands up and walks towards her bed. Then he stops; he doesn't dare to get closer. It scares him to look at her. He yearns to be in her arms, to assure her, to be reassured, but all he can do is stand there. Then suddenly his mother sits up and in a weird tone of voice she screams 'go away you devil!' at him. He startles. And then all there is left is to crawl back in bed. Underneath his blanket he feels torn between anger and sadness.

[1] Case-descriptions retrieved from clinical work of E. van Ee at Centrum '45.

For decades, theory and research on trauma and attachment have developed along relatively independent lines (Stovall-McClough & Cloitre, 2006). This is surprising as clinical practice suggests a strong association between traumatization of parents and the wellbeing of children. Case reports have provided lively descriptions of clinical cases of young children. They describe parents who are unavailable to their children because they are occupied with their own suffering. As parents re-experience their traumas, they become frightened or frightening, unable to tolerate emotions, to attune or to respond in any way. As a consequence, their young children (even babies) develop a range of behavioral problems, including delayed development and disorganized attachment (Harwood, 2006; Koren-Karie, Oppenheim, & Getzler-Yosef, 2004; Lieberman, Padrón, Van Horn, & Harris, 2005; Ringel, 2005; Schechter, Kaminer, Grienenberger, & Amat, 2003). This is the clinical experience within Centrum '45[2] as well: traumatized parents report a variety of issues regarding their children who did not experience trauma themselves. These issues, such as a combination of eating and sleeping disorders, separation anxiety, nightmares, tantrums, oppositional and behavioral problems, are a serious concern and warrant an intensive relationship-focused treatment.

Whether or not children can be affected by the traumatization of their parents is the topic of a longstanding discussion. Clinical reports have emphasized the severity of emotional problems and the subsequent transmission of such problems over generations (Barocas & Barocas, 1980), but have provided inconsistent research results. Most systematic and controlled studies have not found any extreme psychopathology, and most subjects have been reported to be within the normal range (Bar-On et al., 1998; Sagi-Schwartz et al., 2003; Sigal & Weinfeld, 1989; Suedfeld, 2000; Van IJzendoorn et al., 2003). Nevertheless, even systematic research results are not conclusive and have revealed mixed results. Some studies on Holocaust survivors have presented systematic evidence for transmission effects across two generations (Danieli, 1998; Solomon, Kotler, & Mikulincer, 1998; Rosenheck & Fontana, 1985; Solomon & Prager, 1992; Yehuda, Schmeidler, Wainberg, Binder-Brynes, & Duvdevani, 1998). These effects include a predisposition to PTSD or other mental disorders.

However, these research results could have been biased. Most previous analyses were based on the adult children's perceptions of their survivor parents and dominated by narrative reviews. Children were not screened throughout

[2] Foundation Centrum '45 is the Dutch national institute for specialist diagnostics and treatment of psychotrauma complaints resulting from persecution, war and violence.

the developmental span, but as adults looking back on their childhood, which had been troubled by a traumatized parent. Research designs were retrospective in nature. Second, convenience or clinical samples were used in the majority of cases, with an emphasis on Holocaust survivors. These selected samples may have included survivors who were less successful in coping with their traumatic experiences. Finally, although it is known that most people recover well after adversity and do not develop serious symptomatology (Bonanno, 2004; Kleber & Brom, 2003), no distinction was made between parents who had experienced extreme events without developing mental disturbances and parents experiencing the consequences of extreme events, such as PTSD. The result may have been an inherently biased discussion.

A number of recent studies have substantiated associations between parental trauma and parent-child interaction or child wellbeing. Mothers with more symptoms of PTSD were described as less sensitive and responsive (Feeley et al., 2011; Schechter et al., 2010), and children were reported to have more internalizing and externalizing behavior problems (Gold et al., 2007; Leen-Feldner, Feldner, Bunaciu, & Blumenthal, 2011; Lester et al., 2010; Lombardo & Motta, 2008). However, the mechanisms through which children without a trauma-history can be affected by the traumatization of their parents remain understudied. In order to understand the mechanisms underpinning the interplay between traumatized parents and their children, research investigating these parents and their children is crucial. It provides an opportunity not only to understand what happens in the relationship, but also why and how pathology develops through childhood into adulthood.

Aim

To summarize the above, the rationale for this dissertation comes from the combination of clinical expertise and mostly recent research results that reveal an association between the traumatization of parents and the wellbeing of their children. There is a gap in knowledge though. The understanding of why certain dyads are affected and others not, the mechanisms involved, and the entries for intervention are limited. By combining a trauma and attachment perspective, the aim of this dissertation is to contribute to our understanding of these mechanisms between the traumatized parent and the non traumatized child.

The study population consists of asylum seeker and refugee parents and their young children (who were born in the Netherlands). This enables us to study

children in an early developmental stage and within a high-risk population. The study is conducted at Centrum '45 in collaboration with Utrecht University. The project is approved by the Ethical Committee of Leiden University Medical Center and co-funded by ZonMW[3].

Research questions

The general question addressed in this dissertation is: What is the impact of refugee trauma of parents on the wellbeing of the young child? The aim is to understand the influence of posttraumatic stress of the parent on the (possible) symptomatology of the child in high-risk circumstances. To understand these complex dynamics the choice was made to look at two main questions:

1. How does traumatization affect the asylum seeker or refugee parent and his/her non traumatized child?

2. And, is attachment a key in understanding relational patterns between the traumatized asylum seeker or refugee parent and his/her non traumatized child?

More specific issues that are addressed: What are the developmental difficulties presented by young children of traumatized asylum seeker and refugee parents? In what manner do symptoms of posttraumatic stress affect the quality of the parent-child interaction? And, which mechanisms explain the association between posttraumatic stress symptoms of asylum seeker and refugee parents and the wellbeing of children?

Outline

Part I: How does traumatization affect the asylum seeker or refugee parent and his/her non traumatized child?

The first part of this dissertation is mainly devoted to the first question: how does traumatization affect the parent and his/her non traumatized child? In order to explore the impact of refugee trauma of parents on the wellbeing of the young child this dissertation illuminates different angles in each chapter.

Chapter two takes a theoretical approach by reviewing the existing evidence on the concept of "intergenerational transmission of trauma". Whether

[3] Project number 100002037.

or not children can be affected by the traumatization of their parents has been the topic of a longstanding discussion. This chapter provides a critical review of research studies on traumatized parents with symptoms of PTSD and their relationships with their non traumatized children (0-18 years). The main goal is to clarify discernible mechanisms underpinning the interaction between traumatized parents and their children.

Chapter three focuses on mothers as, most often, they are the primary caregivers, and examines maternal traumatization as a risk factor for child development. It analyzes the interrelations among maternal posttraumatic stress symptoms, mother-child interaction and infants' psychosocial functioning and development among 49 asylum seeker and refugee mothers and their children.

As fathers have an important role in the life of children as well, chapter four highlights traumatized fathers. Despite increased attention to the role of fathers within families, there is still a dearth of studies on the impact of posttraumatic stress on father-involvement. The study investigates the quantity of father-involvement and the influence of paternal posttraumatic stress on the father-child interaction among 80 asylum seekers and refugees.

Chapter five adds a clinical perspective to this dissertation by integrating research findings on asylum seekers and refugee families with a specific form of treatment: multi-family group therapy. The chapter explores the consequences of refugee trauma on families and the possibilities to strengthen resilience and parenting competencies in a family setting.

Intermezzo: Children born of wartime rape

Chapter six and seven can be considered as an intermezzo between the two parts. They take a broader perspective on the issue of trauma and parenting by describing the harrowing situation of children born of wartime rape. The situation of these children is a poignant example of the interplay between trauma and attachment on the individual and societal level. Both chapters draw attention to serious concerns for an underserved population. The objective of these chapters is twofold. First, to analyze whether these children born of wartime rape are at risk and identify risk factors for their wellbeing. Second, to identify key issues that should direct research and clinical practice.

Part II: Is attachment a key in understanding relational patterns between the traumatized parent and his/her non traumatized child?

The third part of this thesis is devoted to the second question of the study: is the attachment relationship affected by the traumatization of the parent? First, attachment from the perspective of the parent is studied. Chapter eight illuminates the interaction between refugee trauma and parents' current state of mind with respect to attachment. In what manner these attachment representations of parents affect or protect parenting, and thereby a child, is explored.

Chapter nine studies attachment from the perspective of the child. The link between PTSD, disconnected and extremely insensitive parenting behavior, and child attachment is explored. An insecure, or even more so, a disorganized attachment is considered a risk factor for the development of the child. The chapter takes a unique perspective on these mechanisms by studying the impact of traumas on family relationships embedded within trauma and attachment theory.

Finally, chapter ten summarizes the conclusions drawn from all studies, discusses some fundamental issues and an integration of the two perspectives: trauma and attachment. Or is it actually one perspective?

References

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders: DSM-IV-TR.* Arlington: Author.

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders: DSM-V.* Arlington: Author.

Bar-On, D., Eland, J., Kleber, R. J., Krell, R., Moore, Y., Sagi, A., ..., & Van IJzendoorn, M. H. (1998). Multigenerational perspectives on coping with the Holocaust experience: An attachment perspective for understanding the developmental sequelae of trauma across generations. *International Journal of Behavioral Development*, *22*, 315-338.

Bonanno, G. A. (2004). Loss, trauma, and human resilience. *American Psychologist*, *59*, 20-28.

Bowlby, J. (1951). Maternal care and mental health. *Bulletin of the World Health Organization*, *3*, 355-534.

Bowlby, J. (1973). *Separation: Anxiety and anger*, *Vol. 2.* London: The Hogarth Press and the Institute of Psycho-Analysis.

Centraal Bureau voor de Statistiek (2011). *Asielverzoeken; vanaf 1980 naar nationaliteit*, Retrieved from: www.statline.cbs.nl.

Cloitre, M., Courtois, C. A., Charuvastra, A., Carapezza, R., Stolbach, B. C., & Green, B. L. (2011). Treatment of complex PTSD: Results of the ISTSS expert clinician survey on best practices. *Journal of Traumatic Stress*, *24*, 615-627.

Coppola, G., Vaughn, B. E., Cassibba, R., & Costantini, A. (2006). The attachment script representation procedure in an Italian sample: Associations with adult attachment interview scales and with maternal sensitivity. *Attachment & Human Development*, *8*, 209-219.

Craig, C. D., Sossou, M., Schnak, M., & Essex, H. (2008). Complicated grief and its relationship to mental health and wellbeing among Bosnian refugees after resettlement in the united states: Implications for practice, policy, and research. *Traumatology*, *14*, 103-115.

Danieli, Y. E. (1998). *International handbook of multigenerational legacies of trauma*. New York: Plenum.

Davies, J., Slade, P., Wright, I., & Stewart, P. (2008). Posttraumatic stress symptoms following childbirth and mothers' perceptions of their infants. *Infant Mental Health Journal*, *29*, 537-554.

De Jong, J. T., Komproe, I. H., Van Ommeren, M., El Masri, M., Araya, M., Khaled, N., ..., & Somasundaram, D. (2001). Lifetime events and posttraumatic stress disorder in 4 postconflict settings. *JAMA: The Journal of the American Medical Association*, *286*, 555-562.

Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: A systematic review. *The Lancet*, *365*, 1309-1314.

Feeley, N., Zelkowitz, P., Cormier, C., Charbonneau, L., Lacroix, A., & Papageorgiou, A. (2011). Posttraumatic stress among mothers of very low birthweight infants at 6 months after discharge from the neonatal intensive care unit. *Applied Nursing Research*, *24*, 114-117.

Fraley, R. C., & Shaver, P. R. (2008). Attachment theory and its place in contemporary personality research. In O. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of Personality: Theory and Research*, 3rd edition (pp. 518-541). New York: Guilford Press.

Gold, J. I., Taft, C. T., Keehn, M. G., King, D. W., King, L. A., & Samper, R. E. (2007). PTSD symptom severity and family adjustment among female Vietnam veterans. *Military Psychology*, *19*, 71-81.

Harlow, H. F. (1962). The heterosexual affectional system in monkeys. *American Psychologist*, *17*, 1-9.

Harwood, I. (2006). Head start is too late: Integrating and applying infant observation studies, and attachment, trauma, and neurobiological research to groups with pregnant and new mothers. *International Journal of Group Psychotherapy*, *56*, 5-28.

Herman, J. L. (1997). *Trauma and recovery: The aftermath of violence--from domestic abuse to political terro*r. New York: Basic Books.

International Committee of the Red Cross (ICRC) (2011). *Restoring family links: A guide for national Red Cross and Red Crescent societies*. Geneva: ICRC.

Kaitz, M., Levy, M., Ebstein, R. P., Faraone, S. V., & Mankuta, D. (2009). The intergenerational effects of trauma from terror: A real possibility. *Infant Mental Health Journal*, *30*, 158-179.

Kleber, R. J., & Brom, D. (2003). *Coping with trauma*, *theory*, *prevention and treatment*. Lisse: Swets & Zeitlinger publishers.

Koren-Karie, N., Oppenheim, D., & Getzler-Yosef, R. (2004). Mothers who were severely abused during childhood and their children talk about emotions: Co-construction of narratives in light of maternal trauma. *Infant Mental Health Journal*, *25*, 300-317.

Laban, C. J., Gernaat, H. B., Komproe, I. H., Schreuders, B. A., & De Jong, J. T. (2004). Impact of a long asylum procedure on the prevalence of psychiatric disorders in Iraqi asylum seekers in The Netherlands. *The Journal of Nervous and Mental Disorders*, *192*, 843-851.

Leen-Feldner, E. W., Feldner, M. T., Bunaciu, L., & Blumenthal, H. (2011). Associations between parental posttraumatic stress disorder and both offspring internalizing problems and parental aggression within the national comorbidity survey-replication. *Journal of Anxiety Disorders*, *25*, 169-175.

Lester, P., Peterson, K., Reeves, J., Knauss, L., Glover, D., Mogil, C., …, & Beardslee, W. (2010). The long war and parental combat deployment: Effects on military children and at-home spouses. *Journal of the American Academy of Child & Adolescent Psychiatry*, *49*, 310-320.

Lie, B. (2002). A 3-year follow-up study of psychosocial functioning and general symptoms in settled refugees. *Acta Psychiatrica Scandinavica*, *106*, 415-425.

Lieberman, A. F., Padrón, E., Van Horn, P., & Harris, W. W. (2005). Angels in the nursery: The intergenerational transmission of benevolent parental influences. *Infant Mental Health Journal*, *26*, 504-520.

Lindert, J., Ehrenstein, O. S., Priebe, S., Mielck, A., & Brähler, E. (2009). Depression and anxiety in labor migrants and refugees–a systematic review and meta-analysis. *Social Science & Medicine*, *69*, 246-257.

Lombardo, K. L., & Motta, R. W. (2008). Secondary trauma in children of parents with mental illness. *Traumatology*, 14, 57-67.

Momartin, S., Silove, D., Manicavasagar, V., & Steel, Z. (2004). Complicated grief in Bosnian refugees: Associations with posttraumatic stress disorder and depression. *Comprehensive Psychiatry*, *45*, 475-482.

Nickerson, A., Bryant, R. A., Brooks, R., Steel, Z., Silove, D., & Chen, J. (2011). The familial influence of loss and trauma on refugee mental health: A multilevel path analysis. *Journal of Traumatic Stress*, *24*, 25-33.

Ringel, S. (2005). Through the camera's eye: The intergenerational transmission of loss. *Clinical Social Work Journal*, *33*, 433-443.

Rosenheck, R., & Fontana, A. (1998). Transgenerational effects of abusive violence on the children of Vietnam combat veterans. *Journal of Traumatic Stress*, *11*, 731-742.

Sagi-Schwartz, A., Van IJzendoorn, M. H., Grossmann, K. E., Joels, T., Scharf, M., KorenKarie, N., & Alkalay, S. (2003). Attachment and traumatic stress in female Holocaust child survivors and their daughters. *The American Journal of Psychiatry*, *160*, 1086-1092.

Schaal, S., Elbert, T., & Neuner, F. (2009). Prolonged grief disorder and depression in widows due to the Rwandan genocide. *Journal of Death and Dying*, *59*, 203-219.

Schaal, S., Jacob, N., Dusingizemungu, J., & Elbert, T. (2010). Rates and risks for prolonged grief disorder in a sample of orphaned and widowed genocide survivors. *BMC Psychiatry*, *10*, 55.

Schechter, D. S., Kaminer, T., Grienenberger, J. F., & Amat, J. (2003). Fits and starts: A mother-infant case-study involving intergenerational violent trauma and pseudoseizures across three generations. *Infant Mental Health Journal*, *24*, 510-528.

Schechter, D. S., Willheim, E., Hinojosa, C., Scholfield-Kleinman, K., Turner, J. B., McCaw, J., & Myers, M. M. (2010). Subjective and objective measures of parent-child relationship dysfunction, child separation distress, and joint attention. *Psychiatry: Interpersonal and Biological Processes*, *73*, 130-144.

Schechter, D. S., Coates, S. W., Kaminer, T., Coots, T., Zeanah, C. H., Davies, M., …, & Myers, M. M. (2008). Distorted maternal mental representations and atypical behavior in a clinical sample of violence-exposed mothers and their toddlers. *Journal of Trauma and Dissociation*, *9*, 125-147.

Scheeringa, M. S., & Zeanah, C. H. (2001). A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress*, *14*, 799-815.

Sigal, J. J., & Weinfeld, M. (1989). *Trauma and rebirth. Intergenerational effects of the Holocaust.* New York: Praeger.

Solomon, Z., Kotler, M., & Mikulincer, M. (1998). Combat-related posttraumatic stress disorder among second-generation Holocaust survivors: preliminary findings. *American Journal of Psychiatry*, *145*, 865-868.

Solomon, Z., & Prager, E. (1992). Elderly Israeli Holocaust survivors during the Persian-Gulf-War—a study of psychological distress. *American Journal of Psychiatry*, *149*, 1707-1710.

Sroufe, L. A., & Jacobvitz, D. (1989). Diverging pathways, developmental transformations, multiple etiologies and the problem of continuity in development. *Human Development*, *32*, 196-203.

Steel, Z., Silove, D., Bird, K., McGorry, P., & Mohan, P. (1999). Pathways from war trauma to posttraumatic stress symptoms among Tamil asylum seekers, refugees, and immigrants. *Journal of Traumatic Stress*, *12*, 421-435.

Stovall-McClough, K. C., & Cloitre, M. (2006). Unresolved attachment, PTSD, and dissociation in women with childhood abuse histories. *Journal of Consulting and Clinical Psychology*, *74*, 219-228.

Suedfeld, P. (2000). Reverberations of the Holocaust fifty years later: Psychology's contributions to understanding persecution and genocide. *Canadian Psychology-Psychologie Canadienne*, *41*, 1-9.

United Nations High Commissioner for Refugees (2012). *A year of crises, UNHCR global trends 2011.* Geneva: UNHCR.

Van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., & Sagi-Schwartz, A. (2003). Are children of Holocaust survivors less well-adapted? A meta-analytic investigation of secondary traumatization. *Journal of Traumatic Stress*, *16*, 459-469.

Yehuda, R., Schmeidler, J., Wainberg, M., Binder-Brynes, K., & Duvdevani, T. (1998). Vulnerability to posttraumatic stress disorder in adult offspring of Holocaust survivors. *American Journal of Psychiatry*, *155*, 1163-1171.

How does traumatization affect the asylum seeker or refugee parent and his/her non traumatized child?

Chapter 2

Relational patterns between traumatized parents and their non traumatized children: a review

Relational patterns between traumatized parents and their non traumatized children: a review
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Submitted

A growing body of research has documented the importance of a healthy parent-child relationship in order for children to prosper in their social and emotional development. When parental psychopathology is present, a child's social and emotional development might be threatened. Parental psychopathology has consistently been associated with negative child outcomes (Goodman & Brumley, 1990). More specifically, a consistent association has been found between maternal depression and negative child outcomes, such as internalizing and externalizing problems (Beardslee, Versace, & Gladstone, 1998; Cummings & Davies, 1994; Hay, Pawlby, Angold, Harold, & Sharp, 2003; Herzog, Everson, & Whitworth, 2011), insecure attachment at various ages (Campbell et al., 2004; Moehler, Brunner, Wiebel, Reck, & Resch, 2006) and a difficult temperament (Whiffen & Gotlib, 1989). Similar but less consistent results have been found between maternal anxiety and negative child outcomes ((Bögels & Brechman-Toussaint, 2006; Manassis, Bradley, Goldberg, Hood, & Swinson, 1994; Murray, Cooper, Creswell, Schofield, & Sack, 2007). Maternal psychopathology not only has a negative impact on child outcomes but also on parent-child interaction. Depressed mothers exhibited less positive affect, responded less consistently and positively to their children, and were more hostile, irritable and critical (Downey & Coyne, 1990; Lovejoy, Graczyk, O'Hare, & Neuman, 2000). Anxious mothers exhibited lower levels of sensitivity, including withdrawn, disengaged or intrusive, and overprotective or controlling behavior (Nicol-Harper, Harvey, & Stein, 2007; Weinberg & Tronick, 1998; Whaley, Pinto, & Sigman, 1999; Woodruff-Borden, Morrow, Bourland, & Cambron, 2002). The impact of paternal psychopathology has been investigated far less extensively. Of the scant evidence available, results have shown similar, but less consistent, patterns between the psychopathology of fathers, parenting and child outcome (Davis, Davis, Freed, & Clark, 2011; Kane & Garber, 2004; Lee, Taylor, & Bellamy, 2012; Low et al., 2012). Consequently, chronic interactional disturbances have been postulated as a mediator in the relationship between parental psychopathology and developmental disturbances in their offspring.

In contrast with findings with regard to depression and anxiety, whether or not children can be affected by the traumatization of their parents has been the topic of a longstanding debate. The diagnosis of posttraumatic stress disorder (PTSD) has a considerable symptom overlap with depression and anxiety disorders (Brewin, 2007). The four PTSD symptom clusters consist of the re-experiencing of the traumatic experience, the avoidance of stimuli, negative cognitions and mood, and persistent symptoms of arousal (American Psychiatric Association, 2013). Features of depression are social withdrawal, a loss of interest,

emotional numbing and hopelessness. Anxious patients report emotional and physiological arousal elicited by fear-inducing situations and avoidance of such situations. Both depression and anxiety can lead to sleeplessness, irritability and concentration problems. All of these symptoms could yield a diagnosis of PTSD (Brewin, Lanius, Novac, Schnyder, & Galea, 2009). In contrast with the clusters avoidance, negative cognitions and mood, and arousal, a highly distinctive feature of PTSD, is the re-experiencing cluster, and especially flashbacks (Brewin, 2007). Despite this considerable symptom overlap, it remains unclear whether or not there is an association between parental PTSD, parent-child relationship and child outcome. Therefore, we undertook a systematic review and critical examination of the research evidence of the relation between parental symptoms of PTSD, parenting and developmental disturbances in their children.

Although many parents recover well after extreme life events and do not develop subsequent disorders such as PTSD (Bonanno, 2004; Kleber & Brom, 2003), reviews of empirical studies of the consequences of extreme events have shown that varying percentages of victims have to deal with long-term mental disorders (Davydow, Gifford, Desai, Needham, & Bienvenu, 2008; Fazel, Wheeler, & Danesh, 2005). Case reports have provided vivid descriptions of parents who are unavailable to their children because they are occupied with their own suffering. As parents re-experience their traumatic memory, they become frightened or frightening, unable to tolerate emotions, to attune or to respond in any way. As a consequence, their young children (even infants) develop a range of behavioral problems, including delayed development and disorganized attachment (Harwood, 2006; Koren-Karie, Oppenheim, & Getzler-Yosef, 2004; Lieberman, Padrón, Van Horn, & Harris, 2005; Ringel, 2005; Schechter, Kaminer, Grienenberger, & Amat, 2003). How do we explain these relational patterns between traumatized parents and their non traumatized children, and are these patterns comparable to relational patterns between depressed or anxious parents and their children?

As early as 1975 Fraiberg, Adelson and Shapiro introduced the concept of 'ghosts in the nursery' to describe the intrusions of parental trauma in the parent-child relationship. These intruders from the past may, in an unguarded moment, harm the bond between the parent and his or her child. Using a psychoanalytic perspective, they described the pattern of parents' identification with the aggressor as a defense mechanism. These parents repress the associated affective experience of their own childhood trauma and are consequently at risk of inflicting pain upon the child. The way in which parents represent the child

and the relationship is affected by the traumatizing figures of the past (Schechter et al., 2005).

Attachment theory similarly highlights the importance of early caregiving experiences to subsequent development of the child. Experiences of abuse and the loss of attachment figures could lead to unresolved trauma, disrupted maternal behavior and consequently infant disorganization (Bailey, Moran, Pederson, & Bento, 2007; Madigan et al., 2006; Schuengel, Bakermans-Kranenburg, & Van IJzendoorn, 1999). Insecure attachment relationships have long-term consequences for interpersonal relationships and may thus influence the child's own parenting later in life. The psychoanalytic and attachment perspectives, however, only offer an explanation for the impact of childhood (chronic) trauma on parenting, but no explanation is offered for more recent traumatic experiences in the adult-life of a parent, such as combat, war or terrorism.

A different perspective is taken by the social learning model that posits that children's real-life experiences directly or indirectly shape their behavior, in particular aggression. Parenting behavior is modeled on what parents observed and learned as children (Bandura, 1971). Maltreated children, for example, learn aggressive behavior as a child and are more likely to use corporal punishment as a parent (Muller, Hunter, & Stollak, 1995). Children of traumatized parents have a symptomatic parent as a model and can therefore be expected to exhibit the same or similar behavior or disorders.

In order to further relational trauma theory it is necessary to understand the relationship between traumatized parents and their non traumatized children. Research has shown that most victims recover well, and so, in order to understand this relationship, a critical distinction needs to be made between parents who are coping well with extreme events and parents who are suffering from the long-term consequences of such events. In addition, children of traumatized parents need to be screened throughout the developmental span. Unfortunately, many previous analyses on 'intergenerational transmission of trauma' have been based on the adult children's perceptions of their survivor parents. Children were screened not throughout the developmental span but as adults looking back on their childhood, which had been troubled by a parent struggling with the aftermath of war and terror. Research designs were retrospective in nature. To capture the relationship between traumatized parents and their non traumatized children and understand their interaction, research needs to focus on children.

This review summarizes empirical research on traumatized parents with symptoms of PTSD and their relationships with their non traumatized children (0-18 years), with the main goal of clarifying discernible mechanisms underpinning the interaction between traumatized parents and their children. To our knowledge, such a review has not yet been carried out. First, we will describe the results relating to the effect of symptoms of PTSD on parent-child interaction, as well as on the behavior and development of the child. Secondly, we will describe the proposed mechanisms that emerge in the reviewed articles. Next, methodological issues of the reviewed studies will be highlighted. We end with a discussion of a theoretical framework for understanding the patterns between traumatized parents and their non traumatized children from different perspectives: a trauma perspective, a relational perspective, and a transactional perspective.

Method

A systematic review was conducted of the data sources Embase, PILOTS, PubMed and PsycINFO. Two psychologists searched for articles published between January 1970 and March 2013 using the Medical Subject Headings 'trauma' or 'PTSD', and 'mother' or 'parent', together with 'neonatal', 'infant', 'infancy', 'preschool', 'young child' or 'child', and the reference list the articles yielded. A total of 5,005 articles were retrieved. Studies were included if: 1) they were published in English; 2) parents were assessed on PTSD symptoms (reports of a history of violence, war and other extreme life events without an assessment of trauma symptoms led to exclusion); 3) children were aged between 0 and 18 years old; and 4) children did *not* experience traumatic events.

In general, studies did not explicitly assess and report negative lifetime child trauma histories and thus were included when they intended to study the effect of parental trauma on the child. As the traumatization of the child has its own effect on the interaction studies intended to assess these relationships were excluded. Thus, articles were excluded for the following reasons: 1) the articles described parents and children who were both traumatized. In some cases it seemed likely that the children had experienced traumatic events; for example, in articles describing mothers traumatized by family violence, there seemed a strong probability that the children had witnessed these events; 2) the articles reported on physical trauma as a medical condition of the child; 3) the articles did not report on an assessment of parental traumatic symptoms, although they referred to traumatic experiences (mostly reported in interviews). One study

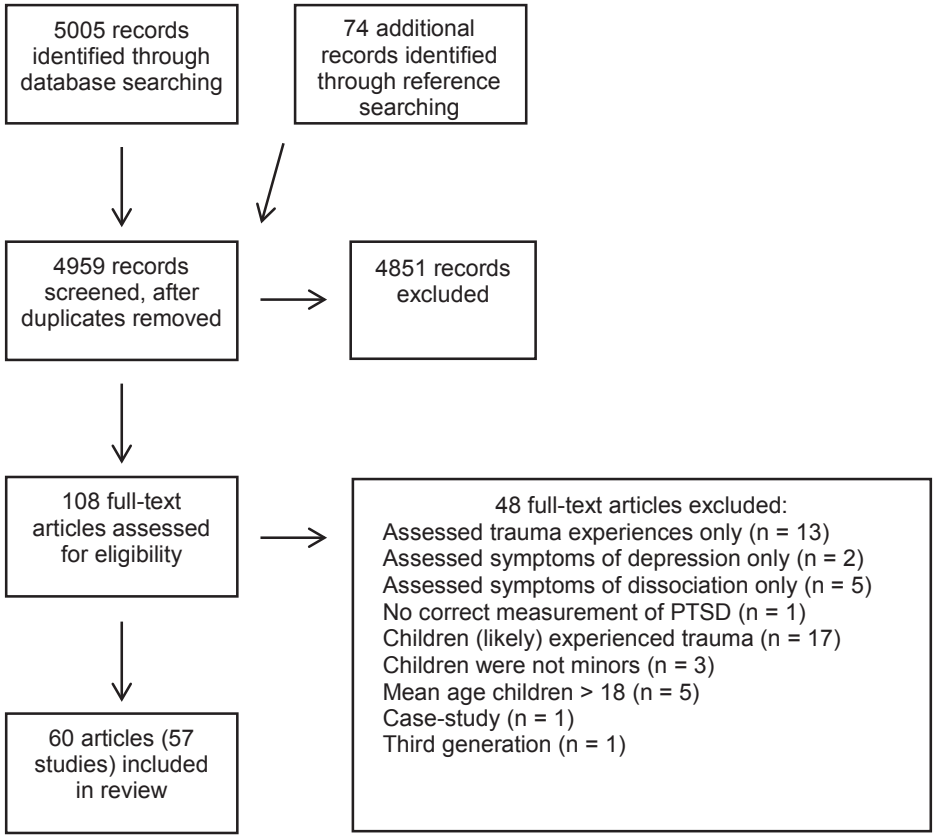

Figure 2.1 Flow chart of the selection of studies

was excluded from this review because posttraumatic stress was assessed by means of the Hopkins Symptom Checklist-25 (HSCL-25), which only contains an anxiety and depression subscale (Foss, 2001); 4) case-studies; and 5) age of the children. Five studies were excluded because the mean age of the children was above 18 years. For example, the study by Ruscio, Weathers, King, and King (2002) reports an age-range of 0.5–39 years with a mean age of 22.4 years and was excluded. If doubts arose regarding the inclusion of an article, the first author screened the full article (see Figure 2.1). Sixty articles (resulting from 57 studies) reported on research on traumatized parents and their non traumatized children (see Table 2.1).

Table 2.1 Included studies

Authors	Part	Child	PTSD	Other measurements[1]	Main outcome
Child abuse					
Brand et al. (2009)	126d[2]	6m	SCID	CTQ, BDI-II, PERI HH, SCC	HPA axis functioning
Jovanovic et al. (2011)	36d	6-13y	SCID	CTQ, PSS, BDI, TESI, EMG, ECG	Startle response
Koren-Karie et al. (2008)	33d	4-10y	IES	AI, AEED, BLAAQ-U, BSI, H-DES	Mother-child dialogues
Lang et al. (2010)	31d	7-32w	PCL-C	CTQ, STAI, BDI-II, IBQ-R, PSOC, PSI-SF	Perceived parenting behavior
Leifer et al. (2004)	199d	4-12y	TSC-40	FOCS, NORCS, APCS, DCCS, ISF, RSQ, MAQ	Child Abuse
Lyons-Ruth & Block (1996)	45d	18m	MS-PTSD	SSP, AAI, DES	Sensitivity, hostility, attachment
Muzik et al. (2012)	150d	6w-6m	NWS-PTSD	PBQ, CTQ, PPDS, MACY-IPCS	Parent-baby bond
Pears & Capaldi (2001)	288	9-21y	MMPI-derr scale	AE-III, SES, MMPI, parent disc., childhood difficulty, CES-D	Child abuse
Schechter et al. (2005)	41d	8-50m	SCID, PCL-S	DTHQ, LEC, BPSAQ, WMCI	Maternal reflective functioning
Schechter et al. (2008)	41d	8-50m	SCID, PCL-S	DTHQ, LEC, BPSAQ, WMCI, AMBIANCE	Maternal reflective functioning
Schechter et al. (2007a&b)	24d	4-7y	SCID	DTHQ, LEC, BPSAQ, CDC, MSSB, FAD-T	Child mental repr., attachment
Childbirth					
Ayers et al. (2006)	192	6-12w	IES	EB, BM–IIS, DAS	Parent-baby bond
Ayers et al (2006)	6	7m-18y	PTSD- DS	Interview transcripts	Maternal relationships
Davies et al. (2008)	211d	6w	PTSDQ, IES	EPDS, MORS-SF, ICQ, MPAS	Maternal perceptions
Despars et al. (2011)	58	2m-12m	IES	WMCI	Maternal representations
McDonald et al. (2011)	81	0-2y	PTSDQ, IES	HADS-D, MORS-SF, PSI-SF	Parenting stress
Nicholls & Ayers (2007)	12	0-10y	PDS, THC	Interview transcripts	Parent-child bond
Parfitt & Ayers (2012)	130	4-8m	BIMMH	EB, BM–IIS, DAS	Parent-baby bond
Parfitt & Ayers (2009)	152	0-2y	PDS	EPDS, DAS, PBQ	Parent-baby bond
Combat					
Ahmadzadeh & Malekian (2004)	282	15-19y	Med. Records	AGQ, CAS, WSSSD	Psychopathology
Al-Turkait & U Ohaeri (2008)	166d	6-33y	CAPS	HSCL, I-E LOC, SES, FAD, PCL, CBI, Rutter A-2	Psychopathology
Berz et al. (2008)	60	6-16y	MCSR-PTSD	CTS, PS	Parenting satisfaction, partner violence
Gewirtz et al. (2010)	468	0-17y	PCL-M	APQ-9, SAS-SR, DAS-7, AUDIT	Perceived parenting, couple adjustment
Gold et al. (2007)	89	6-16y	MSCR-PTSD	DAS, MDS, FACES II, PS, CTS, PERI, CBCL	Family adjustment

Herzog et al. (2011)	54	2-17y	PCL-M	STS, HITS, RAFFT, CBCL, PCL-M	Secondary trauma
Jordan et al. (1992)	1576	6-16y	MSCR-PTSD	MPI, PPI, FACES II, SS LF, CTS, ISW, PERI, SSI, MAST, CBCL	Family adjustment, child behavior problems
Khalys et al. (2011)	97	0-18y	PC-PTSD	DAS	Relationship concerns
Lester et al. (2010)	272	4-12y	PDS, PCL-M	CBCL, CDI, MASC, BSI	Psychopathology
Rosenheck & Fontana (1998)	257	6-16y	MSCR-PTSD	Hist. of vict., FSS, RCS, CBCL, FACES II	Child behavior problems
Samper et al. (2004)	250	0y-18y	MSCR-PTSD	DIS, CTS	Parenting satisfaction
General population					
Bosquet et al. (2011)	52d	6m	PCL-C	LSC-R, EPDS TESI-PRRR, SFP-R, INQ-R, ITSEA	Infant reactivity and regulation
Bosquet et al. (2009)	23d	6m	PCL-C	LSC-R, EPDS, SFP, LSS, IDB	Cardiorespiratory reactivity
Cohen et al. (2008)	176	9-15y	SCID-SAC	LEC, CTS-2, CAP, PPS, CTSPC	Parenting behavior
Feeley et al. (2011)	21d	6m	PPQ	NBRS, EAS, BSID	Parent child interaction
Hairston et al. (2011)	184	4-18m	NWS-PTSD	CDC PRAMS, CTQ-SF, PDSS, CSHQ, PBQ, CBCL	Infant sleep
Lange et al. (2011)	339	1-3y	CIDI 3.0	MFQ, parental report of asthma	Infant's asthma
Leen-Feldner et al. (2011)	3931	0-18y	CIDI	PA, CP	Parental aggression, psychopathology
Lombardo & Motta (2008)	53d	13-17y	MPSS-SR	DASS-21, STS, CES-DC, RCMAS	Secondary trauma
Selimbasic (2010)	100d	10-15y	HTQ	CBCL	Child behavior problems
Schechter et al. (2009)	67	1-4y	CAPS, PCL-S	DTHQ, TLEQ, DES, BDI-II, MQ	Violent media exposure
Schechter at al. (2010)	74d	1-4y	CAPS, PCL-S	DTHQ, TLEQ, BDI-II, PCDI, SDS, AMBIANCE, CJAS	Parenting behavior, child separation distress
Schwerdtfeger & Goff (2007)	41	Prenatal	TSC-40	TEQ, PBI, MAAS	Prenatal attachment
Sullivan et al. (2011)	94	1-4y	MINI, MPSS-SR	PRFQ-1	Maternal reflective functioning
Interpersonal violence					
Schechter et al. (2012)	20	12-42m	CAPS, PCL-S	fMRI, SDS, DES, Crowell-proc., PDQ-4, TLEQ, LS	Neural activity (emotional reactions)
Mass violence					
Brand et al. (2006)	98d	9m	PCL-C	IBQ	Cortisol levels, infants distress
Daud et al. (2008)	80d	6-17y	H/UTQ, DSMIV	DICA-R, PTSSC, WISC-III, ITIA, SDQ	Resilience
Eng et al. (2009)	288d	13-22y	HTQ	RMS, AP	Academic performance
Hinton et al. (2009)	143	-	PCL	AIS, AEF, PASSS, LPS, ASSA, AAOS, ATRSS, ACCS, ELAS, KLAS, LBS	Family-directed anger
Kalebić Jakupčević &	180	6-14y	ICD-10	GIQ, CAEI, PSSS, CAPI	Child abuse

Ajdukovic (2011)					
Vaage et al. (2011)	88d	10-23y	DSM-III	SDQ, SCL-90-R, SRQ	Psychopathology
Van Ee et al. (2012)	49d	1,5-4y	HTQ	HSCL, CS, EAS, BSID, CBCL	Parent-child interaction
Yehuda et al. (2005)	38d	1y	PCL	BDI, RIA	Salivary cortisol
Natural disaster					
Tees et al. (2010)	288	2-12m	PCL-C	PPD, SCL-90-R, EITQ	Infant temperament
Prematurity					
Coppola et al., (2007)	40d	25-35GA	IES	AAI, EAS	Sensitivity
Forcada-Guex (2011)	72d	26-41GA	PPQ	WMCI, CARE, PERI, SES	Parenting behavior
Stillbirth					
Hughes et al. (2006)	31d	12m	PTSD-I	AAI, EPDS, STI, SSP	(Disorg.) attachment
Turton et al. (2004)	60d	12m	PTSD-I	AAI, SSP	(Disorg.) attachment
Substance abuse					
Holditch-Davis et al. (2009)	177	preterm-2yr	PPQ	PSS:NICU, CESD, STAI, DHS, WI, PSS:PBC	Maternal psychological distress
Stover et al. (2012)	126	0-18y	PTSD SS	MAST, DAST, urine scr. PARQ (SF)	Parenting behaviors

[1] All measures abbreviated
[2] d = dyades, parent and child were assessed

Traumatized parents and their non traumatized children

The overview of the existing evidence will be presented in four different clusters: the impact of parental symptoms of PTSD on the parent-child relationship, the impact of parental symptoms of PTSD on child outcome, symptomatic overlap in psychopathology, and contextual variables.

Impact on the parent-child relationship

We identified 33 papers reporting on the association between parental symptoms of PTSD and the parent-child relationship. Reviewed articles showed a consistent negative association between more parental symptoms of PTSD and a reduced quality of the parent-child relationship.

Self-report measurements showed that parents with symptoms of PTSD shortly after birth did not perceive the relationship as being affected (Ayers, Wright, & Wells, 2007), but in the long term did perceive the relationship with their child as poorer than those without symptoms of PTSD (Ayers, Eagle, & Waring, 2006; Berz, Taft, Watkins, & Monson, 2008; Davies, Slade, Wright, & Stewart, 2008; Gewirtz, Polusny, DeGarmo, Khaylis, & Erbes, 2010; Jordan et al., 1992; Khaylis, Polusny, Erbes, Gewirtz, & Rath, 2011; Lauterbach et al., 2007; Muzik et al., 2012; Parfitt & Ayers, 2012; Parfitt & Ayers, 2009; Samper, Casey, King, & King, 2004; Schechter et al., 2010). Parents with symptoms of PTSD perceived their child as more difficult in temperament and experienced more parenting stress (Davies et al., 2008; Holditch-Davis et al.,2009; McDonald, Slade, Spiby, & Iles, 2011). While watching a child displaying distress mothers with PTSD, related to interpersonal violence, experienced more stress and greater neural activity within the fear-circuit-related regions in the brains suggesting that these mothers are still in the 'survival-mode' (Schechter et al., 2012).

Parents with PTSD were more likely to report the endorsement of moderate or severe aggression towards their children (Cohen, Hien, & Batchelder, 2008; Hinton, Rasmussen, Nou, Pollack, & Good, 2009; Lauterbach et al., 2007; Leen-Feldner, Feldner, Bunaciu, & Blumenthal, 2011; Stover, Hall, McMahon, & Easton, 2012). A greater risk of physical and sexual child abuse was reported among parents with PTSD (Kalebic Jakupcevic & Ajdukovic, 2011; Leifer, Kilbane, Jacobsen, & Grossman, 2004). Pears & Capaldi (2001), in contrast, report a reduced risk for abuse of parents with symptoms of PTSD. The authors suggest that parents with symptoms of PTSD may be more prone to withdrawing from the interaction with their children, making it less likely that they will be physically abusive.

Observational measurements showed that mothers with more symptoms of PTSD were less sensitive and responsive (Feeley et al., 2011; Schechter et al., 2010; Van Ee, Kleber, & Mooren, 2012), more avoidant (Ayers et al., 2006; Schechter et al., 2005; Schechter et al., 2008), more overprotective (Ayers et al., 2006; Schwerdtfeger & Goff, 2007), and more hostile and controlling when interacting with their child, as well as exhibiting more insecure ('distorted') mental representations of their child (Davies et al., 2008; Despars et al., 2011; Forcada-Guex, Borghini, Pierrehumbert, Ansermet, & Muller-Nix, 2011; Van Ee et al., 2012). Koren-Karie, Oppenheim and Getzler-Yosef (2008), in contrast, found no associations between maternal psychopathology and sensitivity within mother-child conversations. However, an association between the emotional availability of the traumatized parent to the child and PTSD seems evident from the majority of studies reviewed.

Illustrative of this is a qualitative interview study that described childbirth-related PTSD and the effect on the relationship with the child (Nicholls & Ayers, 2007). Six couples of which at least one partner had clinically significant symptoms of childbirth-related PTSD were interviewed. All participants reported that the traumatic birth effected the perceptions of the child and the parent-infant bond. The perceived effect on the perceptions of the child were divided between ascribed negative attributes to the child as a result of the traumatic experiences and ascribed positive attributes to the child to compensate for the effect of these experiences. For example, one mother described a negative attribution: "She wasn't ready to come out, she didn't want to, it wasn't her time and she was being forced out and it just made me think she is really angry… I just think the whole thing was so unnatural that it created an unnatural child." (pp. 502) The contrast is poignant evident when compared with a positive attribution: "And because she was such a lovely and loving baby, she was very easy to love back" (pp. 502). In conclusion, parental attribution of negative qualities to the child as a result of posttraumatic stress has been confirmed by quantitative and qualitative research designs.

To summarize, the reviewed studies demonstrate implications of parental symptoms of PTSD not just for parental satisfaction and parental functioning, but also for the perception of and the satisfaction with the child.

Impact on the child

We identified 17 papers reporting on associations between parental symptoms of PTSD and child outcome. Higher levels of parental symptoms of PTSD had a

significant positive association with more issues in a variety of child domains. Parental symptoms of PTSD predicted child internalizing behavior problems such as depression and anxiety, and externalizing behavior such as aggression (Ahmadzadeh & Malekian, 2004; Al-Turkait & Ohaeri, 2008; Daud, Klinteber & Rydelius; 2008; Enlow et al., 2011; Gold et al., 2007; Lester et al., 2010; Lombardo & Motta, 2008; Rosenheck & Fontana, 1998; Selimbasic, 2010; Van Ee et al., 2012). Mothers' trauma experiences and severity of PTSD symptoms predicted more dysregulated aggression, attentional bias to danger and distress, as well as more avoidance of and withdrawal from conflicts presented in the children's narratives (Schechter et al., 2007). Maternal symptoms of PTSD, depression or hostility were associated with reports of difficult infant temperament (Tees et al., 2010). Mothers with a history of abuse and symptoms of PTSD reported that their infants had more disruptions in sleep and more separation anxiety around bedtime than mothers with a history of abuse without symptoms of PTSD or than mothers in the control group. The severity of their symptoms was correlated with the degree of sleep disturbance in the child (Hairston et al., 2011).

However, mothers' PTSD symptoms were not related to a delay in infant cognitive and motor development (Feeley et al., 2011; Van Ee et al., 2012) and adolescent social development (Ahmadzadeh & Malekian, 2004). Fathers', but not mothers', symptoms of PTSD have been positively related to asthma symptoms in children at age 1 year, but not at age 3 years (Lange et al., 2011). Father's PTSD symptoms were negatively associated with their own education, which was then positively associated with caregiver warmth, but not their children's academic achievement ((Eng, Mulsow, Cleveland, & Hart, 2009).

To summarize, the association between parental PTSD symptoms and child outcome has been measured on different developmental levels: psychosocial, physical, cognitive and motor development. The only level that elicited significant associations is the psychosocial development. It is noteworthy that seven of the studies on the psychosocial development used parent report, two studies used child report (Ahmadzadeh & Malekian, 2004; Lombardo & Motta, 2008), two studies used a combination of parent and child report (Daud et al., 2008; Lester et al., 2010), and one study used an experiment (Schechter et al., 2007). In more than half of the studies, parents – and specifically mothers – were used as the principal informants on children's emotional and behavioral functioning. Research has shown that maternal reports have weak to moderate convergence with other more objective rating methods and are influenced by the mother's own psychological state (Durbin & Wilson, 2012; Hennigan, O'Keefe, Noether,

Rinehart, & Russell, 2006; Najman et al., 2000; Seifer, Sameroff, Dickstein, Schiller, & Hayden, 2004). It is therefore plausible that part of the reported association between parental traumatization and the child's psychosocial development can be explained by the parent's psychological distress and a more pessimistic assessment of the child's behavior.

Symptomatic overlap in parental psychopathology

As described before, PTSD shares symptoms with a range of psychological problems such as mood and anxiety disorders. In light of a comprehensive understanding of the relational patterns between traumatized parents and their children it is relevant to study the unique contribution of PTSD.

Most studies did not pay specific attention in their data analysis to core symptoms that would yield a diagnosis of PTSD or co-morbidity of depression and anxiety. Lang, Gartstein, Rodgers and Lebeck (2010) report that after the contributions of trauma history and depressive symptoms were taken into account no support was found for an association between PTSD symptoms and parent-child interaction. Lombardo and Motta (2008) report that regardless of the presence of PTSD, children of parents with mental illness reported higher levels of intrusion and avoidance.

Other studies, however, did report evidence for a unique contribution of PTSD after taking depression into account. Hairston et al. (2011) report that mothers' depression symptoms, rather than PTSD symptoms, predicted difficulties in bonding with their infant, which in turn predicted externalizing problems at 18 months. However, a significant association between PTSD symptoms and parent-infant bonding remained. In contrast, Muzik et al. (2012) report a stronger effect for symptoms of PTSD than depression on parent-infant bonding. McDonald et al. (2011) report that childbirth-related posttraumatic stress has some association with parenting stress even when current depression is accounted for. Bosquet et al. (2011) report that maternal PTSD symptoms when the infant was 6 months old predicted internalizing, externalizing, and dysregulation symptoms at 13 months. Maternal depressive symptoms at 6 months predicted internalizing and dysregulation symptoms. When both maternal PTSD symptoms and maternal depressive symptoms were included in a multiple regression analysis, neither variable was found to be significant in predicting infant internalizing symptoms, but maternal PTSD symptoms remained significant in predicting infant dysregulation (where depressive symptoms were not significant). Finally, cortisol levels in infants were related

to maternal PTSD, but unrelated to maternal depression (Yehuda et al., 2005).

To summarize, the results of these studies underline the difficulties in discerning the unique contribution of PTSD. Our understanding of traumatized parents and their children reveals more similarities than differences to depressed or anxious mothers and their children. Parental depression or anxiety has an impact on some but not all children, and on some but not all areas of development. Many parents and children show resilience. Why would this be different for traumatized parents and their children? Traumatization can cause parenting limitations, and these limitations disrupt the development of the child. Ultimately, the child of a traumatized parent is perhaps "just" the child of a parent with a mental disorder.

Contextual factors

Parenting cannot be considered in isolation. Among the reviewed studies nine articles reported on contextual variables. Variables that were positively associated with *worse* child outcomes were number of children in the family (Gewirtz et al., 2010; Lauterbach et al., 2007; Selimbasic, 2010), age of father (Stover et al., 2012), not being married, family violence, family maladjustment (Herzog et al., 2011; Kalebic Jakupcevic & Ajdukovic, 2011; Leifer et al., 2004; Rosenheck & Fontana, 1998) and work-related stress (Lauterbach et al., 2007). Parental variables that were negatively associated with *worse* child outcomes were finances (Kalebic Jakupcevic & Ajdukovic, 2011; Lauterbach et al., 2007; Rosenheck & Fontana, 1998; Selimbasic, 2010) and education (Holditch-Davis et al., 2009; Selimbasic, 2010). Parenting variables that were positively associated with *better* child outcomes were marital relationship (Gewirtz et al., 2010; Lauterbach et al., 2007) and social support (Gewirtz et al., 2010; Kalebic Jakupcevic & Ajdukovic, 2011; Lauterbach et al., 2007).

Once more, we focus on the unique contribution of PTSD symptoms on relational patterns between traumatized parents and their children. Lauterbach et al. (2007) report that after controlling for a broad range of context-related variables the relationship between parental PTSD symptoms and parent-child aggression, but not relationship quality, remained significant. However, after controlling for work-related stress or finances the relationship was no longer significant. Gewirtz et al. (2010) employed a more extensive assessment of parenting and report that increases in parental PTSD symptoms were associated with poorer couple adjustment and lower levels of effective parenting. A change in PTSD symptoms exhibited both a direct and indirect effect on parenting,

and was not mediated by couple adjustment. Social support appeared to be a protective buffer against an increase in PTSD symptoms. Higher perceived social support also had a direct effect on perceived parenting. Herzog et al., (2011) examined trauma symptoms of veterans and the secondary impact of that stress on family members. These secondary trauma symptoms in spouses mediated between trauma symptoms of veterans and secondary trauma symptoms in children (Herzog et al., 2011). Finally, Kalebic Jakupčević and Ajduković (2011) report that poor financial status, partner physical conflicts and insults, and lack of social support predicted child abuse and have an independent contribution next to parental mental health. To summarize, it appears that symptoms of PTSD have an independent effect on parenting, but this effect certainly can be enhanced or negated by contextual factors.

Mechanisms

More than half of the reviewed studies do not use an explicit theoretical framework beyond the general notion that trauma affects relational patterns, as has been shown by previous research results. For the purpose of this review we grouped those papers that referred to a theoretical framework. Four frameworks emerged: mentalization (n = 3), attachment (n = 13), physiological transmission (n = 6), and cycle of abuse (n = 8).

Mentalization

Mentalization is the capacity to perceive and understand mental states of the self and the child that help to explain and predict feelings, thoughts and behavior. It also refers to the capacity to reflect on these mental states (reflective functioning; Fonagy, Target, Steele & Steele, 1998). Mentalization may help the parent to put him- or herself in the place of the child and thereby prevent the parent from repeating the past or allowing 'the ghosts from the nursery' to intrude. This process may be related to parental mental representations of the child and the relationship with the child. A balanced representation includes both positive and negative characteristics of the child's personality or the caregiver's relationship with the child. Parents with balanced representations are involved with the child, and they value the child and the relationship with the child (Zeanah, 2009).

Nonbalanced or even distorted parental mental representations are characterized by an emotional distance from the child and a predominance of negativity of the child and parent-child relationship (Schechter et al., 2005). An

example of a distorted response to the question how the parent would feel when the baby became upset would be: "I'd probably sit and hold it, rock it . . . like my kids right now, if I get where I'm depressed or something, I'll just tell them I need a hug . . . just sit there, hold it, rock back and forth, you know. Just to feel close and feel secure. You know, adults need that, too. Um, it just makes me feel good, knowing that, you know, my kids are there for me …" (Dayton, Levendosky, Davidson, & Bogat, 2010, p. 234). This 29-year old mother expects her child to take care of her emotional needs instead of taking care of the baby's feelings. Parents with nonbalanced representations have difficulties regulating the affective relationship. Lack of caregivers' regulation impairs the development of the child's self-regulation. The capacity of the caregiver to mentalize, and then to respond to the child's cues, is fundamentally supportive of emotion regulation and the development of mentalization within the child (Fonagy, Gergely, & Jurist, 2003).

Schechter et al. (2005, 2008) examined the issue of mentalization in a sample of 41 mothers who had been exposed to interpersonal violence in childhood and their children (8-50 months). They investigated whether maternal violence-related PTSD, reflective functioning (as an operationalization of mentalization) and the quality of mental representations of the child predicted maternal behavior. However, a non-PTSD control group was absent. The study found evidence that maternal interpersonal violence-related PTSD and reflective functioning were significantly associated with mothers' mental representations of their young children. More specifically, they found that maternal PTSD interfered with, and that reflective functioning supported, the formation of mothers' balanced, integrated mental representations of their young children. Negative and distorted mental representations predicted atypical maternal caregiving behavior, which was primarily hostile-intrusive, negative or frightening and frightened. No significant relationships were found between PTSD, reflective functioning and overall atypical caregiving behavior. Sullivan et al. (2011) replicated this finding; neither traumatic experiences nor PTSD were associated with levels of reflective functioning. However, among mothers with PTSD, symptoms of re-experiencing were significantly associated with lower reflective functioning. When a child's distress acts as a trigger for the mother to re-experience her own trauma, it may interfere with the mother's ability to reflect on the child's needs.

It is of interest that the perception by the traumatized parent of the parent-child relationship has so often been studied, but that this interaction

has been so little observed. Even though many studies reported on parental mental representations of the relationship with the child, they did not do this within the framework of mentalization. Parents with PTSD symptoms have been found to report less parental satisfaction. These studies measured parental satisfaction, which refers to the evaluation of their parenting and the parent-child relationship, and not parental functioning, which refers to the quality of parent-child relationships. Whether the evaluation of the parent matched the actual quality of the parent-child relationship was, however, not assessed. A critical distinction needs to be made between the perception of the traumatized parent and the observed quality of the parent-child relationship or the objectified wellbeing of the child. Comparing perceptions with observations could contribute to a valuable clarification of these research results. If PTSD interferes with the formation of balanced and integrated representations of children, we will better understand which traumatized parents are affected and how to support the mentalization processes of these parents.

Attachment

Attachment theory is an important perspective to our understanding of traumatized parents and their interaction with their children. An awareness of the different concepts underpinning attachment and trauma research is crucial. Within the attachment field, adults who are classified as unresolved show signs of disorientation and disorganization during discussions of childhood abuse and the loss of an attachment figure in the Adult Attachment Interview. The AAI is a semi-structured interview that assesses the interviewee's childhood and current relationships with attachment figures (George, Kaplan, & Main, 1996). These events of abuse and loss are considered to be potentially (but not necessarily) traumatic. Signs of disorientation and disorganization could indicate posttraumatic stress, but this is not further explored within the AAI. Even though it has been proposed that the phenomena underneath unresolved loss and PTSD are similar (Fearon & Mansell, 2001), the concepts differ. As a consequence, some (but not all) unresolved adults will experience PTSD and some traumatized adults (but not all) will experience unresolved loss. Trauma research needs to incorporate an attachment perspective bearing the different concepts in mind.

It is through the experience of a warm, intimate and continuous relationship and a sensitive and responsive interaction that children develop a secure attachment (Bowlby, 1973). Insecure attachment, in particular disorganized attachment, has been found to be a risk factor for a range of later social and

cognitive difficulties and psychopathology (Belsky & Nezworski, 1987; Green & Goldwyn, 2002). An unresolved status in the parent is consequently associated with disorganized attachment in their offspring (Bailey et al., 2007; Lyons-Ruth, Bronfman, & Parsons, 1999). Parents with an unresolved status show disrupted patterns of interaction with their child (Madigan, Moran, & Pederson, 2006). The caregivers, preoccupied with their trauma, repeatedly provoke fear in their infants and are less able to react sensitively to their infant's cues (Goldberg, Benoit, Blokland, & Madigan, 2003). They show more frightening, frightened, dissociated and insensitive parental behavior (Green & Goldwyn, 2002; Hesse & Main, 1999; Jacobvitz, Leon, & Hazen, 2006; Main & Morgan, 1996; Out, Bakermans-Kranenburg, & Van IJzendoorn, 2009; Schuengel, Van IJzendoorn, Bakermans-Kranenburg, & Blom, 1998). These behaviors are considered to be driven by their memories of the traumatic experience (Green & Goldwyn, 2002; Hesse & Main, 1999). The attachment of children of parents with unresolved trauma often becomes disorganized because the children are placed in the paradoxical situation of being attached to parents who sometimes behave in a fear-provoking way (Goldberg et al., 2003; Schuengel et al., 1998).

In the reviewed studies seven referred to the bonding process of the mother to the child. Schwerdtfeger and Goff (2007) found that a history of interpersonal trauma was related to more PTSD symptoms and lower maternal attachment to the unborn child. Mothers with symptoms of PTSD perceived the bonding to their infant as less optimal (Ayers et al., 2006; Davies et al., 2008; Hairston et al., 2011; Muzik et al., 2012; Parfitt & Ayers, 2012; Parfitt & Ayers, 2009) except when it was measured shortly after birth (Ayers et al., 2007). Women who met all of the criteria for PTSD expressed less desire for proximity to their infants (Davies et al., 2008). In the qualitative study (Nicholls & Ayers, 2007) described previously in this review, mothers with childbirth-related symptoms of PTSD perceived the bonding process as poor and affecting their parenting. One mother states: 'I hate the bond word, I think it is one of the worst words you can ever use, but I didn't bond with her, I didn't particularly want to go near her. I'd go near her, but I wouldn't touch her' (pp. 503). Both women and men reported emotions and behavior consistent with overprotective/anxious bonds and avoidant/rejecting bonds.

In contrast with these results are the findings on child attachment. Both a maternal history of trauma as well as maternal symptoms of PTSD were not related to infant attachment (Lyons-Ruth & Block, 1996), or more specifically to infant disorganized attachment (Turton, Hughes, Fonagy, & Fainman,

2004). In addition, no correspondence was found between unresolved loss and symptoms of PTSD. Interestingly, PTSD symptoms have been argued to even serve as a protection against an insecure attachment with the child. Hughes, Turton, McGauley and Fonagy (2006) argue that experiencing traumatic events (stillbirth) in intrusive ways may protect the mother from dissociation and may help to stay in touch with the loss of a child but in relationship with the living child. Coppola, Cassiba and Constantini (2007) argue that experiencing traumatic events (premature birth of the child) in intrusive ways may strengthen the coping of insecure mothers as they try to reorganize what has happened to them and search for emotional and practical support.

Again, worthy of note is the distinction between results generated from self-report versus observation. In studies that demonstrated a link between parental symptoms of PTSD and bonding, parents perceived the relationship as less optimal. In studies that were unable to relate parental PTSD to parent-child attachment, parents and child were observed. The explanation for this could be two-fold: 1) the representation of the parent-child relationship, but not the observed quality of the relationship, has been influenced by PTSD symptoms; and 2) the influence of parental PTSD symptoms on the parent-child relationship is subtle and therefore difficult to observe. As all studies but one focused on childbirth, it might take more time before the detrimental effects can be observed. Even negative representations in the long term, one would expect, will influence the observed quality of the relationship. In our clinical experience an improvement in the mental health of the parent leads to an improvement in parenting and child attachment. An improvement in parenting and child attachment in turn increases feelings of competency and efficacy, leading to an improvement in the mental health of the parent. Hence, it is not so much a question of which problem is the main issue, but more how to work with the interplay of trauma and attachment.

Physiological transmission

Where the mechanisms of mentalization and attachment are closely related, the mechanism of physiological transmission takes a different perspective and explains the impact of PTSD on parenting and children by a biological basis. A biological basis has been shown to be a salient risk factor in the development of PTSD in offspring. The hypothalamic-pituitary-adrenal (HPA) axis is hypothesized to be programmed by early life experiences and early developmental factors (Seckl, 2004; Yehuda et al., 2005). The HPA activity appears to be an important link between early life experiences and the pathophysiology

of later psychopathology (Brand et al., 2010). Indeed, childhood trauma and PTSD have been associated with greater sensitivity of the HPA axis to stress and significant increases in cortisol.

Maternal posttraumatic stress during pregnancy has emerged as an important in utero contributor to programming of physiological systems of the child. Mothers who developed symptoms of PTSD after the WTC attacks on September 11 and their infants showed lower salivary cortisol levels (Yehuda et al., 2005). These WTC attacks-exposed mothers who developed PTSD symptoms rated their infants as having greater distress to novelty. As these mothers did not rate their infants as having other negative temperamental traits, the results cannot be ascribed to the perception of the mothers but to the infants as being more easily distressed (Brand, Engel, Canfield, & Yehuda, 2006). Maternal stress after birth, in addition, has emerged as an important perinatal contributor to programming of physiological systems of the child. The quality of parenting in the first years of life helps to shape HPA activity. Sensitive and responsive parenting supports the development of child's self-regulation, buffering the child's physiological responses to stress. Lack of caregivers' regulation impairs the development of child's self-regulation, and is a risk factor for the development of extreme stress responses (Charney, Deutch, Krystal, Southwick, & Davis, 1993; Spangler & Grossmann, 1993). In response to a mild laboratory stressor, both infants and mothers with a history of child abuse and PTSD demonstrated the greatest increase in cortisol relative to baseline (Brand et al., 2010). In response to the still face paradigm, another mild laboratory stressor, maternal lifetime trauma exposure and symptoms of posttraumatic stress were associated with diminished infant recovery, as reflected in higher heart rate, respiratory dysregulation, and distress (these indices of the autonomic nervous system have been associated with a vulnerability to stress). In fact, the strongest associations were found in the period from the stressor to the recovery, suggesting that maternal PTSD symptoms were not associated with measures of infant emotional reactivity (speed and intensity of initial activation of responses) but were associated with measures of infant emotion regulation (the ability to manage the reactivity). Reactivity is theorized to reflect biologically-based differences; the ability to self-regulate is largely theorized to develop out of interactions with caregivers. Maternal PTSD symptoms were not associated with maternal report and observations of the reactivity of the infant, but with the infant's ability to regulate and recover once distressed (Bosquet Enlow et al., 2009; Bosquet Enlow et al., 2011). However, Jovanovic et al. (2011) report that maternal childhood physical and emotional abuse was associated with psychophysiological markers

in the children (dark-enhanced startle). This relationship was not accounted for by maternal symptoms of PTSD or other psychopathology.

The assumption behind these studies is that traumatic experiences, particularly early childhood trauma, are associated with greater sensitivity to stress in adulthood through biological mechanisms. This sensitivity potentially underlies a vulnerability to the development of PTSD or other symptomatology such as depression and anxiety. All studies, except for the last one, suggest that both trauma exposure and PTSD symptoms in the parent are related to physiological markers in the child. In addition, the results show that young children, even babies, show deregulation and distress in response to mild stressors.

The cycle of abuse

Certain types of experience, such as injury, sexual and physical abuse as a child (Gewirtz et al., 2010; Lyons-Ruth & Block, 1996; Rosenheck & Fontana, 1998; Tees et al., 2010), and participation in abusive violence (veterans; Rosenheck & Fontana, 1998) have been positively associated with worse child outcomes. Especially, chronic childhood trauma of parents may have long-lasting negative effects on the parent-child relationship that might be distinct from the effects of recent traumatization of parents. Seven of the reviewed studies report on both parental PTSD and child abuse in the history of the parent.

Studies reporting on parental symptoms of PTSD and a history of child abuse make a distinction between a history of physical, sexual or emotional abuse. A history of physical abuse has been associated with increased hostile and physical and psychological aggressive behavior (Cohen et al., 2008; Lyons-Ruth & Block, 1996), and a decreased tendency to report trauma-related symptoms (Lyons-Ruth & Block, 1996). A history of sexual abuse has been associated with psychological aggression (Cohen et al., 2008), decreased involvement with the infant, restricted maternal affect, and more active reporting of trauma-related symptoms (Lyons-Ruth & Block, 1996). An increased risk for sexual abuse of the child was mediated by current maternal functioning, especially symptoms of PTSD (Leifer et al., 2004). A history of childhood abuse or violence in general was associated with overprotectiveness towards children (Schwerdtfeger & Goff, 2007), poorer mother-child interactions (Lang et al., 2010), and disorganized attachment (Lyons-Ruth & Block, 1996). Finally, a history of emotional abuse has been associated with poorer parent-child interaction, but the interaction was less affected than the parent-child interaction of parents with a history of

physical and sexual abuse (Lang et al., 2010). In some studies trauma severity and not parental symptoms of PTSD predicted if the children were more vigilant and had more difficulty recovering from distress (Jovanovic et al., 2011; Lang et al., 2010; Lyons-Ruth & Block, 1996), while other studies report a larger effect (increase in cortisol in the child) when a history of child abuse and PTSD symptoms are combined (Brand et al., 2010) or the effect of a history of abuse to disappear when PTSD symptoms are taken into account (Muzik et al., 2012).

Although childhood abuse has been associated with parenting outcomes, and PTSD symptoms has only been linked to some of these outcomes, it cannot be inferred that a history of childhood abuse explains parenting and child outcomes exclusively, or above and beyond PTSD. The results of the studies are difficult to compare as the applied methods vary between studies: one study controlled for maternal psychopathology including symptoms of PTSD (Jovanovic et al., 2011), one study defined PTSD symptoms as a moderator (Brand et al., 2010), one study defined PTSD symptoms as a mediator (Lyons-Ruth & Block, 1996), and five studies looked at the interaction between childhood experiences and PTSD (Cohen et al., 2008; Koren-Karie et al., 2008; Lang et al., 2010; Muzik et al., 2012; Schwerdtfeger & Nelson Goff, 2007). A valid comparison of the effect of parental history of traumatic experiences versus parental symptoms of PTSD on the child is therefore, within this review, not possible.

What could explain the results of a direct effect of traumatic childhood experiences, but not PTSD, on parenthood? One factor could be the measurement of PTSD versus a measurement of complex PTSD. Symptoms of PTSD as a result of recent trauma have more robust associations with parenthood. Survivors of chronic childhood trauma are prone to develop symptoms of complex PTSD. Complex PTSD is characterized by the core symptoms of PTSD in conjunction with five domains of disturbances in self-regulatory capacities (emotion regulation difficulties, disturbances in relational capacities, alterations in attention and consciousness, adversely affected belief systems, and somatic distress or disorganization) (Cloitre et al., 2011). In contrast with PTSD, complex PTSD is not the result of exposure to a single traumatic event, but the result of exposure to multiple experiences or forms of interpersonal trauma (Herman, 1997). The reviewed studies on childhood abuse did not measure symptoms of complex PTSD. It can be argued that survivors of childhood trauma who are struggling with psychopathology symptoms are more prone to present symptoms of complex PTSD. These symptoms of complex PTSD could explain the direct effect of traumatic childhood experiences on parenthood.

A second explanation could be that traumatic experiences do not necessarily and directly lead to symptoms of PTSD, but sensitizes to stress in general. People become more vulnerable to new negative events (Smid et al., 2011). Recent life stressors might moderate the relationship between childhood trauma and HPA axis (Brand et al., 2010; Young & Breslau, 2004). Childhood trauma can enhance parents' reactivity to new stressors such as, at times, raising a child.

A third explanation could be the level of resolution of the trauma. Koren-Karie, Oppenheim and Getzler-Yosef (2008) found that neither childhood abuse nor symptoms of PTSD were associated with sensitivity in the mother's conversation with the child, but the level of resolution of the trauma was. Resolution means integration of the traumatic experience into the individual's mind and narrative in a way that enables the person to orientate to the present and adapt to changes. In that sense, resolution is necessary to read and respond to the child's signals adequately.

A final explanation for the direct effect of traumatic childhood experiences, but not PTSD, on parenthood is the modeling of parenting behavior on what parents observed and learned as children. This mechanism has become known as 'the cycle of abuse' and emphasizes the traumatic experience instead of symptoms of PTSD or other psychopathology.

Methodology

Measurements

The 60 articles reviewed revealed a wide variety of measures of trauma and PTSD, outcome measures, and concepts, making it difficult to compare results and leading to scattered knowledge on this issue. For an overview, please see Table 1.

Especially noteworthy is the variety in approaches to measuring traumatizing events and posttraumatic stress symptoms. Among the included articles, 27 different instruments to measure the symptoms of PTSD were used. The use of an assessment that yielded a formal diagnosis of PTSD such as a structured clinical interview was rare. Furthermore, the Diagnostic and Statistical Manual of Mental disorders requires the identification of an event (Criterion A) that has led to certain symptoms. When the level of symptoms is substantial, PTSD can be diagnosed. However, most of the screened articles researched potentially traumatic events without distinguishing between victims

who were traumatized and victims who were recovering and functioning well. For example, research designs that incorporated a sound assessment of both PTSD and unresolved loss or attachment are limited in number. For the purpose of this review, these articles with only a report on events were excluded, which resulted in the exclusion of a large body of attachment research. In general, studies could be strengthened by a thorough examination of the symptoms of posttraumatic stress and PTSD following these events.

In the reviewed studies, the preferred method of measuring PTSD, parenting and child outcomes was parental (self-)reports. With regards to outcome measures, 39 studies used only parental reports, six studies used self-reports of both parents and children, and five studies combined parental report with physiological measures. Six studies included observations of parent-child interaction or child behavior (Feeley et al., 2011; Forcada-Guex et al., 2011; Koren-Karie et al., 2004; Lyons-Ruth & Block, 1996; Muzik et al., 2012; Van Ee et al., 2012) and four studies combined these observations with a structured interview to assess PTSD (Hughes et al., 2006; Schechter et al., 2008; Schechter et al., 2010; Turton et al., 2004). The use of parental reports alone has serious limitations (e.g. perception of the parent, social desirability).

The main outcome measure covered 32 different concepts. Most of the reviewed articles examined the interaction between mothers and their children. A crucial difference, though, exists between research on mothers and research on fathers. Research among male-dominated groups (veterans, first responders in emergencies) focused on the *perceived* quality of the parent-child relationship or symptomatology of the child (as rated by the parent), while research among female-dominated groups focused on the *observed* quality of the parent-child relationship or symptomatology of the child (as rated by the researcher). Thus far, no study has examined the quality of interaction between traumatized fathers and their children.

Design

Five reports used data from multiple time-point assessments (Brand et al., 2006; Brand et al., 2010; Lange et al., 2011; Pears & Capaldi, 2001; Vaage et al., 2011). Five studies used two prospective time-point assessments (Enlow et al., 2011; Hairston et al., 2011; Holditch-Davis et al., 2009; McDonald et al., 2011; Muzik et al., 2012) and five studies on posttraumatic stress at child birth took at least two measurements, but did not analyze these prospectively (Davies et al., 2008; Despars et al., 2011; Forcada-Guex et al., 2011; Hughes et al., 2006; Turton et al.,

2004). All other studies used a cross-sectional design with a one-time assessment.

Clearly, collecting a representative sample is one of the major challenges in a research project. The majority of the reviewed studies were based on small to medium sample sizes and may therefore not be able to detect certain effects due to a lack of statistical power (see Table 1). Thirty-five studies (58% of all studies reviewed) reported a sample size of under 100, and 18 of these studies reported a sample size of under 50. Sixteen studies reported as a limitation the use of a convenience sample, but, on the basis of the reports, we concluded that almost all of the studies worked with convenience samples (except Berz et al., 2008; Brand et al., 2006; Gold et al., 2007; Hairston et al., 2011; Jordan et al., 1992; Lange et al., 2011; Lauterbach et al., 2007; Leen-Feldner et al, 2011; Pears & Capaldi, 2001; Samper et al., 2004; Rosenheck & Fontana, 1998; Yehuda et al., 2005). In addition, seven studies reported the possibility of a sampling bias. Clearly, child development needs to be understood over contexts and over time, therefore there is a need for longitudinal designs within non-selected samples.

Discussion

How do we explain the relational patterns between traumatized parents and their non traumatized children? This article reviewed relational patterns between traumatized parents and their non traumatized children by analyzing the parent-child interaction, impact on the child, contextual variables and explicit mechanisms referred to. From the studies reviewed several patterns emerged: Relational patterns of traumatized parents who are observed to be emotionally less available and who perceive their children more negatively than parents without symptoms of PTSD; relational patterns of children who at a young age are easily deregulated or distressed and at an older age are reported to face more difficulties in their psychosocial development than children of parents without symptoms of PTSD; and relational patterns that show remarkable similarities to relational patterns between depressed or anxious parents and their children. In what follows, we discuss three perspectives that emerged from these relational patterns and could strengthen our understanding and further the integration of research and clinical practice: a trauma perspective, a relational perspective and a transactional perspective.

Traumatized parents and their children: A trauma perspective

Some individuals exposed to traumatic events are affected, while other individuals recover and function well. When these individuals are (or become) parents,

parenthood can be affected or not. It appears that parental traumatization affects the wellbeing of children in diverse ways. First of all, either parent or child can show resilience and therefore a minimal or no effect is observed. Despite a troubled childhood, many adult children of traumatized parents have the potential to function well. Resilience could (partly) explain how large groups of children of traumatized parents manage, despite adversity, to function well.

A second type of effect has been described by Scheeringa and Zeanah (2001) as the vicarious traumatization effect; the symptomatology of the parent affects the responsiveness of the parent to the child. This effect on the parent-child relationship accounts for the effect on the child's symptomatology. "That is, if not for the young child–mother relationship, there would be no effect of the trauma on the child" (p. 809). The manner in which the child is effected depends on the manner in which the caregiver is effected.

In view of the reviewed studies that report, on the one hand, on avoidance and neglect, and on the other hand, on aggression and child abuse, we propose a third effect that would be a direct effect: A parent who is insensitive, intrusive, avoidant, or even aggressive and frightening is generally considered to cause distress in the child. However, we propose that these situations could be directly traumatizing to a young child. For example, parental dissociation could be a threat to the physical integrity of the child's self, and parental aggression or arousal could create a threat to injury. Developmental considerations such as the need for protection, especially by caregivers, have important implications for the child's perception of parental behavior. The experience of threat and inadequacy in achieving safety within the parent-child relationship could lead to vicarious but also direct traumatization.

A relational perspective

Scheeringa and Zeanah (2001) described three relational patterns for traumatized mothers and their traumatized children; 1) withdrawn, unresponsive, unavailable, 2) overprotecting, constricting, and 3) reenacting, endangering, frightening. Following the results described in this review we would like to further develop this theory by applying it to non traumatized children and by adding three relational patterns that could be more specific for traumatized parents and non traumatized children.

The withdrawn, unresponsive, unavailable pattern describes traumatized parents whose avoidance and withdrawal symptoms may limit them from reading

and responding sensitively to a child. The overprotecting, constricting pattern describes parents who are preoccupied by their fears and become constrictive and overprotective. The reenacting, endangering, frightening pattern describes parents who become preoccupied with reminders of the trauma rather than avoiding them. Our review suggests that these relational patterns may apply to traumatized parents and non traumatized children as well. The results show that some parents with symptoms of PTSD are more withdrawn and even avoidant, and less sensitive and responsive within the parent-child interaction. Other parents with symptoms of PTSD are more overprotective and controlling, sometimes even hostile. The reenacting, endangering and frightening pattern, suggested by Scheeringa and Zeanah, is less investigated among parents with symptoms of PTSD. One indication of the existence of this pattern is increased parental aggression towards the child; another indication could be that children of exposed parents are more likely to be exposed to traumatic experiences themselves (Roberts et al., 2012). The 'cycle of abuse' is a mechanism that partly fits within this pattern.

Furthermore, in our clinical experience, three additional relational patterns that could apply to traumatized parents and non traumatized children are: 1) the over-expecting, 2) the over-giving and 3) the 'despite everything, I am going to give my best' pattern. The over-expecting pattern describes traumatized adults who believe that their traumatic experience has mutilated their inner-being, that recovery from the traumatic event is impossible, and that they therefore do not have a future. But the child does, and he or she needs to make up for the losses the parent experienced. The parent expects the child to be and to become everything in this world. The over-giving pattern is similar in the experience of the parent as broken and without a future, but the compensation mechanism is quite different. Instead of expecting something from the child, they start to give everything and expect (almost) nothing. The parent almost disappears as everything is done for the sole interest of the child. These first two patterns illustrate the difficulty of these affected parents to mentalize and put him- or herself in the place of the child. A third pattern encountered we would like to call 'despite everything, I am going to give my best'. It is a resilient pattern in the sense that these parents fight each and every day with and against their symptoms, and manage to take care of their child in a sensitive manner. These parents know their weaknesses and know when to call for help from others, thereby providing a safe home and effectively protecting their children from their own symptoms. These children are likely to develop secure attachment relationships. Naturally, the existence of these patterns needs to be confirmed in

future studies. Moreover, more attention needs to be given to resilient patterns as valuable lessons for treatment can be learned from these parents.

A transactional perspective

Although the transactional model is generally accepted as a framework for relational patterns (Beauchaine & Gatzke-Kopp, 2012; Dixon, 2002; Fiese & Sameroff, 1989) it is surprising to notice that we found no evidence of this model to be incorporated in the reviewed studies. The transactional model proposes that both parent and child play a crucial role as they both contribute protective and risk factors to the interactional experience. It is a dynamic process in which they are interdependent and change as a function of their influence on one another (Sameroff, 2009). As we described earlier, few studies have so far incorporated multiple time-point assessments or child characteristics that are a requisite to study relational patterns from a transactional perspective.

Nevertheless, the model offers a valuable explanation for the positive and negative outcomes for children of traumatized parents. Such a model, which takes into account the behavior of the parent and the child as well as the parent and child representations including changes over time, could offer a framework for the (at times mixed) research results and mechanisms. For example, a traumatized parent represents the self as scarred and broken, without a future. The birth and development of a child stirs new hope and the parent starts to represent the child as the one who needs to compensate for their loss. The parent's behavior, depending on parent-characteristics, such as childhood experiences, but perhaps also the transactions with the child, such as reactivity and regulation, could develop into an over-expecting, over-giving or just their best pattern. If the parent is over-expecting and the child is a compliant and intelligent child, the child at first might represent the self as someone who has the power to make the parent happy, and excel. As time goes by this behavior of the child could soften the behavior of the parent as the parent experiences the child in itself as sufficient and rewarding, and becomes sensitized to the child's needs. But if the child fails to excel all the time, the parent may grow disappointed and hostile and the child hence becomes anxious and realizes he will never get it right.

This example illustrates the importance of not just researching parental behavior and representations, but including child behavior and representations. In our opinion this area has so far been overlooked. It also illustrates the importance of longitudinal investigations as both the negative effect of parental

PTSD on the child, and the resilience, might be either visible or invisible at different moments in time. Of particular interest is the timing of effect; when is the child or parent particularly vulnerable and when is the child or the parent most open to change (i.e., sensitive periods)? Finally, the example illustrates that the transactional model is much more helpful than a causal, fixed unidirectional model in understanding resilience and explaining the probability of parents and children doing well despite adversity.

Integrational perspective

How do these three perspectives relate to each other? The three perspectives are not different perspectives, they build on each other. As is visualized in figure 2, the trauma-perspective zooms in on the effect of trauma-symptoms on parent-child interaction. The relational perspective uses the trauma perspective but adds the parent's capabilities to mentalize and the meaning that has been given to the trauma and the child. Furthermore, the transactional perspective builds on the trauma- and relational perspective by encompassing these perspectives and including child behavior and representations. The model illustrates the complexity of the effect of parental trauma on the child. First of all, there are multiple pathways in which the traumatic experience can impact the parent-child relationship and ultimately the child. Secondly, an alteration in one component can set in motion an entire pathway. Thirdly, the effect is most often not unidirectional but feeds back. Finally, research uses different view points do describe the effect on either the parent-child interaction or child. (E.g. a biological basis lies underneath the symptom clusters of PTSD and partly explains symptomatology of parents. All mechanisms are linked with the parent-child interaction, but there is a dearth of analyses on the pathway from the mechanism via the parent-child interaction to the child.) Without an overarching model results from different mechanisms and perspectives may sound like different or even contradicting results, but used within the model they complement each other.

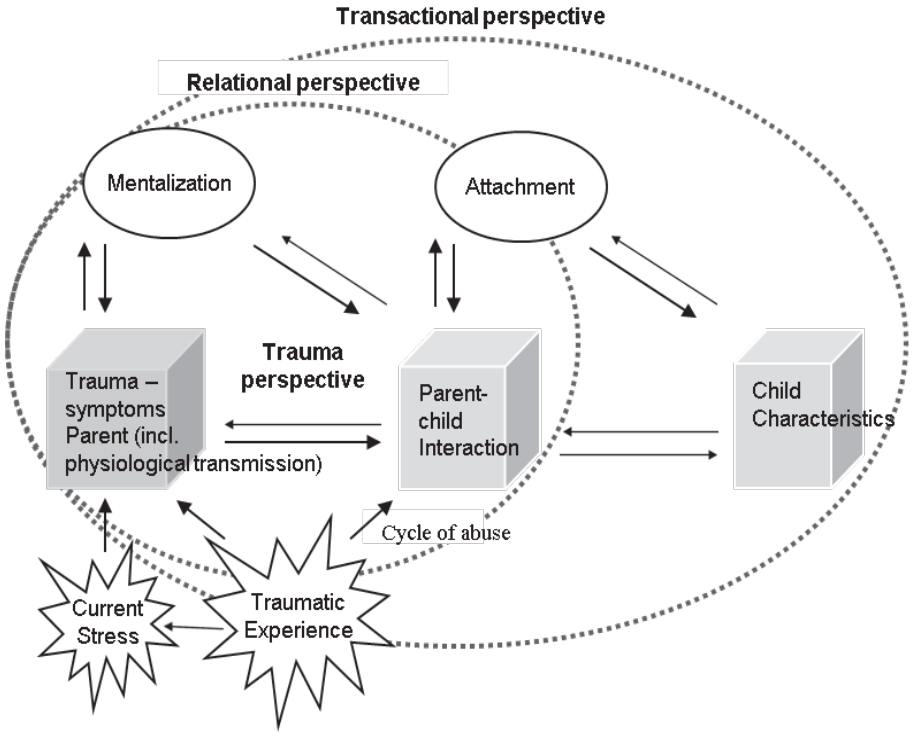

Figure 2.2 Integrational perspective

Conclusion

In recent years, quite a sudden rise in publications on the topic of trauma and parenting has occurred. More than half of the reviewed articles were published in the last five years. Despite this increased attention, our understanding of the relational patterns between these traumatized parents and children remains limited. One explanation is the variety in applied methodologies. The broad variety in PTSD measures and outcome measures hampers the integration of research results. The lack of observations and over-use of parental report may be more serious. How can we understand the child if we only listen to the parent? And how can we understand relationships if we only question the individual? This review shows that the relational patterns between traumatized patterns and their children are complex. Many factors need to be taken into account (e.g., parental symptoms of PTSD, co-morbidity in parental psychopathology,

childhood trauma of the parent, contextual factors). Although mechanisms such as mentalization, attachment, physiological factors and the cycle of abuse have offered a valuable perspective, we have also argued that using a more relational or transactional framework can enhance our understanding of the relation between trauma and parenting. Traumatization can cause parenting limitations, and these limitations can disrupt the development of the young child. This is a probabilistic relationship, though, and certainly not a deterministic one. To understand the possible mechanisms involved in the impact of parental traumatization on children, the inclusion of child-factors is needed. The impact needs to be 'caught' within the research room and throughout the developmental span. This probabilistic relationship implies that there is no clear-cut answer to whom to treat first, the symptomatic parent, the at-risk child or the parent-child interaction. Every case is unique and a transactional analysis needs to be made. On the basis of that analysis the clinician might decide to intervene with the child, the parent, or in the parent-child relationship. In our clinical experience these interventions do not stand alone. For example, intervening in the parent-child relationship ameliorates the parental sense of competence and efficacy and thereby alleviates parental symptoms of posttraumatic stress. As much as the trauma of one person can vibrate through the system, interventions can as well: interventions become transactions.

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References

Ahmadzadeh, G., & Malekian, A. (2004). Aggression, anxiety, and social development in adolescent children of war veterans with PTSD versus those of non-veterans. *Journal of Research in Medical Sciences*, *9*, 231-234.

Al-Turkait, F. A., & Ohaeri, J. U. (2008). Psychopathological status, behavior problems, and family adjustment of kuwaiti children whose fathers were involved in the first gulf war. *Child and Adolescent Psychiatry and Mental Health*, *2*, 2-12.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders*, *DSM V.* Washington DC: Author.

Ayers, S., Eagle, A., & Waring, H. (2006). The effects of childbirth-related posttraumatic stress disorder on women and their relationships: A qualitative study. *Psychology*, *Health & Medicine*, *11*, 389-398.

Ayers, S., Wright, D. B., & Wells, N. (2007). Symptoms of posttraumatic stress disorder in couples after birth: Association with the couple's relationship and parent-baby bond. *Journal of Reproductive and Infant Psychology*, *25*, 40-50.

Bailey, H. N., Moran, G., Pederson, D. R., & Bento, S. (2007). Understanding the transmission of attachment using variable- and relationship-centered approaches. *Development and Psychopathology*, *19*, 313-343.

Bandura, A. (1971). *Social learning theory*. New York: General Learning Press.

Beardslee, W. R., Versace, E. M., & Gladston, T. R. (1998). Children of affectively ill parents: A review of the past 10 years. *Journal of the American Academy of Child & Adolescent Psychiatry*, *37*, 1134-1141.

Beauchaine, T. P., & Gatzke-Kopp, L. M. (2012). Instantiating the multiple levels of analysis perspective in a program of study on externalizing behavior. *Development and Psychopathology*, *24*, 1003-1018.

Belsky, J., & Nezworski, T. M. (1987). *Clinical implications of attachment.* New Jersey: Lawrence Erlbaum Associates.

Berz, J. B., Taft, C. T., Watkins, L. E., & Monson, C. M. (2008). Associations between PTSD symptoms and parenting satisfaction in a female veteran sample. *Journal of Psychological Trauma*, *7*, 37-45.

Bögels, S. M., & Brechman-Toussaint, M. L. (2006). Family issues in child anxiety: Attachment, family functioning, parental rearing and beliefs. *Clinical Psychology Review*, *26*, 834-856.

Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, *59*, 20-28.

Bosquet Enlow, M., Kitts, R. L., Blood, E., Bizarro, A., Hofmeister, M., & Wright, R. J. (2011). Maternal posttraumatic stress symptoms and infant emotional reactivity and emotion regulation. *Infant Behavior and Development*, *34*, 487-503.

Bosquet Enlow, M., Kullowatz, A., Staudenmayer, J., Spasojevic, J., Ritz, T., & Wright, R. J. (2009). Associations of maternal lifetime trauma and perinatal traumatic stress symptoms with infant cardiorespiratory reactivity to psychological challenge. *Psychosomatic Medicine*, *71*, 607-614.

Bowlby, J. (1973). *Separation: Anxiety and anger*, Vol. 2. London: The Hogarth Press and the Institute of Psycho-Analysis.

Brand, S. R., Brennan, P. A., Newport, D. J., Smith, A. K., Weiss, T., & Stowe, Z. N. (2010). The impact of maternal childhood abuse on maternal and infant HPA axis function in the postpartum period. *Psychoneuroendocrinology*, *35*, 686.

Brand, S. R., Engel, S. M., Canfield, R. L., & Yehuda, R. (2006). The effect of maternal PTSD following in utero trauma exposure on behavior and temperament in the 9-Month-Old infant. *Annals of the New York Academy of Sciences*, *1071*, 454-458.

Brewin, C. R. (2007). Autobiographical memory for trauma: Update on four controversies. *Memory*, *15*, 227-248.

Brewin, C. R., Lanius, R. A., Novac, A., Schnyder, U., & Galea, S. (2009). Reformulating PTSD for DSM-V: Life after criterion A. *Journal of Traumatic Stress*, *22*, 366-373.

Campbell, S. B., Brownell, C. A., Hungerford, A., Spieker, S. J., Mohan, R., & Blessing, J. S. (2004). The course of maternal depressive symptoms and maternal sensitivity as predictors of attachment security at 36 months. *Development and Psychopathology*, *16*, 231-252.

Charney, D. S., Deutch, A. Y., Krystal, J. H., Southwick, S. M., & Davis, M. (1993). Psychobiologic mechanisms of posttraumatic stress disorder. *Archives of General Psychiatry*, *50*, 294.

Cloitre, M., Courtois, C. A., Charuvastra, A., Carapezza, R., Stolbach, B. C., & Green, B. L. (2011). Treatment of complex PTSD: Results of the ISTSS expert clinician survey on best practices. *Journal of Traumatic Stress*, *24*, 615-627.

Cohen, L. R., Hien, D. A., & Batchelder, S. (2008). The impact of cumulative maternal trauma and diagnosis on parenting behavior. *Child Maltreatment*, *13*, 27-38.

Coppola, G., Cassibba, R., & Costantini, A. (2007). What can make the difference? premature birth and maternal sensitivity at 3 months of age: The role of attachment organization, traumatic reaction and baby's medical risk. *Infant Behavior & Development*, *30*, 679-684.

Cummings, E. M., & Davies, P. T. (1994). Maternal depression and child development. *Journal of Child Psychology and Psychiatry*, *35*, 73-122.

Daud, A., af Klinteberg, B., & Rydelius, P. (2008). Resilience and vulnerability among refugee children of traumatized and non traumatized parents. *Child and Adolescent Psychiatry and Mental Health*, *2*, 7-17.

Davies, J., Slade, P., Wright, I., & Stewart, P. (2008). Posttraumatic stress symptoms following childbirth and mothers' perceptions of their infants. *Infant Mental Health Journal*, *29*, 537-554.

Davis, R. N., Davis, M. M., Freed, G. L., & Clark, S. J. (2011). Fathers' depression related to positive and negative parenting behaviors with 1-year-old children. *Pediatrics*, *127*, 612-618.

Davydow, D. S., Gifford, J. M., Desai, S. V., Needham, D. M., & Bienvenu, O. J. (2008). Posttraumatic stress disorder in general intensive care unit survivors: A systematic review. *General Hospital Psychiatry*, *30*, 421-434.

Dayton, C. J., Levendosky, A. A., Davidson, W. S., & Bogat, G. A. (2010). The child as held in the mind of the mother: The influence of prenatal maternal representations on parenting behaviors. *Infant Mental Health Journal*, *31*, 220-241.

Despars, J., Peter, C., Borghini, A., Pierrehumbert, B., Habersaat, S., Müller-Nix, C., & Hohlfeld, J. (2011). Impact of a cleft lip and/or palate on maternal stress and attachment representations. *The Cleft Palate-Craniofacial Journal*, *48*, 419-424.

Dixon, W. E. (2002). *Twenty studies that revolutionized child psychology*. New Jersey: Pearson College Div.

Downey, G., & Coyne, J. C. (1990). Children of depressed parents: An integrative review. *Psychological Bulletin*, *108*, 50-76.

Durbin, C. E., & Wilson, S. (2012). Convergent validity of and bias in maternal reports of child emotion. *Psychological Assessment*, *24*, 647-660.

Eng, S., Mulsow, M., Cleveland, H., & Hart, S. L. (2009). Academic achievement among adolescents in Cambodia: Does caregiver trauma matter? *Journal of Community Psychology*, *37*, 754-768.

Enlow, M. B., Kitts, R. L., Blood, E., Bizarro, A., Hofmeister, M., & Wright, R. J. (2011). Maternal posttraumatic stress symptoms and infant emotional reactivity and emotion regulation. *Infant Behavior & Development*, *34*, 487-503.

Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: A systematic review. *The Lancet*, *365*, 1309-1314.

Fearon, R. P., & Mansell, W. (2001). Cognitive perspectives on unresolved loss: Insights from the study of PTSD. *Bulletin of the Menninger Clinic*, *65*, 380-396.

Feeley, N., Zelkowitz, P., Cormier, C., Charbonneau, L., Lacroix, A., & Papageorgiou, A. (2011). Posttraumatic stress among mothers of very low birthweight infants at 6 months after discharge from the neonatal intensive care unit. *Applied Nursing Research*, *24*, 114-117.

Fiese, B. H., & Sameroff, A. J. (1989). Family context in pediatric psychology: A transactional perspective. *Journal of Pediatric Psychology*, *14*, 293-314.

Fonagy, P., Gergely, G., & Jurist, E. L. (2003). *Affect regulation, mentalization and the development of the self*. London/New York: Karnac Books Ltd.

Fonagy, P., Target, M., Steele, H., & Steele, M. (1998). *Reflective-functioning manual, Version 5, for application to Adult Attachment Interviews.* Retrieved: http://mentalizacion.com.ar

Forcada-Guex, M., Borghini, A., Pierrehumbert, B., Ansermet, F., & Muller-Nix, C. (2011). Prematurity, maternal posttraumatic stress and consequences on the mother-infant relationship. *Early Human Development*, *87*, 21-26.

Foss, G. F. (2001). Maternal sensitivity, posttraumatic stress, and acculturation in Vietnamese and Hmong mothers. *MCN: The American Journal of Maternal/Child Nursing*, *26*, 257-263.

Fraiberg, S., Adelson, E., & Shapiro, V. (1975). Ghosts in the nursery: A psychoanalytic approach to the problems of impaired infant-mother relationships. *Journal of the American Academy of Child Psychiatry*, *14*, 387-421.

George, C., Kaplan, N., & Main, M. (1996). *Adult attachment interview.* Unpublished manuscript.

Gewirtz, A. H., Polusny, M. A., DeGarmo, D. S., Khaylis, A., & Erbes, C. R. (2010). Posttraumatic stress symptoms among national guard soldiers deployed to Iraq: Associations with parenting behaviors and couple adjustment. *Journal of Consulting and Clinical Psychology*, *78*, 599-610.

Gold, J. I., Taft, C. T., Keehn, M. G., King, D. W., King, L. A., & Samper, R. E. (2007). PTSD symptom severity and family adjustment among female Vietnam veterans. *Military Psychology*, *19*, 71-81.

Goldberg, S., Benoit, D., Blokland, K., & Madigan, S. (2003). Atypical maternal behavior, maternal representations, and infant disorganized attachment. *Development and Psychopathology*, *15*, 239-257.

Goodman, S. H., & Brumley, H. E. (1990). Schizophrenic and depressed mothers: Relational deficits in parenting. *Developmental Psychology*, *26*, 31-39.

Green, J., & Goldwyn, R. (2002). Annotation: Attachment disorganisation and psychopathology: New findings in attachment research and their potential implications for developmental psychopathology in childhood. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *43*, 835-846.

Hairston, I. S., Waxler, E., Seng, J. S., Fezzey, A. G., Rosenblum, K. L., & Muzik, M. (2011). The role of infant sleep in intergenerational transmission of trauma. *Sleep*, *34*, 1373-1383.

Harwood, I. (2006). Head start is too late: Integrating and applying infant observation studies, and attachment, trauma, and neurobiological research to groups with pregnant and new mothers. *International Journal of Group Psychotherapy*, *56*, 5-28.

Hay, D. F., Pawlby, S., Angold, A., Harold, G. T., & Sharp, D. (2003). Pathways to violence in the children of mothers who were depressed postpartum. *Developmental Psychology*, *39*, 1083-1094.

Hennigan, K. M., O'Keefe, M., Noether, C. D., Rinehart, D. J., & Russell, L. A. (2006). Through a mother's eyes: Sources of bias when mothers with co-occurring disorders assess their children. *The Journal of Behavioral Health Services and Research*, *33*, 87-104.

Herman, J. L. (1997). *Trauma and recovery: The aftermath of violence--from domestic abuse to political terro*r, New York: Basic Books.

Herzog, J. R., Everson, R. B., & Whitworth, J. D. (2011). Do secondary trauma symptoms in spouses of combat-exposed national guard soldiers mediate impacts of soldiers' trauma exposure on their children*? Child & Adolescent Social Work Journal*, *28*, 459-473.

Hesse, E., & Main, M. (1999). Second-generation effects of unresolved trauma in nonmaltreating parents: Dissociated, frightened, and threatening parental behavior. *Psychoanalytic Inquiry*, *19*, 481-540.

Hinton, D. E., Rasmussen, A., Nou, L., Pollack, M. H., & Good, M. J. (2009). Anger, PTSD, and the nuclear family: A study of Cambodian refugees. *Social Science and Medicine*, *69*, 1387-1394.

Holditch-Davis, D., Miles, M. S., Weaver, M. A., Black, B., Beeber, L., Thoyre, S., & Engelke, S. (2009). Patterns of distress in African-American mothers of preterm infants. *Journal of Developmental and Behavioral Pediatrics*, *30*, 193-204.

Hughes, P., Turton, P., McGauley, G. A., & Fonagy, P. (2006). Factors that predict infant disorganization in mothers classified as U in pregnancy. *Attachment & Human Development*, *8*, 113-122.

Jacobvitz, D., Leon, K., & Hazen, N. (2006). Does expectant mothers' unresolved trauma predict frightened/frightening maternal behavior? risk and protective factors. *Development and Psychopathology*, *18*, 363-379.

Jordan, B. K., Marmar, C. R., Fairbank, J. A., Schlenger, W. E., Kulka, R. A., Hough, R. L., & Weiss, D. S. (1992). Problems in families of male Vietnam veterans with posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, *60*, 916-926.

Jovanovic, T., Smith, A., Kamkwalala, A., Poole, J., Samples, T., Norrholm, S. D., …, Bradley, B. (2011). Physiological markers of anxiety are increased in children of abused mothers. *Journal of Child Psychology and Psychiatry*, *52*, 844-852.

Kalebic Jakupcevic, K., & Ajdukovic, M. (2011). Risk factors of child physical abuse by parents with mixed anxiety-depressive disorder or posttraumatic stress disorder. *Croatian Medical Journal*, *5*2, 25-34.

Kane, P., & Garber, J. (2004). The relations among depression in fathers, children's psychopathology, and father–child conflict: A meta-analysis. *Clinical Psychology Review*, *24*, 339-360.

Khaylis, A., Polusny, M. A., Erbes, C. R., Gewirtz, A., & Rath, M. (2011). Posttraumatic stress, family adjustment, and treatment preferences among national guard soldiers deployed to OEF/OIF. *Military Medicine*, *176*, 126-131.

Kleber, R. J., & Brom, D. (2003). *Coping with trauma*, *theory*, *prevention and treatment*. Lisse: Swets & Zeitlinger publishers.

Koren-Karie, N., Oppenheim, D., & Getzler-Yosef, R. (2004). Mothers who were severely abused during childhood and their children talk about emotions: Co-construction of narratives in light of maternal trauma. *Infant Mental Health Journal*, *25*, 300-317.

Koren-Karie, N., Oppenheim, D., & Getzler-Yosef, R. (2008). Shaping children's internal working models through mother-child dialogues: The importance of resolving past maternal trauma. *Attachment & Human Development*, *10*, 465-483.

Lang, A. J., Gartstein, M. A., Rodgers, C. S., & Lebeck, M. M. (2010). The impact of maternal childhood abuse on parenting and infant temperament. *Journal of Child and Adolescent Psychiatric Nursing*, *23*, 100-110.

Lange, N. E., Bunyavanich, S., Silberg, J. L., Canino, G., Rosner, B. A., & Celedón, J. C. (2011). Parental psychosocial stress and asthma morbidity in Puerto Rican twins. *Journal of Allergy and Clinical Immunology*, *127*, 734-740.

Lauterbach, D., Bak, C., Reiland, S., Mason, S., Lute, M. R., & Earls, L. (2007). Quality of parental relationships among persons with a lifetime history of posttraumatic stress disorder. *Journal of Traumatic Stress*, *20*, 161-172.

Lee, S. J., Taylor, C. A., & Bellamy, J. L. (2012). Paternal depression and risk for child neglect in father-involved families of young children. *Child Abuse & Neglect*, *36*, 461-469.

Leen-Feldner, E. W., Feldner, M. T., Bunaciu, L., & Blumenthal, H. (2011). Associations between parental posttraumatic stress disorder and both offspring internalizing problems and parental aggression within the national comorbidity survey-replication. *Journal of Anxiety Disorders*, *25*, 169-175.

Leifer, M., Kilbane, T., Jacobsen, T., & Grossman, G. (2004). A three-generational study of transmission of risk for sexual abuse. *Journal of Clinical Child and Adolescent Psychology*, *33*, 662-672.

Lester, P., Peterson, K., Reeves, J., Knauss, L., Glover, D., Mogil, C., … & Beardslee, W. (2010). The long war and parental combat deployment: Effects on military children and at-home spouses. *Journal of the American Academy of Child & Adolescent Psychiatry*, *49*, 310-320.

Lieberman, A. F., Padrón, E., Van Horn, P., & Harris, W. W. (2005). Angels in the nursery: The intergenerational transmission of benevolent parental influences. *Infant Mental Health Journal*, *26*, 504-520.

Lombardo, K. L., & Motta, R. W. (2008). Secondary trauma in children of parents with mental illness. *Traumatology*, *14*, 57-67.

Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior: A meta-analytic review. *Clinical Psychology Review*, *20*, 561-592.

Low, N. C., Dugas, E., Constantin, E., Karp, I., Rodriguez, D., & O'Loughlin, J. (2012). The association between parental history of diagnosed mood/anxiety disorders and psychiatric symptoms and disorders in young adult offspring. *BMC Psychiatry*, *12*, 741-746.

Lyons-Ruth, K., Bronfman, E., & Parsons, E. (1999). Atypical attachment in infancy and early childhood among children at developmental risk: IV. maternal frightened, frightening, or atypical behavior and disorganized infant attachment patterns. *Monographs of the Society for Research in Child Development*, *64*, 67-96.

Lyons-Ruth, K., & Block, D. (1996). The disturbed caregiving system: Relations among childhood trauma, maternal caregiving, and infant affect and attachment. *Infant Mental Health Journal*, *17*, 257-275.

Madigan, S., Moran, G., & Pederson, D. R. (2006). Unresolved states of mind, disorganized attachment relationships, and disrupted interactions of adolescent mothers and their infants. *Developmental Psychology*, *42*, 293-304.

Madigan, S., Bakermans-Kranenburg, M. J., Van IJzendoorn, M. H., Moran, G., Pederson, D. R., & Benoit, D. (2006). Unresolved states of mind, anomalous parental behavior, and disorganized attachment: A review and meta-analysis of a transmission gap. *Attachment & Human Development*, *8*, 89-111.

Main, M., & Morgan, H. (1996). Disorganization and disorientation in infant strange situation behavior: phenotypic resemblance to dissociative states. In L. K. Michelson, & W. J. Ray (Ed.), *Handbook of Dissociation: Theoretical, Empirical, and Clinical Perspectives* (pp. 107-138). New York: Plenum Press.

Manassis, K., Bradley, S., Goldberg, S., Hood, J., & Swinson, R. P. (1994). Attachment in mothers with anxiety disorders and their dhildren. *Journal of the American Academy of Child and Adolescent Psychiatry*, *33*, 1106-1113.

McDonald, S., Slade, P., Spiby, H., & Iles, J. (2011). Posttraumatic stress symptoms, parenting stress and mother-child relationships following childbirth and at 2 years postpartum. *Journal of Psychosomatic Obstetrics & Gynecology*, *32*, 141-146.

Michael S., S., & Charles H., Z. (2001). A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress*, *14*, 799-815.

Moehler, E., Brunner, R., Wiebel, A., Reck, C., & Resch, F. (2006). Maternal depressive symptoms in the postnatal period are associated with long-term impairment of mother-child bonding. *Archives of Women's Mental Health*, *9*, 273-278.

Muller, R. T., Hunter, J. E., & Stollak, G. (1995). The intergenerational transmission of corporal punishment: A comparison of social learning and temperament models. *Child Abuse & Neglect*, *19*, 1323-1335.

Murray, L., Cooper, P., Creswell, C., Schofield, E., & Sack, C. (2007). The effects of maternal social phobia on mother-infant interactions and infant social responsiveness. *Journal of Child Psychology and Psychiatry*, *48*, 45-52.

Muzik, M., Bocknek, E. L., Broderick, A., Richardson, P., Rosenblum, K. L., Thelen, K., & Seng, J. S. (2013). Mother–infant bonding impairment across the first 6 months postpartum: The primacy of psychopathology in women with childhood abuse and neglect histories. *Archives of Women's Mental Health*, *16*, 29-38.

Najman, J. M., Williams, G. M., Nikles, J., Spence, S., Bor, W., O'Callaghan, M., et al. (2000). Mothers' mental illness and child behavior problems: Cause-effect association or observation bias*? Journal of the American Academy of Child & Adolescent Psychiatry*, *39*, 592-602.

Nicholls, K., & Ayers, S. (2007). Childbirth related posttraumatic stress disorder in couples: A qualitative study. *British Journal of Health Psychology*, *12*, 491-509.

Nicol-Harper, R., Harvey, A. G., & Stein, A. (2007). Interactions between mothers and infants: Impact of maternal anxiety. *Infant Behavior & Development*, *30*, 161-167.

Out, D., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (2009). The role of disconnected and extremely insensitive parenting in the development of disorganized attachment: Validation of a new measure. *Attachment & Human Development*, *1*, 419-443.

Parfitt, Y., & Ayers, S. (2012). Postnatal mental health and parenting: The importance of parental anger. *Infant Mental Health Journal*, *33*, 400-410.

Parfitt, Y. M., & Ayers, S. (2009). The effect of post-natal symptoms of posttraumatic stress and depression on the couple's relationship and parent-baby bond. *Journal of Reproductive and Infant Psychology*, *27*, 127-142.

Pears, K. C., & Capaldi, D. M. (2001). Intergenerational transmission of abuse: A two-generational prospective study of an at-risk sample. *Child Abuse & Neglect*, *25*, 1439-1461.

Ringel, S. (2005). Through the camera's eye: The intergenerational transmission of loss. *Clinical Social Work Journal*, *33*, 433-443.

Roberts, A. L., Galea, S., Austin, S. B., Cerda, M., Wright, R. J., Rich-Edwards, J. W., & Koenen, K. C. (2012). Posttraumatic stress disorder across two generations: Concordance and mechanisms in a population-based sample. Biological Psychiatry, *72*, 505-511.

Rosenheck, R. A., & Fontana, A. (1998). Transgenerational effects of abusive violence on the children of Vietnam combat veterans. *Journal of Traumatic Stress*, *11*, 731-742.

Ruscio, A. M., Weathers, F. W., King, L. A., & King, D. W. (2002). Male war-zone veterans' perceived relationships with their children: The importance of emotional numbing. *Journal of Traumatic Stress*, *15*, 351-357.

Sameroff, A. (2009). *The transactional model of development*, *How children and contexts shape each other*, Washington DC: American Psychological Association.

Samper, R. E., Casey, T. T., King, D. W., & King, L. A. (2004). Posttraumatic stress disorder symptoms and parenting satisfaction among a national sample of male Vietnam veterans. *Journal of Traumatic Stress*, *17*, 311-315.

Schechter, D. S., Coates, S. W., Kaminer,, T., Coots, T., Zeanah, C. H., Davies, M., …, & Myers, M.M. (2008). Distorted maternal mental representations and atypical behavior in a clinical sample of violence-exposed mothers and their toddlers. *Journal of Trauma & Dissociation*, *9*, 123-147.

Schechter, D. S., Coots, T., Zeanah, C. H., Davies, M., Coates, S. W., Trabka, K. A., …, & Myers, M. M. (2005). Maternal mental representations of the child in an inner-city clinical sample: Violence-related posttraumatic stress and reflective functioning. *Attachment & Human Development*, *7*, 313-331.

Schechter, D. S., Kaminer, T., Grienenberger, J. F., & Amat, J. (2003). Fits and starts: A mother-infant case-study involving intergenerational violent trauma and pseudoseizures across three generations. *Infant Mental Health Journal*, *24*, 510-528.

Schechter, D. S., Moser, D. A., Wang, Z., Marsh, R., Hao, X., Duan, Y., …, & Peterson, B.S. (2012). An fMRI study of the brain responses of traumatized mothers to viewing their toddlers during separation and play. *Social Cognitive and Affective Neuroscience*, *7*, 969-979.

Schechter, D. S., Zygmunt, A., Coates, S. W., Davies, M., Trabka, K. A., McCaw, J., ..., Robinson, J. (2007). Caregiver traumatization adversely impacts young children's mental representations on the MacArthur story stem battery. *Attachment & Human Development*, *9*, 187-205.

Schechter, D. S., Willheim, E., Hinojosa, C., Scholfield-Kleinman, K., Turner, J. B., McCaw, J., ..., Myers, M. M. (2010). Subjective and objective measures of parent-child relationship dysfunction, child separation distress, and joint attention. *Psychiatry: Interpersonal and Biological Processes*, *73*, 130-144.

Schechter, D. S., Coots, T., Zeanah, C. H., Davies, M., Coates, S. W., Trabka, K. A., ..., Myers, M. M. (2005). Maternal mental representations of the child in an inner-city clinical sample: Violence-related posttraumatic stress and reflective functioning. *Attachment and Human Development*, *7*, 313-331.

Schechter, D. S., Coates, S. W., Kaminer, T., Coots, T., Zeanah, C. H., Davies, M., ... & Myers, M. M. (2008). Distorted maternal mental representations and atypical behavior in a clinical sample of violence-exposed mothers and their toddlers. *Journal of Trauma and Dissociation*, *9*, 125-147.

Scheeringa, M. S., & Zeanah, C. H. (2001). A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress*, *14*, 799-815.

Schuengel, C., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (1999). Frightening maternal behavior linking unresolved loss and disorganized infant attachment. *Journal of Consulting and Clinical Psychology*, *67*, 54.

Schuengel, C., Van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., & Blom, M. (1998). Frightening maternal behaviour, unresolved loss, and disorganized infant attachment: A pilot-study. *Journal of Reproductive and Infant Psychology*, *16*, 277-283.

Schwerdtfeger, K. L., & Goff, B. S. (2007). Intergenerational transmission of trauma: Exploring mother-infant prenatal attachment. *Journal of Traumatic Stress*, *20*, 39-51.

Seckl, J. R. (2004). Prenatal glucocorticoids and long-term programming. *European Journal of Endocrinology*, *151*, U49-U62.

Seifer, R., Sameroff, A., Dickstein, S., Schiller, M., & Hayden, L. C. (2004). Your own children are special: Clues to the sources of reporting bias in temperament assessments. *Infant Behavior and Development*, *27*, 323-341.

Selimbasic, Z. (2010). PW01-65-Family risk factors and behavioral disturbances in children of parents with posttraumatic stress disorder. *European Psychiatry*, *25*, 1481.

Smid, G., van der Velden, P., Lensvelt-Mulders, G., Knipscheer, J., Gersons, B., & Kleber, R. (2011). Stress sensitization following a disaster: A prospective study. *Psychological Medicine*, *1*, 1-12.

Spangler, G., & Grossmann, K. (1993). Biobehavioral organization in securely and insecurely attached infants. *Child Development*, *64*, 1439-1450.

Stover, C. S., Hall, C., McMahon, T. J., & Easton, C. J. (2012). Fathers entering substance abuse treatment: An examination of substance abuse, trauma symptoms and parenting behaviors. *Journal of Substance Abuse Treatment*, *43*, 335-343.

Sullivan, B., Gotman, N., Yonkers, K., Mayes, L., Lutyen, P., Nix, K., …, Smith, M. V. (2011). Effects of trauma and PTSD on parenting in mothers with preschool age children. *Comprehensive Psychiatry*, *52*, e15.

Tees, M. T., Harville, E. W., Xiong, X., Buekens, P., Pridjian, G., & Elkind-Hirsch, K. (2010). Hurricane Katrina-related maternal stress, maternal mental health, and early infant temperament. *Maternal and Child Health Journal*, *14*, 511-518.

Turton, P., Hughes, P., Fonagy, P., & Fainman, D. (2004). An investigation into the possible overlap between PTSD and unresolved responses following stillbirth: An absence of linkage with only unresolved status predicting infant disorganization. *Attachment & Human Development*, *6*, 241-253.

Vaage, A. B., Thomsen, P. H., Rousseau, C., Wentzel-Larsen, T., Ta, T. V., & Hauff, E. (2011). Paternal predictors of the mental health of children of Vietnamese refugees. *Child and Adolescent Psychiatry and Mental Health*, *5*, 1-11.

Van Ee, E., Kleber, R. J., & Mooren, T. T. M. (2012). War trauma lingers on: Associations between maternal posttraumatic stress disorder, parent–child interaction, and child development. *Infant Mental Health Journal*, *33*, 459-468.

Weinberg, M. K., & Tronick, E. Z. (1998). The impact of maternal psychiatric illness on infant development. *Journal of Clinical Psychiatry; Journal of Clinical Psychiatry*, *59*, 53-61.

Whaley, S. E., Pinto, A., & Sigman, M. (1999). Characterizing interactions between anxious mothers and their children. *Journal of Consulting and Clinical Psychology*, *67*, 826-836.

Whiffen, V. E., & Gotlib, I. H. (1989). Infants of postpartum depressed mothers: Temperament and cognitive status. *Journal of Abnormal Psychology*, *98*, 274-279.

Woodruff-Borden, J., Morrow, C., Bourland, S., & Cambron, S. (2002). The behaviour of anxious parents: Examining mechanisms of transmission of anxiety from parent to child. *Journal of Clinical Child and Adolescent Psychology*, *31*, 364-374.

Yehuda, R., Engel, S. M., Brand, S. R., Seckl, J., Marcus, S. M., & Berkowitz, G. S. (2005). Transgenerational effects of posttraumatic stress disorder in babies of mothers exposed to the world trade center attacks during pregnancy. *Journal of Clinical Endocrinology & Metabolism*, *90*, 4115-4118.

Young, E. A., & Breslau, N. (2004). Saliva cortisol in posttraumatic stress disorder: A community epidemiologic study. *Biological Psychiatry*, *56*, 205-209.

Zeanah Jr, C. H. (2009). *Handbook of infant mental health*, New York: The Guilford Press.

Chapter 3

War trauma lingers on… Associations between maternal PTSD, parent-child interaction and child development

War trauma lingers on… Associations between maternal PTSD, parent-child interaction, and child development
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The combination of vulnerability and resilience after traumatic experiences is a bewildering juxtaposition seen in human beings and especially so in children. A striking illustration of this juxtaposition are the findings of studies on the impact of traumatic events experienced by parents on health and adjustment of their children (often labelled as intergenerational transmission of trauma or secondary traumatization). Research has shown that large groups of children of parents with Holocaust experiences do not manifest serious psychopathology (Bar-On et al., 1998; Leon, Butcher, Kleinman, Goldberg & Almagor, 1981; Sigal & Weinfeld, 1989; Suedfeld, 2000). In contrast with these results, studies on clinical participants reveal the vulnerability of traumatized people and their children. For example, some studies on Holocaust survivors have described a transmission effect across two generations. These effects included a predisposition to posttraumatic stress disorder (PTSD), chronic anxiety and depression, and disturbed family relations (Danieli, 1998; Levav, Levinson, Radomislensky, Shemesh & Kohn, 2007; Niederland, 1981; Solomon, Kotler & Mikulincer, 1998; Yehuda, Schmeidler, Wainberg, Binder-Brynes & Duvdevani, 1998). A meta-analysis by Van IJzendoorn et al. (2003), though, revealed that "in a set of adequately designed nonclinical studies, no evidence for the influence of the parents' traumatic Holocaust experiences on their children could be found" (p.459). Intergenerational transmission of trauma emerged only in studies on clinical participants (Van IJzendoorn et al., 2003).

It should be noted that these studies on the impact of traumatic events experienced by parents on health and adjustment of their children suffer from a number of limitations. Most of these studies focused on adult children of parents exposed to major stressors, and did not examine the fact whether the parents themselves experienced mental disturbances. Cross-sectional or longitudinal research on parents with posttraumatic stress and their young children has been scarce or non-existent. By contrast, empirical studies on depression or family violence have extensively studied the relationships between mothers and their children. In samples of abused mothers (e.g. Banyard, Williams, Siegel, 2003; Lovejoy, Graczyk, O'Hare & Neuman, 2000) and depressed mothers (e.g. Kitzmann, Gaylord, Holt & Kenny, 2003; Levendosky, Leahy, Bogat, Davidson & von Eye, 2006), the relationships between maternal mental health, distorted parenting, and child psychosocial functioning and development such as behavioral, emotional, attentional, mental and interpersonal disturbances have been well documented. Despite the importance of exploring the potential impact of traumatic stress on parental caregiving and, consequently, child development, relatively little work has been conducted in this area.

Traumatized parents suffer from a triad of symptoms: hyperarousal, avoidance and numbing, and re-experiencing. Infants depend on their caregivers to regulate their emotional states, but as a result of posttraumatic stress symptoms traumatized parents may experience difficulties regulating their own arousal and consequently experience difficulties modulating infant's arousal (McDonaugh-Coyle et al., 2001; Tull, Barrett, McMillan & Roemer, 2007; Van der Kolk, 1994). In the last decade, studies have shown that parents diagnosed with PTSD report significantly poorer parent-child relationships than those without PTSD. For example, severe emotional numbing is significantly related to a perceived lower quality of the parent-child relationship among Vietnam veterans (Ruscio, Weathers, King & King, 2002; Samper, Casey, King & King, 2004) and is predictive of increased parent-child aggression in the general population (Lauterbach et al., 2007). Research also suggested that cumulative trauma exposure, trauma-related symptoms and co-morbidity are associated with insensitive caregiving behavior, such as increased hostile-intrusive behavior or negative affect (Cohen, Hien & Batchelder; 2008; Lyons-Ruth and Block, 1996; Schechter et al., 2010). Parent-child relationship dysfunction, in turn, forms a risk-factor for psychopathology such as relationship disorders, emotional and behavioral disorders (Skovgaard et al., 2007; Skovgaard et al., 2008), and dissociation from infancy on (Dutra, Bureau, Holmes, Lyubchik & Lyons-Ruth 2009). Considering that maternal posttraumatic stress appears to be associated with children's psychosocial functioning, a mediation model that would explain the process via the parent-child interaction can be inferred.

Refugee families form a population with a high level of war experiences. Their lives bear witness of survival as well as post-trauma adjustment. In the host country, many refugees attempt to continue their lives and continue to have children. Because of this refugee families offer the unique possibility to study the potential impact of posttraumatic stress on parental caregiving and, consequently, the development of the young non-exposed child. Research into refugee populations necessarily raises the question of cross-cultural differences in parenting behaviors. However, elevated rates of psychopathology (e.g. PTSD, depression, poorer family adjustment) have been reported for non traumatized children of traumatized parents among Western samples (Hoven et al., 2009; Hoven et al, 2004) and non Western samples (Al-Turkait & Ohaeri, 2008; Daud, Klinteberg & Rydelius, 2008). In any culture caregivers and children interact and attachment bonds will be established. Experts and mothers interpret and value attachment security in similar ways across cultures (Harwood, Miller & Irizarry, 1995; Van IJzendoorn & Sagi-Schwarz, 2008). Attachment security is fostered by

particularly sensitive and prompt responses to the infants' attachment signals. Although ethnicity does predict patterns of parenting, the presence of sensitive parenting is not predicted by ethnicity (Chaudhuria, Easterbrooks and Davis, 2009; Keller, Borke, Yovsi, Lohaus & Jensen, 2005). Therefore, specific parenting behaviors may vary across cultures but the patterning of sensitive behavior or secure base behavior remains the same (Van IJzendoorn & Sagi-Schwarz, 2008).

This study contributes to our understanding of the impact of posttraumatic stress symptoms on families by studying the emotional availability within parent-child interaction as mediator between posttraumatic stress symptoms of refugee mothers and infants' psychosocial functioning and development within a high-risk sample. The first objective of the present study was to examine the association between maternal posttraumatic stress symptoms, maternal emotional availability (distinguished in sensitivity, structuring, non-intrusiveness and non-hostility), children's availability (responsiveness and involvement to the parent), psychosocial functioning (internalizing and externalizing behavior) as well as children's development (mental and psychomotor development). It was expected that high levels of maternal posttraumatic stress symptoms would be associated with high levels of infant's internalizing and externalizing behavior, as well as a delay in infant's mental and psychomotor development. It was also expected that high levels of maternal posttraumatic stress symptoms would be associated with low levels of maternal and infants' emotional availability within the parent-child interaction. The second objective of the study was to test whether the association between maternal trauma on the one hand and infant's psychosocial functioning and mental and psychomotor development on the other hand is mediated via the quality of dyadic emotional availability. We hypothesized that the association between maternal trauma and infant's psychosocial functioning is no longer significant when the mediator emotional availability is taken into account. Maternal posttraumatic stress symptoms do not directly effect infant's psychosocial functioning, but they do effect the quality of the dyadic interaction and therefore infant's psychosocial functioning.

Method

Participants and procedure

Participants in this study were 49 asylum seekers and refugee mothers who had a child between the ages of 18 to 42 months born in the Netherlands. Asylum seekers and refugees with severe mental retardation, addictions or psychosis

were excluded. Likewise dyads were excluded when children had experienced traumatic experiences themselves. The sample was recruited via Foundation Centrum '45, the Dutch national institute for the treatment of trauma resulting from war, persecution and violence and via regional asylum seekers centers in the Netherlands. At Centrum '45, counselors informed eligible participants about the research project and asked their consent to be approached by research assistants. If eligible participants approved, a (phone) meeting was scheduled to give information and answer questions on the project. A qualified interpreter was always present to help with the communication. If the mother consented to proceed, a research date was set. In addition, research assistants, together with interpreters, approached eligible participants at the asylum seekers centers to inform them of the project. If the mother was willing to participate, a research date was set.

All mothers came with their child for one day to Centrum '45 or a designated area within the asylum seekers center. Before testing would start a final informed consent was obtained. Participants were aware that they could withdraw their consent at any time. This happened only once. One mother had received her final notice to leave the country. When she was asked about the stress she experienced over the asylum seekers procedure in the last week she decided to withdraw. Two other dyads were excluded: one mother did not finish the tests due to being 5 hours late for her appointment and not turning up for new appointments; and one mother did not speak and could not complete the questionnaires. An interpreter was present during the entire day. If questionnaires were not available in a specific language, items were translated in session. Participants received 25 euro and reimbursement for traveling expenses. The research was approved by the medical ethical committee of the Medical Center of Leiden University (LUMC), the Netherlands.

Measures

Traumatic events and posttraumatic stress disorder symptoms of mothers were screened by the Harvard Trauma Questionnaire (Mollica et al., 1992). The questionnaire consists of a list of traumatic events and a 16-item scale measuring severity of PTSD symptoms described in the DSM-IV. The HTQ asks participants which traumatic events they experienced themselves, witnessed or heard of. It also asks participants to rate to what degree particular symptoms have bothered them in the past week using a 4-point frequency scale, where 1 = not at all and 4 = extremely. Items of the HTQ correspond to the 17 symptoms of PTSD listed in the DSM-IV, with two symptoms, psychological and physiological reactivity

given traumatic cues, represented by a single item. A cut-off score of 2.5 was used in several studies to identify clinically significant PTSD (Mollica et al., 1992). A standard version of the HTQ is available in many languages. The psychometric properties of this translation of the HTQ are adequate across cultures and, in general, applicable to measure symptoms of posttraumatic stress (Kleyn, Hovens & Rodenburg, 2001). A review of instruments used in studies of refugees (Hollifield et al., 2002) noted that the HTQ is statistically reliable and valid in multiple studies across multiple traumatized populations.

Symptoms of depression and anxiety were measured by the Hopkins Symptom Checklist-25 (Derogatis, Lipman, Rickels, Uhlenhuth & Covi, 1974) which is an established and widely used screening instrument for symptoms related to anxiety (10 items) and depression (15 items). Each question asks about the frequency of specific symptoms in the past week using a 4-point frequency scale, where 1 = not at all and 4 = extremely. The average item score will result in a total score for depression and anxiety. Mean item score above 1.75 indicates distress in the clinical range (Mollica et al., 1996). The total score is consistently highly correlated with severe emotional distress. The instrument was specifically developed for research across diverse populations and is available in many languages (Pernice & Brook, 1996; Smith Fawzi et al., 1995; Thapa & Hauff, 2005). The psychometric properties are adequate across cultures and, in general, are applicable to measure symptoms of depression and anxiety (Kleyn et al., 2001).

Current stressors were measured by asking the mothers to rate on a 4-point Likert scale, where 1 = not at all and 4 = extremely, the amount of stress experienced in the last week regarding their asylum procedure, other legal procedures, housing, finances, marital relationship or relationship, and relatives in the country of origin.

Psychosocial functioning of children was covered by the Child Behavior Check List 1,5-5 (Achenbach & Rescorla 2000). It is a revision of the CBCL 2–3 (Achenbach, 1992), based on the CBCL 4–18 (Achenbach, 1991). The items cover an empirical range of behavioral and emotional problems, which are scored on separate scales for parents and caregivers. The parent and caregiver are asked to rate 99 problem items on a 3-point scale, where 0 = not true and 2 = very true or often true. For several items, respondents are asked to provide descriptions of the problems. The CBCL 1,5-5 consists of seven empirically based syndrome scales: Emotionally Reactive, Anxious/Depressed, Somatic Complaints, Withdrawn, Sleep Problems, Attention Problems and Aggressive Problems. In addition, symptoms can be scored in two broad groups of Internalizing and Externalizing

syndromes which also leads to a score on the scale Total Problems. The score on each scale falls within either the normal range (T < 60), borderline clinical range (T = 60 – 63) or clinical range (T > 63). The CBCL has well-established reliability and validity. It is standardized in many countries and has been translated into nearly 60 languages (Skovgaard, Houmann, Landorph, & Christiansen 2004).

Mental and psychomotor development was measured by the Bayley Scales of Infant Development-Second Edition – Dutch version (Van der Meulen, Ruiter, Spelberg & Smrkovsky, 2000) which offers a standardized assessment for children ages 1 month through 42 months. It is the most widely used measure of the development of infants and toddlers in clinical and research settings (Skovgaard, Houmann, Landorph, & Christiansen 2004). It has a broad content coverage providing information about mental development, gross and fine motor development, and test-taking behavior. The Mental Scale yields a normalized standard score called the Mental Development Index, evaluating a variety of abilities such as sensory/perceptual acuities, memory, learning, problem solving, vocalization, basis of abstract thinking and mathematical concept formation. The Motor Scale assesses skills as degree of body control, large muscle coordination, finer manipulatory skills of the hands and fingers, dynamic movement and dynamic praxis. Reliability and validity of the Bayley Scales have been established (Skovgaard et al., 2004).

Emotional availability within the parent-child interaction was assessed by observing dyadic interactions between parents and children using the Emotional Availability (EA) Scales, 4th edition (Biringen, 2008). Emotional availability refers to the degree to which each partner expresses emotions and is responsive to the emotions of others. Optimal emotional availability enhances secure base behavior (Emde & Easterbrooks, 1985; Pipp-Siegel, 1998). The EA Scales consist of six dimensions of the emotional availability of the parent or caregiver toward the child and of the child toward the parent or caregiver. The parental dimensions are sensitivity, structuring, non-intrusiveness, and non-hostility. The child dimensions are the child's responsiveness to the parent and the child's involvement with the parent. On all dimensions higher values signify more desirable behavior. Higher scores on the sensitivity scale mean more sensitivity, higher scores on the non-intrusiveness scale mean less intrusiveness. Each dimension consists of two criteria rated on a seven point scale and five criteria rated on a three point scale. Examples of these criteria are: A sensitive adult displays a balanced, genuine affect and clarity of perceptions and appropriate responsiveness. A structuring adult provides appropriate

guidance and suggestions but is also successful in that the child receives the input. A non-intrusive adult follows child's lead and waits for optimal breaks to enter the interaction. And a non-hostile adult lacks negativity in face or voice. A responsive child has a positive affect and behavior regulation and is likely to respond to the adult. An involving child shows initiative in bringing the adult into interaction. The final score on each dimension ranges between one and seven. In this study, mothers and children were videotaped during a 15-minutes play session. The mothers received the instruction to play with their children and the available toys as they liked. During this unstructured play mother and child were alone in the room.

Two raters trained for reliability and unaware of maternal history of trauma or level of symptoms independently coded the videotaped sessions. Inter-rater reliability, established on a randomly selected 30% of the videotapes, was satisfactory. Cohen's kappa ranged from .76 to .91 (sensitivity k = .89, structuring k = .91, non-intrusiveness k = .86, non-hostility k = .76, responsiveness k = .88, involvement k = .87).

Statistical analysis

Chi-Square test, Fisher's Exact test, Kendall τ, one-way ANOVA or Mann-Whitney U test were conducted for the preliminary analysis on group differences between refugees and asylum seekers. Preliminary analyses on the variables of interest were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity.

Mediation analyses are most often guided by the procedures outlined by Baron and Kenny (1986) and follow directly from their definition of a mediator. Variable Z is considered a mediator if (1) X significantly predicts Y, (2) X significantly predicts Z, and (3) Z significantly predicts Y controlling for X. The relationship between X and Y is referred to as the total effect of X on Y. The relationship between X and Y after controlling for Z is referred to as the direct effect. A conclusion that a mediation effect is present implies that the total effect of X predicting Y was present initially. There is no such assumption in the assessment of indirect effects. The SPSS macro written by Preacher and Hayes (2004) was used to test for the mediation hypotheses. This macro uses the traditional approach advocated by Baron and Kenny (1986) but entails a test for the indirect effect using a bootstrap approach especially recommended in the case of modest to small sample sizes.

Results

Preliminary analyses

To control for group differences between asylum seekers and refugees both groups were compared on demographic variables, reported current stress, symptoms of anxiety and symptoms of depression. Compared to asylum seekers (M = 2.7, SD = 1.1) refugees had spent a longer time in the Netherlands (M = 8.1, SD = 4.8, z = -4.41, p < .001) and reported more stress about housing (Kendall τ = .46, p < .001). No other significant differences were found between the groups. Refugees did not differ from asylum seekers in terms of age, country of origin, level of education, symptoms of anxiety and depression, current stress over legal procedures, finances, marital relationship or relatives residing in home country.

Participating mothers ranged in age from 19 to 44 years (M = 29.5, SD = 6.2), children ranged in age from 16 to 46 months (M = 26.6, SD = 8.3). The group of children consisted of 28 boys (57%) and 21 girls (43%). Mothers had fled from all over the world (Eastern Europe, Russia and former Russia 14%, Asia 12%, Middle East 35%, Africa 39%) to the Netherlands 5 months to 17 years (M = 5.5, SD = 4.4) ago. A small majority had received a refugee status (53%). Education varied from (some years of) primary school (50%), secondary school (18%), to university (27%). Mothers had experienced multiple traumas (M = 8.1, SD = 5.7). Examples of the traumatic experiences are imprisonment (39%), being wounded (31%), combat situations (47%), rape (25%), murder of a relative or friend (40%), murder of a stranger (27%) and torture (44%). Noteworthy is that one in four mothers reported to have experienced rape, knowing that rape is often underreported. As can be seen from Table 3.1, the rate of severe emotional distress of both mothers and children was high within this sample. The average score of children for internalizing behavior reached the sub-clinical level. The average score of children for externalizing behavior was only just within the normal range.

Associations between maternal posttraumatic stress symptoms, emotional availability, infant's psychosocial functioning and development

Pearson product-moment correlation coefficients among severity of maternal posttraumatic stress symptoms, emotional availability within the mother-child interaction, child's psychosocial functioning and child's development were computed (see Table 3.2). Severity of posttraumatic stress symptoms was significantly correlated with internalizing behavior (r = .40, p = < .01) and total problems (r = .40, p < .01). None of the other correlations between

Table 3.1 Descriptive statistics in sample of refugee and asylum seekers mothers and their infants

		M	*SD*
Mother	PTSD – DSM IV symptoms	2.58	.78
	PTSD – HTQ total symptoms	2.43	.72
	Symptoms of Anxiety	2.51	.90
	Symptoms of Depression	2.52	.80
	Stress over:		
	Asylum procedure	2.05	1.36
	Legal procedures	1.51	1.05
	Finances	2.05	1.16
	Housing	2.51	1.36
	Marriage or relationship	1.59	.95
	Relatives in country of origin	2.61	1.38
Interaction	Mother:		
	Sensitivity	4.32	1.60
	Structuring	4.37	1.61
	Non-intrusiveness	4.41	1.10
	Non-hostility	5.07	0.93
	Child:		
	Responsiveness	4.27	1.61
	Involvement child	4.12	1.27
Child	T value internalizing behavior	61.49	11.10
	T value externalizing behavior	57.51	11.79
	T value total problems	59.46	10.88
	Mental development index	95.43	15.65
	Psychomotor development index	105.77	13.70

Note. PTSD = posttraumatic stress disorder, DSM IV = Diagnostic and statistical manual of mental disorders, fourth edition, HTQ = Harvard Trauma Questionnaire

Table 3.2 Correlations between the study variables

	1	2	3	4	5	6	7	8	9	10	11	12
Mother												
1. PTSD symptoms	-	-.49**	-.43**	-.20	-.35*	-.45**	-.37*	.40**	.17	.40**	-.27	-.12
2. Sensitivity		-	.87**	.56**	.73**	.88**	.71**	-.21	-.02	-.18	.20	.17
3. Structuring			-	.56**	.67**	.90**	.77**	-.10	.07	-.05	.21	.15
4. Non-intrusiveness				-	.68**	.62**	.56**	-.15	-.19	-.16	.15	.04
5. Non-hostility					-	.68**	.63**	-.30*	-.22	-.30*	.15	.05
Child												
6. Responsiveness						-	.86**	-.10	-.01	-.10	.22	.12
7. Involvement							-	-.18	.00	-.10	.20	.11
8. Internalizing behavior								-	.52**	.82**	-.04	-.01
9. Externalizing behavior									-	.87**	-.05	.16
10. Total problems										-	-.07	.08
11. Mental development											-	.51**
12. Psychomotor dev.												-

Note. ** Pearson correlation is significant at the 0.01 level (2-tailed).
* Pearson correlation is significant at the 0.05 level (2-tailed).

parental posttraumatic stress symptoms and child's externalizing behavior or mental and psychomotor development were significant. Mothers experiencing posttraumatic stress symptoms scored lower on all single scales of the Emotional Availability scales. The lower scores for sensitivity (r = -.49, p < .01), structuring (r = -.43, p < .01) and non-hostility (r = .35, p < .05) were statistically significant. However, the subscale non-intrusiveness violated the assumption of normality and was not significant. Both infant scores were lower for mothers experiencing

posttraumatic stress (responsiveness r = -.45, p < .01, involvement r = -.37, p < .05). Although mother's posttraumatic stress symptoms correlated significantly with the occurrence and severity of psychosocial as well as with the emotional availability within the parent-child interaction, only non-hostility within the parent-child interaction correlated significantly with infant's internalizing behavior (r = -.30, p < .05) and total problems (r = -.30, p < .05). None of the other dimensions of parent-child interaction were found to be significantly correlated with either child's psychosocial functioning or development.

Emotional availability as a mediator between maternal posttraumatic stress symptoms and infant's psychosocial functioning

As there were significant correlations between maternal posttraumatic stress symptoms and the subscales sensitivity, structuring and non-hostility of the emotional availability scales as well as the scale total problems of infant's psychosocial functioning we tested whether each of these emotional availability scales mediated the relation between maternal posttraumatic stress symptoms and infant's psychosocial functioning. The total effect of maternal posttraumatic stress symptoms on infant's psychosocial functioning (i.e. without the mediator variable in the model) was significant ($ß$ = 14.39, t = 3.09, p < .01). After adding the mediators, the subscales of emotional availability, to the model, the effect of maternal posttraumatic stress symptoms on the separate scales of emotional availability was significant (sensitivity $ß$ = -1.09, t = -3.87, p < .01, structuring $ß$ = -1.18, t = -4.03, p < .01, non-hostility $ß$ = -0.69, t = -3.04, p < .01). The direct effect of maternal posttraumatic stress on infant's psychosocial functioning, controlling for the mediators sensitivity and non-hostility, was not significant, but was significant when controlling for structuring ($ß$ = 18.26, t = 3.42, p < . 01). The effects of all scales of emotional availability on infant's psychosocial functioning were not significant. The Sobel test and the bootstrap 95% confidence intervals show that the indirect effects were not significant, leading to the conclusion that the mediation model does not hold.

Discussion

The objective of this study was to contribute to our understanding of the impact of posttraumatic stress symptoms on families by studying the emotional availability within the parent-child interaction as mediator between maternal posttraumatic stress symptoms and infants' psychosocial functioning and development within a high-risk sample. We predicted that maternal posttraumatic stress would

be associated with a decreased infants' psychosocial functioning and delayed infants' development, mediated by less emotional availability within the parent-child interaction. A mediation model, though, could not be inferred.

The presented results support previous findings on the association between maternal posttraumatic stress symptoms and reported psychosocial functioning of infants (Al-Turkait & Ohaeri, 2008; Daud et al., 2008; Hoven, Duarte et al., 2004; Hoven et al., 2005;). Mothers suffering from posttraumatic stress report more internalizing behaviors of infants. In contrast with this difference in psychosocial functioning of infants, no association was found between maternal posttraumatic stress symptoms and mental or psychomotor development of the infant. As psychosocial functioning was measured by asking a subjective rater, the mother, to report on the behavior of the infant, these results, suggest an association between maternal posttraumatic stress and the mother's perception of the behavior of the infant. Symptoms of posttraumatic stress associate with a more negative perception of the infant's behavior, which might be an indication of negative mental representations (Schechter et al., 2008). Research has shown that a mother's negative perception of the infant is associated with the development of insecure attachment and consequently places the future development of the infant at risk (Benoit, Parker & Zeanah, 1997). Therefore, infants of traumatized mothers may be at risk.

This study established that mothers with more symptoms of posttraumatic stress show less emotional availability within the parent-child interaction. What is striking in the data presented is the combination of less sensitivity of the mother and less responsiveness of the child when the mother reports more posttraumatic stress symptoms. As defined by Biringen (2008), a child's responsiveness to the mother is reflected in a positive affect and the regulation of emotions in response to the mother. A mother's sensitivity to the child is reflected in a warm affect and an emotional connectedness. It is precisely this capacity that might be hindered by posttraumatic stress symptoms as it includes an impairment in the ability to regulate affect and arousal. Lack of caregivers regulation impairs the development of child's self-regulation, and as a consequence behavioral adaptations may result. Van der Kolk and Fisler (1994) state that for traumatized children the "loss of ability to regulate the intensity of feelings and impulses is possibly the most far-reaching effect of trauma and neglect" (p.145). According to Scheeringa and Zeanah (2001) traumatized parents can be emotionally and functionally unavailable thereby exacerbating symptomatology of their traumatized children. Our data suggest that even non

traumatized children exhibit negative adaptations in their regulation of affect and arousal in response to unavailable parenting.

As noted our results indicate that mothers experiencing posttraumatic stress are at elevated risk for insensitive, un-structuring or hostile interactions with their infants. These results are in line with research on depressed or anxious mothers and their children, in which strong relations between parental psychopathology, parenting behavior and infants' psychosocial functioning and development have been reported (e.g. Bögels & Brechman-Toussaint, 2006; Lovejoy et al., 2000; Murray, Fiori-Cowley, Hooper & Cooper, 1996; Schreier, Wittchen, Höfler & Lieb, 2008). In our sample, high levels of symptoms of depression and anxiety were reported by both mothers with posttraumatic stress symptoms and mothers without posttraumatic stress symptoms. We therefore propose that posttraumatic stress likely has an association with caregiving above and beyond symptoms of depression and anxiety. In this study, behaviors that impressed as dissociative, disorganized or (c)overtly aggressive parenting behavior have been clinically observed. It is possible that these extreme parent-child interactions are attributable to posttraumatic stress symptoms and comparable to what has been called extreme insensitive and frightening behaviors. As research has shown these behaviors may indicate a dissociative state in the parent and form a risk factor for the development of disorganized attachment in infants (Lyons-Ruth, Bronfman, & Atwood, 1999; Madigan, Moran & Pederson, 2006; Main & Hesse, 1990). Within this study emotional availability did not function as a mediator. Still, it has been mentioned that maternal sensitivity and responsiveness of infants are key markers of the parent-child interaction. Thus, it could be that posttraumatic stress hinders a parent interacting with or attuning to the infant. Then, alterations within the parent-child interaction, such as parental dissociation and extreme insensitivity, could lead to the infant's symptoms. Longitudinal research is needed to specify causal relations and to understand more precisely the conditions under which behavior of traumatized caregivers enhances or negates the mental health of infants.

Strengths and weaknesses

This study is unique for its thorough observation of parent-child interactions among refugees often severely traumatized by war. Research among refugees is scarce, but tremendously needed. Not only is there a global increase in refugees but also they are a population increasing in level of psychosocial problems. Despite the heterogeneity of the population within this study, we were able to establish statistically significant associations.

A methodological issue that requires comment is the size of our sample. In view of the imperviousness of the asylum seeker and refugee population a sample size of 49 is considered noteworthy. In view of statistical analyses a larger sample size is considered preferable. Another methodological issue that requires comment is the validation of the used tests and questionnaires. The tests or questionnaires we used were not specifically validated for this population, because for refugees validated tests are almost non-existent. To alleviate this issue we chose for tests or questionnaires which had been used with good results in populations from different cultural backgrounds. In addition, we chose for a combination of tests and questionnaires. Considering the cultural heterogeneity of our sample and the combination of measurements, the associations identified are likely to be an outcome of traumatic stress on part of the mother.

Clinical implications

Considering the results of this study it makes sense for clinicians counseling traumatized parents to inquire about parenthood and the wellbeing of children. We even postulate a responsibility for clinicians counseling adults to care about the children of their clients, and consequently a responsibility to direct the children to care when needed. In addition, the results indicate a need to re-establish 'attunement' between mother and child. Traumatized mothers can regain sensitivity when they are enabled to regulate their arousal not only in response to trauma triggers, but also in response to the unique triggers of parent-child interaction. Children can regain responsiveness when they are enabled to feel safe and confident in the relationship. A combined treatment of both mother and child, even at young age, is recommended. Still, clinicians need to remain open-minded for other explanations of mothers' and infants' behavior. The associations between maternal posttraumatic stress and the emotional availability within the parent-child interaction was statistically significant but explained only part of the association. Other variables, not covered within this study, might be of equal or bigger importance to explain the association.

Finally, we must not forget the resilience of these families. As noted in this study, most mothers experienced many severe traumatic experiences. Despite these past experiences and current stress, they tried to give their best to their child. Some acknowledged they experienced difficulties in caregiving, others did not. But all of them desired safety and happiness for their child. When counseling is needed, this desire can be the entry for a clinician.

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References

Achenbach, T. M. (1992). *Manual for the Child Behavior Checklist 4-18 and 1991 profile*. Burlington: University of Vermont, Department of Psychiatry.

Achenbach, T. M. (1992). *Manual for the Child Behavior Checklist 2-3 and 1992 profile*. Burlington: University of Vermont, Department of Psychiatry.

Achenbach, T. M., & Rescorla, L.A. (2000). *Manual for the ASEBA preschool forms and profiles*. Burlington: University of Vermont, Department of Psychiatry.

Al-Turkait, F. A., & Ohaeri, J. U. (2008). Psychopathological status, behavior problems, and family adjustment of Kuwaiti children whose fathers were involved in the first Gulf War. *Child and Adolescent Psychiatry and Mental Health*, *2*, 2-12.

Banyard, V. L., Williams, L. M., & Siegel, J. A. (2003). The impact of complex trauma and depression on parenting: An exploration of mediating risk and protective factors. *Child Maltreatment*, *8*, 334-349.

Bar-On, D., Eland, J., Kleber, R. J., Krell, R., Moore, Y., Sagi, A., Soriano, E., Suedfeld, P., Van der Velden, P. G., & Van IJzendoorn, M. H. (1998). Multigenerational perspectives on coping with the Holocaust experience: An attachment perspective for understanding the developmental sequalae of trauma across generations. *International Journal of Behavioral Development*, *22*, 315-338.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182.

Benoit, D., Parker, K., & Zeanah, C. H. (1997). Mothers' representations of their infants assessed prenatally: Stability and association with infants' attachment classifications. *Journal of Child Psychology*, *Psychiatry and Allied Disciplines*, *38*, 307-313.

Biringen, Z. (2008). *The emotional availability (EA) scales*, *4th edition*. Boulder: emotionalavailability.com.

Bögels, S. M., & Brechman-Toussaint, M. L. (2006). Family issues in child anxiety: Attachment, family functioning, parental rearing and beliefs. *Clinical Psychology Review*, *26*, 834-856.

Chaudhuria, J. H., Easterbrooks, M. A., & Davis, C. R. (2009). The relation between emotional availability and parenting style: Cultural and economic factors in a diverse sample of young mothers. *Parenting: Science and Practice*, *9*, 277-299.

Cohen, L. R., Hien, D. A., & Batchelder, S. (2008). The impact of cumulative maternal trauma and diagnosis on parenting behavior. *Child Maltreatment*, *13*, 27-38.

Danieli, Y. E. (1998). *International handbook of multigenerational legacies of trauma*. New York: Plenum.

Daud, A., Klinteber af, B., & Rydelius, P. (2008). Resilience and vulnerability among refugee children of traumatized and non traumatized parents. *Child and Adolescent Psychiatry and Mental Health*, *2*, 7-17.

Derogatis, L., Lipman, R., Rickels, K., Uhlenhuth, E., & Covi, L. (1974). The Hopkins symptom checklist (HSCL), a self-report symptom inventory. *Behavioural Science*, *19*, 1-15.

Dutra, L., Bureau, J., Holmes, B., Lyubchik, A. & Lyons-Ruth, K. (2009). Quality of early care and childhood trauma. A prospective study of developmental pathways to dissociation. *The Journal of Nervous and Mental Disease*, *197*, 383-390).

Emde, R., & Easterbrooks, A. (1985). Assessing emotional availability in early development. In W. Frankenburg, R. Emde, & J. Sullivan (Eds.), *Early Identification of Children at Risk. An International Perspective.* (pp. 79-101). New York/ London: Plenum Press.

Harwood, R. L., Miller, J. G., & Irizarry, N.L. (1995). *Culture and attachment: Perceptions of the child in context*. New York: Guilford Press.

Hollifield, M., Warner, T. D., Lian, N., Krakow, B., Jenkins, J. H., Kesler, J., … Westermeyer, J. (2002). Measuring trauma and health status in refugees: A critical review. *Journal of the American Medical Association*, *299*, 611-621.

Hoven, C. W., Duarte, C. S., Wu, P., Doan, T., Singh,. N., Mandel, D. J., … & Cohen, P. (2009). Parental exposure to mass violence and child mental health: The first responder and WTC evacuee study. *Clinical Child Family Psychology Review*, *12*, 95-112.

Hoven, C. W., Duarte, C. S., Wu, P., Erickson, E., Musa, G., & Mandell, D. J. (2004). Exposure to trauma and separation anxiety in children after the WTC attack. *Applied Developmental Science*, *8*, 172-183.

Keller, H., Borke, J., Yovsi, R., Lohaus, A., & Jensen, H. (2005). Cultural orientations and historical changes as predictors of parenting behaviour. *International Journal of Behavioral Development*, *29*, 229-237.

Kitzmann, K. M., Gaylord, N. K., Holt, A. R., & Kenny, E. D. (2003). Child witnesses to DV: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *71*, 339-352.

Kleyn, W. C., Hovens, J. E., & Rodenburg, J. J. (2001). Posttraumatic stress symptoms in refugees: assessment with the Harvard trauma questionnaire and the Hopkins symptom checklist-25 in different languages. *Psychological Reports*, *88*, 527-532.

Lauterbach, D., Bak, C., Reiland, S., Mason, S., Lute, M. R., & Earls, L. (2007). Quality of parental relationships among persons with a lifetime history of posttraumatic stress disorder. *Journal of Traumatic Stress*, *20*, 161-172.

Leon, G. R., Butcher, J. N., Kleinman, M., Goldberg, A., & Almagor, M. (1981). Survivors of the Holocaust and their children: Current status and adjustment. *Journal of Personality and Social Psychology*, *41*, 503-516.

Levav, I., Levinson, D., Radomislensky, I., Shemesh, A., & Kohn, R. (2007). Psychopathology and other health dimensions among the offspring of Holocaust survivors: Results from the Israel national health survey. *Israel Journal of Psychiatry*, *44*, 144-151.

Levendosky, A. A., Leahy, K. L., Bogat, A., Davidson, W. S., & Von Eye, A. (2006). Domestic violence, maternal parenting, maternal mental health, and infant externalizing behavior. *Journal of Family Psychology*, *20*, 544-552.

Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior: A meta-analytic review. *Clinical Psychology Review*, *20*, 561-592.

Lyons-Ruth, K., & Block, D. (1996) The disturbed caregiving system: Relations among childhood trauma, maternal caregiving, and infant affect and attachment. *Infant Mental Health Journal*, *17*, 257-275.

Lyons-Ruth, K., Bronfman, E., & Atwood, G. (1999). A relational diathesis model of hostilehelpless states of mind: Expressions in mother-infant interaction. In J. Solomon & C. George (Eds.), *Attachment disorganization* (pp. 33-70). New York: The Guilford Press.

Madigan, S., Moran, G., & Pederson, D. R., (2006). Unresolved states of mind, disorganized attachment relationships, and disrupted interactions of adolescent mothers and their infants. *Developmental Psychology*, *42*, 293-304.

Main, M., & Hesse, E. (1990). Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention. The John D. and Catherine T. MacArthur Foundation series on mental health and development.* (pp. 161-182). Chicago, IL: The University of Chicago Press.

McDonaugh-Coyle, A., McHugo, G. J., Friedman, M. J., Schnurr, P. P., Zayfert, C., & Descamps, M. (2001). Psychophysiological reactivity in female sexual abuse survivors. *Journal of Traumatic Stress*, *14*, 667-683.

Mollica, R. F., Caspi-Yavin, Y., Bollini, P., Truong, T., Tor, S., & Lavelle J. (1992). The Harvard trauma questionnaire: validating a cross-cultural instrument for measuring torture, trauma, and posttraumatic stress disorder in refugees. *Journal of Nervous Mental Disorders*, *180*, 111-116.

Mollica, R. F., Wyshak, G., De Marneffe, D., Tu, B., Yang, T., Khuon, F., … & Lavelle, J. (1996). Hopkins symptom checklist (HSCL-25); Manual for Cambodian, Laotian, and Vietnamese versions. *Torture*, *6* (suppl. 1), 35-42.

Murray, L., Fiori-Cowley, A., Hooper, R., & Cooper, P. J. (1996). The impact of postnatal depression and associated adversity on early mother infant interactions and later infant outcome, *Child Development*, *67*, 2512–2526.

Niederland,W. G. (1981). The survivor syndrome: Further observations and dimensions. *Journal of the American Psychoanalytic Association*, *29*, 413-425.

Pernice, R., & Brook, J. A. (1996). Refugees' and immigrants' mental health: Association of demographic and post-immigration factors. *The Journal of Social Psychology*, *136*, 511-519.

Pipp-Siegel, S. (1998). Assessing the quality of relationships between parents and children: The emotional availability scales. *Volta Review*, *100*, 279-298.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, *36*, 717-731.

Ruscio, A. M., Weathers, F. W., King, L. A., & King, D. W. (2002). Male war-zone veterans' perceived relationships with their children: The importance of emotional numbing, *Journal of Traumatic Stress*, *15*, 351-357.

Samper, R. E., Casey, T. T., King, D. W., & King, L. A. (2004). Posttraumatic stress disorder symptoms and parenting satisfaction among a national sample of male Vietnam veterans. *Journal of Traumatic Stress*, *17*, 311-315.

Schechter, D. S., Coates, S. W., Kaminer, T., Coots, T., Zeanah, C. H., Davies, M., …, & Myers, M. M. (2008). Distorted maternal mental representations and atypical behavior in a clinical sample of violence-exposed mothers and their toddlers. *Journal of Trauma and Dissociation*, *9*, 123-147.

Schechter, D. S., Willheim, E., Hinojosa, C., Scholfield-Kleinman, K., Blake Turner, J., McCaw, J., … & Myers, M. M. (2010). Subjective and objective measures of parent-child relationship dysfunction, child separation distress, and joint attention. *Psychiatry*, *73*, 130-144.

Scheeringa, M. S., & Zeanah, C. H. (2001). A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress*, *14*, 799-815.

Schreier, A., Wittchen, H., Höfler, M., & Lieb, R. (2008). Anxiety disorders in mothers and their children: Prospective longitudinal community study. *The British Journal of Psychiatry*, *192*, 308-309.

Sigal, J. J., & Weinfeld, M. (1989). *Trauma and rebirth. Intergenerational effects of the Holocaust*. New York: Praeger.

Skovgaard, A. M., Houmann, T., Landorph, S. L., & Christiansen, E. (2004). Assessment and classification of psychopathology in epidemiological research of children 0–3 years of age. A review of the literature. *European Children and Adolescence Psychiatry*, *13*, 337-346.

Skovgaard, A. M., Houmann, T., Christiansen, E., Landorph, S., Jϕrgensen, T., & CCC 2000 study team (2007). The prevalence of mental health problems in children 1½ years of age- the Copenhagen Child Cohort 2000. *Journal of Child Psychology and Psychiatry*, *48*, 62-70.

Skovgaard, A. M., Olsen, E. M., Christiansen, E., Houmann, T., Landorph, S., Jørgensen, T., & CCC 2000 study team (2008). Predictors (0-10 months of psychopathology at age 1½ years – a general population study in the Copenhagen Child Cohort CCC 2000. *The Journal of Child Psychology and Psychiatry*, *49*, 553-562.

Smith Fawzi, M., Murphy, E., Pham, T., Lin, L., Poole, C., & Mollica, R. (1997). The validity of screening for posttraumatic stress disorder and major depression among Vietnamese former political prisoners. *Acta Psychiatrica Scandinavica*, *95*, 87-93.

Solomon, Z., Kotler, M., & Mikulincer, M. (1998). Combat-related posttraumatic stress disorder among second-generation Holocaust survivors: Preliminary findings. *American Journal of Psychiatry*, *145*, 865-868.

Suedfeld, P. (2000). Reverberations of the Holocaust fifty years later: Psychology's contributions to understanding persecution and genocide. *Canadian Psychology-Psychologie Canadienne*, *41*, 1-9.

Thapa, S., & Hauff, E. (2005). Psychological distress among displaced persons during an armed conflict in Nepal. *Social Psychiatry and Psychiatric Epidemiology*, *40*, 672-679.

Tull, M.T., Barrett, H.M., McMillan, E.S., & Roemer, L. (2007). A preliminary investigation of the relationship between emotion regulation difficulties and posttraumatic stress symptoms. *Behavior Therapy*, *38*, 303-313.

Van der Kolk, B. A. (1994). The body keeps the score: Memory and the evolving psychobiology of posttraumatic stress. *Harvard Review of Psychiatry*, *1*, 253-265.

Van der Kolk, B. A., & Fisler, R. E. (1994). Childhood abuse and neglect and loss of self-regulation. *Bulletin of the Menninger Clinic*, *589*, 145-168.

Van der Meulen, B. F., Ruiter, S. A. J., Spelberg, H. C., & Smrkovsky, M. (2000). *Bayley scales of infant and toddler development-II-NL*. Lisse: Swets Test Publishers.

Van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., & Sagi-Schwartz, A. (2003). Are children of Holocaust survivors less well-adapted? A meta-analytic investigation of secondary traumatization. *Journal of Traumatic Stress*, *16*, 459-469.

Van IJzendoorn, M. H., & Sagi-Schwartz, A. (2008). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. C. Caddisy & P. R. Shaver (Eds.). *Handbook of attachment: Theory, research, and clinical applications* (pp. 880-905), New York: Guilford Press.

Yehuda, R., Schmeidler, J., Wainberg, M., Binder-Brynes, K., & Duvdevani, T. (1998). Vulnerability to posttraumatic stress disorder in adult offspring of Holocaust survivors. *American Journal of Psychiatry, 155*, 1163-1171.

Chapter 4

Father-involvement in a refugee sample: Relations between posttraumatic stress and caregiving

Father-involvement in a refugee sample: Relations between posttraumatic stress and caregiving
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Healthy parent-child interaction is recognized as essential for early childhood development. Research has long been focused solely on mothers, because they have been considered the primary caregivers; fathers meanwhile have been considered to be providers. Recently, however, ideas of and attitudes toward fatherhood have been changing, at least in Western societies, as fathers are increasingly perceived as being true co-parents (Connell & Goodman, 2002; McBride, Schoppe, & Rane, 2002). Despite these changing perceptions there is little empirical evidence on how this translates into daily father involvement. Some research results suggest that the aspects of both the quantity and quality of father involvement are associated with the wellbeing of their children (Flouri & Buchanan, 2003; Frascarolo, 2004; Harris, Furstenberg, & Marmer, 1998).

Sensitivity and responsivity, reading and responding accurately to the child's cues, are regarded as the most important markers of the quality of the parent-child interaction. Some research has found that fathers are less sensitive or responsive than mothers (Forbes, Cohn, Allen, & Lewinsohn, 2004; Nakamura, Stewart, & Tatarka, 2000; Volling, McElwain, Notaro, & Herrera, 2002), whereas other research has found that fathers are as sensitive or responsive as mothers (Boechler, Harrison & Magill-Evans, 2003; De Falco, Venuti, Esposito, & Bornstein, 2009). The feelings of competency and self-efficacy that result from a higher quantity of involvement could be an explanation for these found differences. As fathers shape their children's attachment through direct and indirect channels (Thompson, 1997; Van IJzendoorn & De Wolff, 1997), the quality of their involvement is of substantial importance. Sensitive and responsive father-child interactions have been found to be related to more optimal child development (Gable, Crnic, & Belsky, 1994; Magill-Evans & Harrison, 2001).

Mental illnesses, such as posttraumatic stress disorder (PTSD), interfere with the quality of parent involvement. A parent's sensitivity is precisely the capacity that might be hindered by posttraumatic stress symptoms, as these symptoms include the impairment of the ability to regulate affect and arousal. Traumatized mothers are found to be less sensitive, less available, less involved and more hostile and intrusive (Davies, Slade, Wright, & Stewart, 2008; Kaitz, Levy, Ebstein, Faraone, & Mankuta, 2009; Lyons-Ruth & Block, 1996; Tees et al., 2010; Van Ee, Kleber, & Mooren, 2012). Lack of caregivers' regulation impairs the development of the child's self-regulation, and as a consequence behavioral maladaptation may result. Therefore, trauma related psychopathology constitutes a risk-factor in the mental health of the child (Dutra, Bureau, Holmes, Lyubchik, & Lyons-Ruth, 2009; Leen-Feldner, Feldner, Bunaciu, & Blumenthal,

2011; Skovgaard et al., 2008; Vaage et al., 2011). One of the most welldocumented groups experiencing indirect effects of trauma are the children of survivors of the Nazi Holocaust. Children born after World War II to Holocaust survivors exhibited negative effects due to the traumatic experiences of their parents (e.g. Brom, Kfir & Dasberg, 2001; Levav, Levinson, Radomislensky, Shemesh, & Kohn, 2007; Yehuda, Schmeidler, Wainberg, Binder-Brynes, & Duvdevani, 1998). However, the issue of a traumatization of these children – as is assumed in the concept of transgenerational traumatization – is not undisputed. The psychopathology of the offspring of survivors has sometimes been stressed to an extent unwarranted by empirical research.

Despite increased attention on the role of the fathers, there is still a dearth of studies on the impact of trauma on father-involvement. Studies on the longterm effects of war in the USA and Israel found that children with a veteran father suffering from PTSD had significantly more behavioral problems than did children of veteran fathers without PTSD (Figley & Kleber, 1995; Jordan et al., 1992; Lester et al., 2010; Rosenheck & Fontana, 1998). Posttraumatic stress jeopardizes fathers' perception of the quality of parent-child interaction. Studies of male Vietnam veterans show that fathers with PTSD, in particular those who suffer from avoidance and emotional numbing, evaluate the quality of the parent-child relationship as poorer and parenting as less satisfying (Ruscio, Weathers, King, & King, 2002; Samper, Taft, King, & King, 2004). Fathers with PTSD symptoms were more likely to report the endorsement of aggression towards their children (Leen-Feldner, Feldner, Bunaciu, & Blumenthal, 2011; Stover, Hall, McMahon & Easton, 2012). To our knowledge, only the perceptions of traumatized fathers have been studied and not the actual assessed quality of father-child interaction. This study investigates the quantity and quality of father-involvement in a refugee and asylum seeker population. Many refugees and asylum seekers have suffered the hardships of multiple traumatic events and forced migration. The accumulation of these stressful events can lead to considerable psychological problems (Fazel, Wheeler, & Danesh, 2005; Nickerson et al., 2011). Observations of the interactions of refugee and asylum seekers with their young non traumatized children offer a unique opportunity to study father-involvement within a high-risk sample. To provide a comprehensive picture of father-involvement, this study empirically tests the quantity and quality of father-involvement compared to that of mothers, and the influence of posttraumatic stress on the quality of the interaction. Specifically, we hypothesize that compared with mothers, fathers are quantitatively less involved with their children (less time for caregiving interactions). The characteristic symptoms of posttraumatic stress (such

as avoidance, numbing and hyperarousal) affect the quality of father-child interaction likewise posttraumatic stress influences the quality of mother-child interaction. In addition, we hypothesize that posttraumatic stress not only influences the perception but also the actual quality of involvement.

Method

Participants

The participants were recruited from Dutch asylum seeker centers and from client groups at Centrum '45, a national treatment and expertise center for psychological trauma. Participants included in this study met the following criteria: they (a) were asylum seekers or refugees who had been exposed to traumatic events, (b) had at least one child aged 18-42 months, who had been born in the Netherlands and had not been exposed to a traumatic event, and (c) did not suffer from addiction, mental retardation or psychosis.

At our first research site, Centrum '45, therapists were asked which of their patients met the inclusion criteria. All eligible patients were asked by their therapist if the research team could inform them on the project. Of these 83 eligible parents, 38 consented to participate in the study. Those who agreed to participate did not differ from those who did not in terms of age, country of origin, education or reported posttraumatic stress symptoms on the Harvard Trauma Questionnaire. There was a significant difference (t = 2.87, p = .01) in time spent in the Netherlands between participating (M = 8.64 years, SD = 5.22) and non-participating clients (M = 12.56, SD = 3.35).

At our second research site, the asylum seeker centers, we used several strategies to recruit participants (word of mouth, leaflets in the living room, providing information door to door). The majority of the participants were recruited via word of mouth. Fifty-five parents consented to participate. Three fathers who were directly approached declined, but non-response is difficult to estimate, as we do not know how many eligible parents heard of the research project but decided not to show interest.

Of the 93 parents who consented to participate from both research sites, 13 dyads were excluded: seven did not meet the inclusion criteria, one participant was in the final trimester of her pregnancy, one participant could not participate in the study because of work-related circumstances, and four participants did not show up.

The final sample consisted of 80 parents and their children: 29 fathers, 51 mothers, 37 sons and 25 daughters. One parent participated of 62 children, both parents participated of 18 children. Mean ages for fathers, mothers and their children were 35.63 years (*SD* = 7.97), 29.57 years (*SD* = 6.15) and 27.14 months (*SD* = 9.10), respectively. The socioeconomic status of the sample was low as, within the Netherlands, asylum seekers are not allowed to work or study and most refugees are unemployed or working in low status jobs. The level of education among participants was strongly divided: 20% had no or little education, 15% had finished primary school, 18.8% had finished secondary school, 11.3% had finished vocational education and 27.5% held a professional or university degree. Parents had fled from various geographical regions: Middle East (43.8%), Africa (32.5%), East Europe (12.5%), Asia (8.8%), and South America (2.6%). Parents had experienced multiple traumas (*M* = 12, range 1-20). Examples of the most common traumatic experiences are torture (44%), combat situation (46%), threatened with torture (49%), unnatural death of a family member (53%), forced separation of family members (56%), and near-death experience (59%).

Procedure

Measurements were taken over the course of one day and took place at Centrum '45 or at a designated area in the asylum seeker center. On arrival the study procedures were explained and informed consent was obtained. The MINI questionnaire (Overbeek, Schruers, & Griez, 1999) was conducted to check addiction and psychotic phenomena. In case of a language barrier, qualified interpreters were available. Participants received 25 euros as a financial compensation and reimbursement of travel expenses. Procedures were approved by the Ethical Committee of Leiden University Medical Center.

Measures

Traumatic events and stress. The Harvard Trauma Questionnaire (HTQ) (Mollica, Caspi-Yavin, Bollini, & Truong, 1992), a self-report measure, was used to assess posttraumatic stress symptoms, according to the Diagnostic and Statistical Manual of Mental Disorders-IV (2000). The posttraumatic stress disorder (PTSD) score for this questionnaire is obtained from 16 items on which participants indicate the degree to which various symptoms have bothered them in the past week on a four-point Likert scale (where 1 = not at all and 4 = extremely). The HTQ has been found to be statistically reliable and is available in many different languages (Hollifield et al., 2002; Kleijn, Hovens, & Rodenburg, 2001).

Quantity of caregiving. A questionnaire describing the responsibilities for caregiving activities was developed by the research team. This questionnaire consists of nine common caregiving tasks (e.g. bathing, diapering, feeding, dressing, and putting the child to bed), and five non-specified play activities that parents could use to describe activities (e.g. playing, reading, watching TV together). To maximize the chance of accurate recall, parents were asked to report which task or activity was done by whom (participant, partner, or a third party) on an average day, preferably the day before participating in the study. A total score was calculated by giving a point for each activity that was performed by the participant: a maximum score of 14 points could be given.

Emotional availability. The quality of parent-child interaction was evaluated from a 15-minute videotaped free-play session between a parent and child, using the Emotional Availability Scales (EAS), fourth edition (Biringen, 2008). Emotional availability can be described as the quality of parent-child interactions, and this specifically focuses on parents' accessibility and ability to read and respond properly to the child's communicative input (Biringen & Robinson, 1991). The EAS consist of six dimensions, of which four dimensions concern the emotional availability of the adult toward the child: sensitivity concerns the adult's ability to be warm and emotionally connected to the child; structuring refers to the parents' ability to structure the child's play appropriately and in the right amount; non-intrusiveness concerns the parents' capacity to be available to the child when needed, without being intrusive and undermining the child's autonomy; and non-hostility refers to the degree of hostility expressed, both verbal and non-verbal. The dimensions are dyadic, as they take both adult behavior and child response into account. The total scale score can range from 1 to 7, where higher scores indicate a better quality of interaction.

Two raters trained for reliability by the Biringen lab and unaware of parental history of trauma or level of symptoms independently watched the entire 15-minute videotaped sessions and coded each dimension separately. Inter-rater reliability was based on a randomly selected 30% of the videotapes and was found to be satisfactory. Intraclass correlations ranged from .76 to .91 (sensitivity: ICC = .89, structuring: ICC = .91, non-intrusiveness: ICC = .86 and non-hostility: ICC = .76).

Perception of parent-child relationship. The Working Model of the Child Interview was designed to assess parents' internal representations, or "working model," of their relationship with their child (Zeanah, Benoit, & Barton, 1986). From the 19 questions in this interview, we selected 9 questions on different

aspects of the relationship between father and child to qualitatively assess the fathers' perception of the parent-child relationship:

1. Could you describe your impression of your child's personality? 2a. At this point, whom does your child remind you of? 2b. How did you decide on your child's name? How well does the name seem to fit? 3. What do you feel is unique or different about your child compared to (what you know of) other children? 4. What about your child's behaviour is most difficult to handle? How do you feel when your child reacts that way? 5. How would you describe your relationship with your child now? 6. Do you feel your problems or your relationship with your child has affected your child? 7. What pleases you most about your relationship with your child? 8. Are there any regrets or setbacks you would have liked your child to have been spared from? 9. Think for a moment of your child as an adult. What hopes and fears do you have about that time?

The interviews were conducted in an open-ended manner, allowing fathers to discuss significant elements of the parent-child relationship with minimal guidance from the interviewer.

Data analysis

Differences between fathers and mothers on the HTQ, caregiving, and EAS scores were examined with independent samples t-tests. Multiple hierarchical regression analyses were conducted to further explore the associations. In line with previous research we controlled for parental age. Nine participants were not included in the analyses because of missing data on one of the variables.

All interviews on the perception of the parent-child relationship were transcribed and two trained master's students coded each potentially significant fragment referring to fatherhood from the first five transcripts independently. Using the grounded theory method the coding process involved three levels of data coding, starting with underlining key words and phrases and followed by summarizing key phrases into codes. The differences were then discussed within the research team until consensus was reached. The remaining interviews were compared with existing codes to identify similarities and differences. Finally, the codes were independently grouped into themes by the first and second author. They were fully in agreement on the themes described in this paper. Theoretical saturation was suspected after 11 interviews and then confirmed with the subsequent interviews.

Results

Parental posttraumatic stress and father-involvement

Table 4.1 provides an overview of the descriptive statistics and the results of the t-tests of fathers' and mothers' posttraumatic stress and involvement. Both fathers and mothers reported high rates of posttraumatic stress symptoms. No difference was found in these rates of posttraumatic stress between fathers and mothers. Based on a cut-off score of 2.45 (Mollica et al., 1992), 86% of all fathers and 72% of all mothers were classified as having PTSD.

On average, fathers performed 1.4 caregiving tasks (*SD* 2.29) during one day and 0.9 play activities (*SD* 1.21). Mothers performed on average 6.4 caregiving tasks (*SD* 2.75) and 2.8 play activities (*SD* = 1.96). Within this sample, refugee mothers performed four times as many caregiving tasks and activities than fathers (t = -7.55, p = .00).

The overall interaction quality of refugee and asylum seeker fathers was found to be moderately positive. According to the Emotional Availability Scales Manual (Biringen, 2008) refugee and asylum seeker fathers were classified as inconsistently sensitive, indicating that their behavior fluctuated from sensitive at some times to preoccupied with other concerns, or other questionable behaviors, at other times. They were inconsistently structuring; that is to say, they tended to provide some structure and supportive frame, but overall were inconsistent in their capacity to guide the child. Furthermore, they were classified as generally non-intrusive. Parents were leaving enough space in the interaction for the child to explore and lead, but there were signs of overprotection and overparenting. Finally, the overall climate between parent and child was non-hostile, but the parent did show negative affect in the form of boredom, impatience or frustration. There were no statistically significant differences between fathers and mothers on any of the four EAS scores.

Table 4.1 Descriptive statistics and t-tests for parental posttraumatic stress scores and involvement

	Fathers	Mothers	*t*	*p*
HTQ PTS			1.53	.13
M	2.82	2.56		
SD	0.77	0.70		
Range	1.3-4	1.1-3.7		
Caregiving				
M	2.34	9.22	-7.55	.00
SD	3	4.34		
Range	0-14	0-14		
EA Scales				
Sensitivity			.71	.48
M	4.41	4.16		
SD	1.35	1.68		
Range	2-7	1-7		
Structering			.50	.62
M	4.41	4.24		
SD	1.27	1.66		
Range	2-7	1-7		
Non-intrusiveness			.80	.43
M	4.59	4.33		
SD	1.50	1.07		
Range	1-7	1-6		
Non-hostility			.49	.62
M	5.07	4.92		
SD	1.31	1.28		
Range	3-7	1-7		

Note. *p < .05; **p < .01.

Interaction effect of gender and posttraumatic stress on quality of involvement

Multiple hierarchical regression analyses were performed for each of the four EA scales (Table 4.2) to establish the influence of posttraumatic stress on the quality of interaction. Variables were entered in the following order: block 1 – parental age; block 2 – parental gender; block 3 – posttraumatic stress symptoms score; and block 4 – parental gender x posttraumatic stress symptoms. An interaction term was added to test whether gender and posttraumatic stress did interact. For this purpose an interaction variable was created, and subsequently converted into z-scores. In the first step, parental age was added as a covariate, which was not significant. In the second step, gender was entered into the model. As expected, gender did not predict EA scores on any of the four scales. In the third step, the posttraumatic stress score was added to the equation and was found to predict sensitivity, structuring and non-hostility. Parents with high scores for posttraumatic stress were less sensitive and structuring, and more hostile.

Table 4.2 Outcome of the hierarchical regression analyses for estimating the effects of predictor variables on the parent-child interaction quality

	Sensitivity			Structuring			Non-intrusiveness			Non-hostility		
	B	*SE B*	*β*	*B*	*SE B*	*B*	*B*	*SE B*	*Beta*	*B*	*SE B*	*β*
Step 1												
Parental Age	0,00	0,02	-0,01	0,00	0,02	-0,02	0,00	0,02	-0,01	0,00	0,02	-0,02
Step 2												
Parental Age	-0,01	0,03	-0,05	-0,01	0,03	-0,04	-0,01	0,02	-0,05	-0,01	0,02	-0,04
Parental Gender	-0,33	0,40	-0,11	-0,21	0,39	-0,07	-0,30	0,32	-0,18	-0,13	0,32	-0,05
Step 3												
Parental Age	-0,01	0,02	-0,04	-0,01	0,03	-0,04	-0,01	0,02	-0,05	-0,01	0,02	-0,03
Parental Gender	-0,54	0,38	-0,17	-0,35	0,38	-0,13	-0,40	0,32	-0,16	-0,24	0,31	-0,10
PTS Symptoms	-0,79	0,23	-0,38**	-0,56	0,23	-0,28*	-0,38	0,20	-0,23	-0,44	0,19	-0,26*
Step 4												
Parental Age	-0,01	0,02	-0,04	-0,01	0,03	-0,04	-0,01	0,02	-0,05	-0,01	0,02	-0,03
Parental Gender	-0,53	0,38	-0,17	-0,31	0,38	-0,10	-0,40	0,32	-0,17	-0,27	0,32	-0,11
PTS Symptoms	-0,79	0,23	-0,38**	-0,55	0,23	-0,27*	-0,39	0,20	-0,23*	-0,44	0,19	-0,27*
PTS Symptoms * Parental Gender	-0,02	0,18	-0,01	-0,20	0,18	-0,13	0,19	0,15	0,15	0,11	0,15	0,09

Note.
Sensitivity: R^2 = .00 for Step 1, ΔR^2 = .01 for Step 2, ΔR^2 = .14* for Step 3, ΔR^2 = .00 for Step 4
Structuring: R^2 = .00 for Step 1, ΔR^2 = .00 for Step 2, ΔR^2 = .08* for Step 3, ΔR^2 = .02 for Step 4
Non-intrusiveness: R^2 = .00 for Step 1, ΔR^2 = .01 for Step 2, ΔR^2 = .05 for Step 3, ΔR^2 = .02 for Step 4
Non-hostility: R^2 = .00 for Step 1, ΔR^2 = .00 for Step 2, ΔR^2 = .07* for Step 3, ΔR^2 = .01 for Step 4
*p < .05; **p < .01.

Posttraumatic stress was marginally significant on the non-intrusiveness scale. Finally, we added an interaction term between gender and posttraumatic stress, which did not reach significance.

Fathers' perception of the parent-child relationship

Fathers' perception of their child. When asked about the personality of their children, fathers mostly reported positive characteristics such as sweet, friendly, obedient, and determined (59%). Fathers did, however, also report negative characteristics such as easily angry, aggressive, impatient and anxious. Both the positive and negative characteristics reminded those fathers of themselves (26%). The children's appearance reminds fathers more often of the mothers. When asked what is unique about their child, 64% of the fathers mentioned positive characteristics such as smart, social, sweet and happy. Fourteen percent of the fathers mentioned negative characteristics such as excessive crying, difficulties with eating, and a delay in their development. Nine percent of the fathers emphasized that their child is normal and not different from other children.

Difficulties in the interaction with their children. Of the interviewed fathers, 41% had difficulty handling aggressive, angry or busy behavior; they found yelling or screaming especially difficult to tolerate ("She is not the problem, I am. I have difficulties with loud behavior. I can't stand it if she is busy and noisy, but that's how children are"). Some fathers reacted by giving in ("If he wants something, I just give it to him. I do not want to give in, but otherwise he will just continue to scream"), others reacted angrily and lose control ("Sometimes I hit him and he starts crying. He feels pain, but that can happen. I lost control, I am in pain too").

Some fathers (18%) described stubborn and independent behavior as difficult to handle. They either wanted to protect the child against danger or described a lack of patience or feeling of agitation when the child takes too much time to do things by themselves: "Everything she does she wants to do by herself, it makes me tired. (…) It confuses me; it drives me crazy because it takes forever. It makes me aggressive. I do not want that to happen, but it happens automatically."

Still, almost all fathers described their relationship with their children as good, close and loving. Most fathers (92%) felt satisfied with the father-child relationship, and 36% of them felt their role was acknowledged as important.

The impact of traumatization on fatherhood. Three fathers (11%) recognized that their own mental health is a condition for doing well together: "We have no issues, we are good together. But if he makes noise and I have a headache, then we do badly together. Then we collide." Traumatized parents can view their child as a hope for a better life or a better future (Kaitz et al., 2009; Weine, Muzurovic, Kalauzovic, 2004). Seven of the interviewed fathers (25%) described their child as very important to them. Having survived their traumatic experiences their children became their source of happiness and hope for the future, for example: "I live for her. If she wasn't there I wouldn't be alive anymore, not here, not today," and "Maybe he is the only one that gives me hope for the future. He is the only reason to get up in the morning. He keeps me alive." Four fathers (14%) described protecting their child as one of their most important responsibilities.

Many fathers (55%) indicated that their own issues had a negative impact on their relationship with their child. This is put down to the fact that children feel the sadness of the father, for example: "She senses when I am sad. She asks me: 'Why are you so far away in your thoughts, why aren't you happy?' Very often she asks me this." Other fathers mentioned that anger or aggressiveness had a negative impact on the relationship. Some fathers (19%) regretted their behavior, but did not feel in control. Fathers (14%) also considered that living at the asylum seeker center or having no residency permit was an important stressor with a negative impact on the relationship. A minority (14%) were convinced that they could keep their problems to themselves and therefore the problems did not impact upon their relationship with their child: "I do not show my emotions to him, even not when I am nervous or restless. I have an agreement with my wife that our children cannot know."

The future. Interviewed fathers expressed high expectations about the future of their child, which included the hope that they would have a good education and a strong and caring character. The fathers were congruent in their fears about the future of their child, fearing most that their child would become addicted to drugs, become an aggressive person or a criminal. Other major fears expressed were being sent back to their home country and a negative influence of Dutch society or the loss of their own culture.

Discussion

The aim of this study was to provide a comprehensive picture of the quantity and quality of father-involvement in a high-risk refugee and asylum seeker sample. Although fathers are less involved in caregiving tasks and play activities, no parental gender difference was found in the quality of involvement (EAS). Symptoms of traumatic stress negatively affected the perception and the actual quality of parent-child interaction. Nevertheless, almost all fathers described their relationship with their child as good, and their child as very important to them.

Our results support findings from previous studies in which the quantity of the fathers' involvement was found to be less than that of mothers, but did not support findings in which the quality of fathers' involvement was less than that of mothers. Most of these refugee fathers came from more traditional cultures and the quantity of involvement may be similar or even higher than the amount of involvement within their country of origin. The current study found refugee and asylum seeking fathers and mothers to be equally sensitive, structured, intrusive, and hostile. Two studies examining emotional availability in mothers and fathers with children with Down's syndrome and children with psychiatric disorders also failed to discover a difference (De Falco et al., 2009; Wiefel et al., 2005). De Falco et al. (2009) suggested that fathers tailor their interaction style and focus more on the needs of their children when facing extra-familial challenges. By adjusting their interaction style these fathers try to compensate for the difficulties that their children may face. As a result, fathers' and mothers' levels of emotional availability did not differ. This compensation mechanism might also be applicable to refugee and asylum seeker fathers, as they face difficulties that put their children at risk (Shimoni, Este, & Clark, 2003). Furthermore, previous studies have suggested that fathers suffer more from immigration stress than mothers do (Lamb & Bougher, 2009; Shimoni et al., 2003). In order to gain a new influential role in the family, fathers may compensate for their role loss as protector and provider by investing more energy in the interaction with their child (Este & Tachble, 2009; Lamb, 2010; Qin, 2009).

Interestingly, in the present study, this likely investment did not translate into an increase in the quantity of father-involvement. Apparently, these fathers invested more energy, but not necessarily more time, in the interaction with their child. In addition, since the quantity of father-involvement was less than that of mothers, fathers might have more opportunity to withdraw when symptoms of

stress worsen. This might enable them to achieve a style of interaction that is qualitatively comparable to that of the mothers. These kinds of compensation mechanisms may lead fathers to reach the same level of interaction quality with their child as mothers.

In accordance with our expectations, traumatic stress symptoms did negatively affect emotional availability. The more parents suffered from posttraumatic stress symptoms, the more hostile, less sensitive, and structured they were when interacting with their child. These findings are in line with previous research (Banyard, Williams, & Siegel, 2003; Cohen, Hien, & Batchelder, 2008; Kaitz et al., 2009). A new but complementary finding is that quality of involvement of both fathers and mothers is equally affected by posttraumatic stress symptoms. Although straightforward, these findings are of clinical importance. Most parent-child interventions are aimed at the mothers, while individual, familial and contextual factors interact in complex ways (Banyard et al., 2003; Thompson, 1997; Van IJzendoorn & De Wolff, 1997). As the quality of father-involvement is of importance to the development of the child, traumatized fathers are as much in need of clinical intervention as mothers.

The themes within the qualitative data suggest that posttraumatic stress has an impact on fatherhood and consequently upon the relationship with the child. For example, fathers describe aggressive, loud, or busy behavior as difficult to handle. Hyper-vigilance and agitation could be a possible explanation for this. Furthermore, fathers describe (excessive) concerns over the safety of the child. Their child has become the only source of happiness and hope for the future. This can be caused by traumatization and lead to protective or even intrusive behavior (Este & Tachble, 2009; Kaitz et al., 2009; Lyons-Ruth & Block, 1996; Scheeringa & Zeanah, 2001). Taking an idiographic approach, emphasizing the diversity and variability over cultures, we have to be wary of cultural differences. For example, describing your child as not different from others could be explained by cultural differences as, in some cultures, to differentiate indicates that there is something wrong. Some cultures mainly discuss the adult perspective, the needs of the children or their perspective are less addressed (Weine et al., 2011; Saraswathi, 2003). Although fathers from different cultural backgrounds were equally distributed as far as the quality of involvement (EAS) is concerned, we do not know in what way their perception of the relationship was affected by culture and migration. The results are perhaps even more interesting from a nomothetic approach: within our sample of fathers from different cultural backgrounds significant association were found between symptoms of PTSD and the quality

of involvement, supporting the notion that the impact of PTSD is generalizable over cultures.

Importantly, almost all fathers described their relationship with their child as good. This perception of the relationship as good despite apparent difficulties could be either a strength or a weakness: a source of resilience or a threshold for treatment. Overall, these data support refugee fathers having a specific involvement within the lives of their children. Mechanisms such as withdrawal and compensation might enable affected fathers to step into the interaction when needed, raise the quality of involvement with their child, and diminish the negative impact of stress resulting from trauma and migration.

Strengths and Limitations

This study is unique for its structured observation of refugee fathers and the interaction with their children. To our knowledge, no research into the actual quality of parent-child interaction of traumatized fathers has been conducted before. In addition, only limited research has been directed at parenting in refugee and asylum seeker families. Therefore, the findings from this study provide new information about parenting of young children in an under-studied group.

The current study is subject to several limitations. The sample was small and culturally diverse. Therefore, findings cannot be generalized to other groups. In view of the imperviousness of the asylum seeker and refugee population, a sample size of 29 fathers is considered noteworthy. In view of statistical analyses, a larger sample size is considered preferable. A final limitation of this study is the selected dimensions of father-involvement, as they represent only some of the many aspects of the impact of forced migration upon parenting (Marchetti-Mercer, 2012; Weine et al., 2011).

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References

Banyard, V. L., Williams, L. M., & Siegel, J. A. (2003). The impact of complex trauma and depression on parenting: An exploration of mediating risk and protective factors. *Child Maltreatment*, *8*, 334-349.

Biringen, Z. (2008). *Emotional Availability (EA) Scales Manual, 4th edition.* Published by emotionalavailability.com.

Biringen, Z., & Robinson, J. (1991). Emotional availability in mother-child interactions: A reconceptualization for research. *American Journal of Orthopsychiatry*, *61*, 258-271.

Boechler, V., Harrison, M. J., & Magill-Evans, J. (2003). Father-child teaching interactions: the relationship to father involvement in caregiving. *Journal of Pediatric Nursing*, *18*, 46-51.

Brom, D., Kfir, R., & Dasberg, H. (2001). A controlled double-blind study on children of Holocaust survivors. *Israel Journal of Psychiatry and Related Sciences*, *38*, 47-57.

Cohen, L. R., Hien, D. A., & Batchelder, S. (2008). The impact of cumulative maternal trauma and diagnosis on parenting behavior. *Child Maltreatment*, *13*, 27-38.

Connell, A. M., & Goodman, S. H. (2002). The association between psychopathology in fathers versus mothers and children's internalizing and externalizing behavior problems: A meta-analysis. *Psychological Bulletin*, *128*, 746-773.

Davies, J., Slade, P., Wright, I., & Stewart, P. (2008). Posttraumatic stress symptoms following childbirth and mothers' perceptions of their infants. *Infant Mental Health Journal*, *29*, 537-554.

De Falco, S., Venuti, P., Esposito, G., & Bornstein, M. H. (2009). Mother-child and father-child emotional availability in families of children with Down syndrome. *Parenting: Science and Practice*, *9*, 198-215.

Dutra, L., Bureau, J. F., Holmes, B., Lyubchik, A., & Lyons-Ruth, K. (2009). Quality of early care and childhood trauma: A prospective study of developmental pathways to dissociation. *The Journal of Nervous and Mental Disease*, *197*, 383-390.

Este, D. C., & Tachble, A. A. (2009). The perceptions and experiences of Russian immigrant and Sudanese refugee men as fathers in an urban center in Canada. *The ANNALS of the American Academy of Political and Social Science*, *624*, 139-155.

Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: a systematic review. *The Lancet*, *365*, 1309-1314.

Figley, C. R. & Kleber, R. J. (1995). Beyond the 'victim': Secondary traumatic stress. In: R. J. Kleber, C. R. Figley & B. P. R. Gersons (Eds.), *Beyond trauma: Cultural and societal dimensions* (pp. 75-98). New York: Plenum.

Flouri, E., & Buchanan, A. (2003). The role of father involvement in children's later mental health. *Journal of Adolescence*, *26*, 63-78.

Forbes, E. E., Cohn, J. F., Allen, N. B., & Lewinsohn, P. M. (2004). Infant affect during parent-infant interaction at 3 and 6 months: differences between mothers and fathers and influence of parent history of depression. *Infancy*, *5*, 61-84.

Frascarolo, F. (2004). Paternal involvement in child caregiving and infant sociability. *Infant Mental Health Journal*, *25*, 509-521.

Gable, S., Crnic, K., & Belsky, J. (1994). Coparenting within the family system: Influences on children's development. *Family Relations*, *43*, 380-386.

Harris, K. M., Furstenberg, F. F., & Marmer, J. K. (1998). Paternal involvement with adolescents in intact families: The influence of fathers over the life course. *Demography*, *35*, 201-216.

Hollifield, M., Warner, T. D., Lian, N., Krakow, B., Jenkins, J. H., Kesler, J., ... & Westermeyer, J. (2002). Measuring trauma and health status in refugees. *JAMA: The Journal of the American Medical Association*, *288*, 611-621.

Jordan, K. B. Marmar, C. R., Fairbank, J. A., Schlenger, W. E., Kulka, R. A., Hough, R. L. & Weiss, D. S. (1992). Problems in families of male Vietnam veterans with posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, *60*, 916-926.

Kaitz, M., Levy, M., Ebstein, R., Faraone, S. V., & Mankuta, D. (2009). The intergenerational effects of trauma from terror: A real possibility. *Infant Mental Health Journal*, *30*, 158-179.

Kleijn, W., Hovens, J., & Rodenburg, J. (2001). Posttraumatic stress symptoms in refugees: assessments with the Harvard Trauma Questionnaire and the Hopkins symptom Checklist-25 in different languages. *Psychological Reports*, *88*, 527-532.

Lamb, M. E., & Bougher, L. D. (2009). How does migration affect mothers' and fathers' roles within their families? Reflections on some recent research. *Sex Roles*, *60*, 611-614.

Lamb, M. E. (2010). *The role of the father in child development*. New Jersey: John Wiley & Sons Inc.

Leen-Feldner, E. W., Feldner, M. T., Bunaciu, L., & Blumenthal, H. (2011). Associations between parental posttraumatic stress disorder and both offspring internalizing problems and parental aggression within the National Comorbidity Survey-Replication. *Journal of Anxiety Disorder*, *25*, 169-175.

Lester, P., Peterson, K., Reeves, J., Knauss, L., Glover, D., Mogil, C., …, & Bearslee, W. (2010). The long war and parental combat deployment: Children and at-home spouses. *Journal of the American Academy of Child and Adolescent Psychiatry*, *49*, 310-320.

Levav, I., Levinson, D., Radomislensky, I., Shemesh, A., & Kohn, R. (2007) Psychopathology and other health dimensions among the offspring of Holocaust survivors: Results from the Israel National Health Survey. *Israel Journal of Psychiatry*, *44*, 144-151.

Lyons-Ruth, K., & Block, D. (1996). The disturbed caregiving system: Relations among childhood trauma, maternal caregiving, and infant affect and attachment. *Infant Mental Health Journal*, *17*, 257-275.

Magill-Evans, J., & Harrison, M. J. (2001). Parent-child interactions, parenting stress, and developmental outcomes at 4 Years. *Child Health Care*, *30*, 135-150.

Marchetti-Mercer, M. C. (2012). Those easily forgotten: The impact of emigration on those left behind. *Family Process*, *51*, 376-390.

McBride, B. A., Schoppe, S. J., & Rane, T. R. (2002). Child characteristics, parenting stress, and parental involvement: Fathers versus mothers. *Journal of Marriage & Family*, *64*, 998-1011.

Mollica, R. F., Caspi-Yavin, Y., Bollini, P., & Truong, T. (1992). The Harvard Trauma Questionnaire: Validating a cross-cultural instrument for measuring torture, trauma, and posttraumatic stress disorder in Indochinese refugees. *Journal of Nervous and Mental Disorders*, *180*, 111-116.

Nakamura, W. M., Stewart, K. B., & Tatarka, M. E. (2000). Assessing father-infant interactions using the NCAST teaching scale: a pilot study. *American Journal of Occupational Therapy*, *54*, 44-51.

Nickerson, A., Bryant, R. A., Brooks, R., Steel, Z., Silove, D., & Chen, J. (2011). The familial influence of loss and trauma on refugee mental health: A multilevel path analysis. *Journal of Traumatic Stress*, *24*, 25-33.

Overbeek, T., Schruers, K., & Griez, E. (1999). *MINI-The International Neuropsychiatric Interview. Dutch version 5.0.0 DSM-IV.* Maastricht: University of Maastricht.

Qin, D. B. (2009). Gendered processes of adaptation: Understanding parent–child relations in Chinese immigrant families. *Sex roles*, *60*, 467-481.

Ruscio, A. M., Weathers, F. W., King, L. A., & King, D. W. (2002). Male war-zone veterans' perceived relationships with their children: The importance of emotional numbing. *Journal of Traumatic Stress*, *15*, 351-357.

Rosenheck, R., & Fontana, A. (1998). Transgenerational effects of abusive violence on the children of Vietnam combat veterans. *Journal of Traumatic Stress*, *11*, 731-742.

Samper, R. E., Taft, C. T., King, D. W., & King, L. A. (2004). Posttraumatic stress disorder symptoms and parenting satisfaction among a national sample of male Vietnam veterans. *Journal of Traumatic Stress*, *17*, 311-315.

Saraswathi, T. S. (2003) (Ed.). C*ross-cultural perspectives in human development: Theory, research and applications*. London: Sage.

Scheeringa, M. S., & Zeanah, C. H. (2001). A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress*, *14*, 799-815.

Shimoni, R., Este, D., Clark, D. E. (2003). Paternal engagement in immigrant and refugee families. *Journal of Comparative Family Studies*, *34*, 555-568.

Skovgaard, A. M., Olsen, E.M., Christiansen, E., Houmann, T., Landorph, S., & Jørgensen, T. (2008). Predictors (0–10 months) of psychopathology at age 1½ years–a general population study in The Copenhagen Child Cohort CCC 2000*. *Journal of Child Psychology and Psychiatry*, *49*, 553-562.

Stover, C. S., Hall, C, McMahon, T. J., Easton, C. J. (2012). Fathers entering substance abuse treatment: An examination of substance abuse, trauma symptoms and parenting behaviors. *Journal of Substance Abuse Treatment*, *43*, 335-343.

Tees, M. T., Harville, E. W., Xiong, X., Buekens, P., Pridjian, G., & Elkind-Hirsch, K. (2010). Hurricane Katrina-related maternal stress, maternal mental health, and early infant temperament. *Maternal and Child Health Journal*, *14*, 511-518.

Thompson, R. A. (1997). Sensitivity and security: New questions to ponder. *Child Development*, *68*, 595-597.

Vaage, A. B., Thomsen, P. H., Rousseau, C., Wentzel-Larsen, T., Ta, T. V., & Hauff, E. (2011). Paternal predictors of the mental health of children of Vietnamese refugees. *Child and Adolescent Psychiatry and Mental health*, *5*, 1-11.

Van Ee, E., Kleber, R. J., & Mooren, T. M. (2012). War trauma lingers on: Associations between maternal posttraumatic stress disorder, parent–child interaction, and child development. *Infant Mental Health Journal*, *33*, 459-468.

Van IJzendoorn, M. H., De Wolff, M. S. (1997). In search of the absent father – meta-analyses of infant-father attachment: A rejoinder to our discussants. *Child Development*, *68*, 604-609.

Volling, B. L., McElwain, N. L., Notaro, P. C., & Herrera, C. (2002). Parents' emotional availability and infant emotional competence: predictors of parent–infant attachment and emerging self-regulation. *Journal of Family Psychology*, *16*, 447-465.

Weine, S. M., Hoffman, Y., Ware, N., Tugenberg, T., Hakizimana, L., Dahnweigh, G., …, & Wagner, M. (2011). Secondary migration and relocation among African refugee families in the United States. *Family Process*, *50*, 27-46.

Weine, S., Muzurovic, N., & Kulauzovic, Y. (2004). Family consequences of refugee trauma. *Family Process*, *43*, 147-160.

Wiefel, A., Wollenweber, S., Oepen, G., Lenz, K., Lehmkuhl, U., & Biringen, Z. (2005). Emotional availability in infant psychiatry. *Infant Mental Health Journal*, *26*, 392-403.

Yehuda, R., Schmeidler, J., Wainberg, M., Binder-Brynes, K., & Duvdevani, T. (1998). Vulnerability to posttraumatic stress disorder in adult offspring of Holocaust survivors. *American Journal of Psychiatry*, *155*, 1163-1171.

Zeanah, C. H., Benoit, D., & Barton, M. (1986). *Working model of the child interview.* Unpublished manuscript. Retrieved from: http://sundspsykologerna.se/files/C.H-Zeanah-et-al-Working-Model-of-the-Child-Interview.1986-1993.pdf

Chapter 5

Broken mirrors: Shattered relationships within refugee families

Broken mirrors: Shattered relationships within refugee families
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Introduction

People all over the world flee from their homeland and seek refuge in foreign countries because their life is threatened as a consequence of their political or religious convictions or even the simple fact that they belong to an ethnic or social group that is discriminated against. Such dangerous political and social circumstances drive them to forced migration and an application for asylum, through which they may regain hope for new perspectives. Refugees have suffered many hardships and ordeals. For example, they are exposed to a lack of food and water, serious injury, rape, imprisonment, torture, combat situations and murder of close relatives (Nickerson et al., 2011). There is evidence of a strong relation between the multiple and chronic extreme experiences of refugees and the diagnosis of Posttraumatic Stress Disorder (PTSD), which is defined as the consequence of a traumatic event or series of these events characterized by intrusive memories of the trauma and symptoms of avoidance and hyper-arousal (American Psychiatric Association, 2000). This disorder often co-occurs with depression and/or anxiety disorders (Fazel, Wheeler, & Danesh, 2005; Lindert, Von Ehrenstein, Priebe, Mielck, & Brähler, 2009; Momartin, Silove, Manicavasagar, & Steel, 2004). In addition, exposure to violence, terror and war is thought to change a person's fundamental beliefs, worldview and self-view, such that she/he no longer experiences the world as a secure place and her/his self-efficacy will decrease (Ehlers & Clark, 2000; Hobfoll et al., 2007; Janoff-Bulman & McPherson Frantz, 1997). Thus, the hardships that refugees experience appear to have a significant and long-lasting impact on their functioning.

Furthermore, refugees and asylum seekers experience the profound loss of their home and their homeland as well as the stress and alienation of resettlement in a new country and culture. Papadopoulos (2002) describes home as a safe haven for child development, both literal and figurative. For that reason, the loss of this intimate place could also be recognized as a life event that disturbs important meanings, such as security and belonging to a community. Moro (2003) illustrates the effects of this situation on parents of children born in exile: a mother may feel uncertain about her role and ability to nurture her child into the new environment without the familiar support network, which may interfere with her providing security for her child. Consequently, it is understandable that parenting may be a complicated task for refugees and asylum seekers (Speksnijder-Bregman, 2012).

In this chapter we focus on traumatized refugee parents and the interaction with their children. We will start with providing a theoretical framework for

these parent-child interactions by discussing the concept of intergenerational transmission of trauma. Next, we will elaborate on research that specifically addressed the impact of violence, terror and forced migration of refugee parents on their children. We will delineate the concept of emotional availability to enhance our understanding of these interactions. In the following paragraphs multifamily therapy will be introduced. This systemic family oriented therapy within a group setting builds on the resilience within families to heal the relationships of a hurt individual with him or herself, their family members and their future. We close this chapter with conclusions and recommendations.

Intergenerational transmission of trauma?

An Afghan family applies for psychological assistance. The parents describe as their major concerns the asylum procedure, memories they do no (yet) want to share, and the behavioral problems of their teenage son. Their son does not listen to them and is aggressive towards other children. They worry that their son will become a drug addict and a criminal. Their teenage daughter is well-adjusted, devoted to school and dreams of becoming a doctor one day. The children describe their parents as anxious and depressed: "All day long they sit on the coach and often they cry." Both children deny having problems of their own but do worry about the others in the family.

Whether or not children can be affected by the posttraumatic disturbances of their parents is the topic of a longstanding discussion. Especially in the 1980s and the 1990 there was a strong debate about the issue of the so-called second generation of war survivors: do the concentration camp experiences of parents lead to similar or related disturbances in their children born after World War II? The issue disappeared somewhat from the field of traumatic stress studies, but is nevertheless important these days because of its relevance for refugees and survivors of recent wars (see for an overview Danieli, 1998). Case reports provided lively descriptions of clinical cases of children. They described parents who were unavailable to their children because they were occupied with their own suffering. As parents re-experience their traumas, they become frightened or frightening, unable to tolerate emotions, to attune or to respond in any way. As a consequence, their children (even babies) develop a range of behavioral problems, including delayed development and disorganized attachment. Eventually, they are in need of treatment in adulthood.

In contrast to these case reports, most systematic and controlled studies have not found significant differences in health problems and adjustment

between (adult) children of war survivors and control groups in countries such as the United States, Israel and The Netherlands. No indications of extreme psychopathology were found, and most subjects have been reported to be within the normal range (e.g. Bar-On et al., 1998; Leon, Butcher, Kleinman, Goldberg, & Almagor, 1981; Sigal & Weinfeld, 1989; Suedfeld, 2000; Van der Velden, Eland, & Kleber, 1994). Nevertheless, even systematic research results were not conclusive. Some studies on Holocaust survivors and survivors of recent wars have presented empirical evidence for transmission effects across two generations (e.g. Eland, Van der Velden, Kleber, & Steinmetz, 1990; Levav, Levinson, Radomislensky, Shemesh, & Kohn, 2007; Rosenheck & Nathan, 1985; Solomon, Kotler, & Mikulincer, 1998; Yehuda, Schmeidler, Wainberg, Binder-Brynes, & Duvdevani, 1998). These effects include a predisposition to emotional stress, PTSD or other mental disorders. Nevertheless, Van IJzendoorn, Bakermans-Kranenburg and Sagi-Schwartz (2003) concluded in a meta-analysis that "no evidence of the influence of parents' traumatic Holocaust experiences on their children could be found in a set of adequately designed nonclinical studies" (p. 459).

However, research results could have been biased. Most analyses were based on the adult children's perceptions of their survivor parents. Children were not screened throughout the developmental span, but as adults looking back on their childhood, which had been troubled by a traumatized parent. Research designs were hence retrospective in nature. Second, convenience or clinical samples were used in the majority of cases, with an emphasis on Holocaust survivors. Finally, it has been found that most victims and survivors recover well after adversity and do not develop serious symptomatology (Kleber & Brom, 2003). Therefore, it is necessary to make a distinction between parents who had experienced extreme events without developing mental disturbances and parents who had experienced these events and who suffered from resulting disorders, such as PTSD. Unfortunately, most of the studies mentioned above did not made this important distinction. We expect that this distinction will be related to quite different transgenerational effects with regard to parenting behavior and child development.

Limitations in parenting

A three-year-old child and his Armenian mother are admitted for therapy. The mother complains about the behavior of the child, and says she cannot handle him any more. He only sleeps for a few hours at night and keeps her awake. He barely speaks, and instead cries or screams to get her attention. He wants attention all day

long. During the day, the mother is unable to leave the child alone for a minute. She is afraid that something will happen to him. At night, they sleep in the same room even though the mother's nightmares scare the child.

There is considerable evidence that a parental psychological disorder generally increases the risk of disturbed child development and poor mental health in adulthood. For example, substantial research has been conducted on the impact of maternal depression on child functioning. Maternal depression has been associated with wide-ranging and persistent impairments in child functioning. The adverse outcomes reach into adolescence with elevated rates of affective disorders (Essex, Klein, Cho, & Kalin, 2002; Field, 1995; Halligan, Murray, Martins, & Cooper, 2006; Hay et al., 2001). Interacting with their children, depressed mothers exhibit less positive affect, respond less consistently and positively to their children, and engage in fewer vocalizations than non-depressed mothers. They also display more negative affect, are more hostile, irritable and critical, and use more coercive parenting methods when interacting with their children (for reviews, see Downey & Coyne, 1990; Lovejoy, Graczyk, O'Hare, & Neuman, 2000). Thus, several decades of research indicate that there is a strong relationship between maternal depression and parenting behavior.

Our understanding of the intergenerational consequences of traumatization reveals similarities between traumatized mothers and depressed mothers and their children. Research has shown a relation between parental PTSD and the quality of parent-child interaction. Parents with PTSD report significantly poorer parent-child relationships than those without PTSD, especially when the parents experience emotional numbing or avoidance symptoms (Gewirtz, Polusny, DeGarmo, Khaylis, & Erbes, 2010; Lauterbach et al., 2007; Ruscio, Weathers, King, & King, 2002; Samper, Taft, Casey, King, & King, 2004). Parent-child relationships of parents with PTSD were also observed to be of lesser quality than of parent without PTSD. Mothers with more symptoms of posttraumatic stress were less emotionally available and responsive (Schechter et al., 2010). Mother's with childhood or cumulative traumatic experiences were more hostile, intrusive, punitive, aggressive and neglectful of the child (Banyard, Williams, & Siegel, 2003; Cohen, Hien, & Batchelder, 2008; Lyons-Ruth & Block, 1996). Parental PTSD has been associated with child outcome as well. More psychopathological and abnormal behaviors such as anxiety, depression, aggression and deviant behavior has been reported for children of parents with PTSD (Ahmadzadeh & Malekian 2004; Al-Turkait & Ohaeri, 2008; Gold et al. 2007; Jordan et al., 1992). Although general parenting ability may remain intact after a history of traumatic experiences, traumatized parents can be affected in their parenting.

However, the links that have been found between parental disorders and the presence of similar disorders in the child have mostly been weak. The main threat to child development does not lie in temporary situation-specific stress reactions, but in disturbances that are pervasive across various situations and persistent over time (Rutter & Quinton, 1984).This evokes doubts about the term 'intergenerational transmission of trauma'. It is *not* trauma that is transmitted over generations. Traumatization can cause parenting limitations, and these limitations disrupt the development of the young child. Although we must not forget the remarkable resilience of many of these parents and children, parental traumatization may alter parent-child interaction and therefore constitute a risk to the development of the child.

Refugee parents and the interaction with their children

An Iraqi father sits on the couch remembering his friends who died fighting next to him during the war. He has a blank expression and sits there silently all day long. In the corner plays a five-year-old girl. She plays quietly so as not to disturb father or he will get angry. Sometimes, suddenly, her father gets up and screams something she does not understand. It scares her and she presses herself into the corner. After a few minutes it stops and her father will sit down again, barely noticing the reaction of his little daughter.

Refugee parents face major challenges in rearing their children. These families are confronted with terror, forced migration and asylum procedures. Their members often suffer from various symptoms such as sleep problems, flash backs, aggression, concentration problems and somatic complaints. It is not surprising that these disturbances are often referred to by the term complex PTSD (Mooren & Stöfsel, 2014). The parents that apply for help at Centrum '45, the Dutch national institute for research on and treatment of psychotrauma, are less able to react sensitively to the needs of their children and are pre-occupied with their own problems. They are emotionally and functionally unavailable to their children.

Despite increased attention for parental posttraumatic disturbances and the impact on children there is still a dearth of studies on refugee families. Vaage et al. (2011) conducted a longitudinal prospective cohort study of long-term effects of PTSD on Vietnamese refugee parents and their children 23 years after resettlement. Although 30% of the families had one parent with a high psychological distress score, only 4% of the children (10-23 years) reported

probable mental health problems. However, PTSD in fathers did predict the risk of mental health problems among their offspring. In order to explore resilience, Daud, Klinteber and Rydelius (2007) assessed 80 refugee children (aged 6-17) who had not developed posttraumatic stress symptoms despite a history of parental PTSD. Non-exposed children without posttraumatic stress symptoms but with traumatized parents had more favorable outcomes on emotionality, family relations, peer relations and pro-social behavior than non-exposed children with PTSD.

Resilience

A teenage boy, whose father died in the concentration camps of former Yugoslavia, finds his escape in music. In his lyrics he expresses his sadness and his anger because of the losses, his regrets of the past, but also his love for his mother, and his dreams for the future. When asked about his music he answers: "I was so confused, but I survived because I started writing."

Despite a troubled childhood, many children of traumatized parents have the potential to function well. Resilience is a key concept for understanding positive adaptation within the context of significant adversity. Resilience has been operationalized in various ways, but in general, it is regarded as an individual's capacity to withstand, adapt to and rebound from challenging or threatening circumstances. It is a dynamic process involving the interplay of multiple risk and protective processes over time, incorporating individual, family and larger sociocultural influences (Brom & Kleber, 2009; Walsh, 2003). The same adversity can result in different outcomes for different individuals.

In studies on children of traumatized parents, the concept of resilience only received explicit attention within the study of Daud, Klinteber and Rydelius (2007). The results show the importance of family and peer relationships. The study of Al-Turkait and Ohaeri (2008) addresses the independent contribution of traumatized fathers and mothers in relation to child outcome variable. The results suggested the importance of a non-affected parent. Children with one affected and one non-affected parent were more resilient than children with two affected parents. The non-affected parent has the potential to build resilience in the child. The role of the mother was especially significant for the psychosocial functioning of the child. Although PTSD of both parents affected the children, the mother's anxiety was the most frequent and important predictor of children's anxiety, depression or abnormal behavior. These results are in line with the results

of studies of at-risk children. The studies noted the crucial influence of significant relationships with caring adults and mentors who supported, encouraged and believed in the potential of these children (Walsh, 1996). This underlines the importance of research which focuses not only on parental pathology, but also on family relational networks and child resilience. In addition, it alludes to the clinical importance of establishing compensating relationships within the child's environment.

Parent-child interaction among refugees and asylum seekers: empirical findings

A Sudanese mother, suffering from severe PTSD and depression, ordered her three-year old daughter to stay near her bed when she was very sad. If the little girl went off to play, she told her, the mother would die. The father taught his daughter to bring her mother tissues. He thought that it was cute to see the three-year old take care of her mother.

Healthy parent-child interaction is recognized as an essential focus for the development of children, as through the behavior of the primary caregivers both protective factors and risk factors for a healthy physical and psychological development can be transmitted to the child (Scheeringa & Zeanah 2001; Zeanah, Boris, & Larrieu, 1997). Therefore, we will elaborate on our study on parent-child interaction in a refugee and asylum seeker population. Earlier in this chapter we referred to the longstanding debate on the intergenerational transmission of trauma. In the past, this research focused on the psycho-social functioning of adult children and no distinction was made between parents who had experienced extreme events and those who suffered from long-term consequences of these events. In order to understand the mechanisms underpinning the interplay between traumatized parents and their children, research investigating these parents and their (young) children is crucial. This impact needs to be "caught" within the research room and throughout the developmental span. To contribute to an understanding of the influence of refugee trauma of parents on the interaction with their children we designed a study in which the impact of posttraumatic stress of refugee parents with young children, not exposed to traumatic events themselves, on the parent-child interaction was studied.

Refugee and asylum seeker parents and their children were recruited from Dutch asylum seeker centers and from client groups at Centrum '45. Participants

included in this study met the following criteria: (a) they were asylum seekers or refugees that had been exposed to traumatic events; (b) they had at least one child in the age range of 18–42 months, who had been born in the Netherlands and had not been exposed to a traumatic event; and (c) the parents did not suffer from addiction, mental retardation or psychosis. The final sample consisted of 80 parents and their children; 29 fathers, 51 mothers, 45 sons and 35 daughters. Parents had fled from various geographical regions: Middle East (43.8%), Africa (32.5%), Eastern Europe (12.5%), Asia (8.8%), and South America (2.6%). Of the sample 55% were refugees and 45% were asylum seekers. Furthermore, 49% of the participant population was living in an asylum seeker center. The measurements consisted of: trauma experiences and symptoms of PTSD (Harvard Trauma Questionnaire), symptoms of anxiety and depression (Hopkins Symptom Checklist), quality of parent-child interaction (Emotional Availability Scales), and psychosocial functioning of the child (Child Behavior Checklist).

As a good understanding of the measurement of the Emotional Availability Scales (EAS) is of importance to the interpretation of the results, the issue of emotional availability will be delineated in some detail. Parents establish expectable interactions with their young child through their voices, facial expressions and gestures (Bornstein et al., 2006). When the caregiver is emotional available and interacts in a sensitive and responsive manner, secure attachment is fostered (Bowlby, 1969/1982; Rothbaum, Rosen Schneider, Pott, & Beatty, 1995). Emotional availability can be described as the quality of emotional transactions between parent and child, specifically focusing on parents' accessibility and ability to read and respond properly to the child (Biringen & Robinson, 1991). The EAS (Biringen, 2008) were designed to measure dyadic interactions between an adult and a child. The EAS consist of six dimensions, of which four dimensions concern the emotional availability of the adult toward the child (sensitivity, structuring, non-intrusiveness and non-hostility) and two dimensions concern the emotional availability of the child toward the adult (responsiveness and involvement). An emotionally available parent is able to be warm and emotionally connected with the child, and to provide appropriate structure for the child in the right amount. The parent is able to be available to the child when needed, without being intrusive, hostile or undermining of the child's autonomy. An emotionally available child exhibits positive affect and behavior regulation. The child is likely to respond to the adult and shows initiative in bringing the adult into interaction.

In our sample of 80 refugee parents and their young children 72% of all mothers and 86% of all fathers were classified as having PTSD. Between refugee

mothers and fathers no significant differences were found on posttraumatic stress and emotional availability. Fathers were as traumatized, but also as emotional available to their children as mothers. Posttraumatic stress was found to predict sensitivity, structuring and non-hostility within the parent-child interaction. Parents with symptoms of PTSD were less sensitive, less structuring and more hostile. Posttraumatic stress was marginally significant ($p < .10$) on the non-intrusiveness scale (Van Ee, Sleijpen, Kleber, & Jongmans, 2013). This indicates that parents with symptoms of PTSD are more intrusive. It is possible that our small sample size prevented significant results on the non-intrusiveness scale.

We took a closer look at the severity of maternal posttraumatic stress symptoms of 45 refugee mothers, the emotional availability within the mother-child interaction, and the children's psychosocial functioning. Severity of maternal posttraumatic stress symptoms was significantly correlated with children's internalizing behavior and total problems (a composite of internalizing and externalizing problems). Mothers experiencing posttraumatic stress symptoms scored lower on all single scales of the EAS. This means that mothers with symptoms of PTSD were less sensitive, less structuring, more intrusive and more hostile. Both child scores on the EAS were lower for mothers experiencing posttraumatic stress. Children of mothers with symptoms of PTSD were less responsive to and less involved with their mothers. We tested whether the association between maternal trauma and child's psychosocial functioning is mediated via the quality of dyadic emotional availability. Although mother's posttraumatic stress symptoms correlated significantly with the occurrence and severity of children's psychosocial symptoms as well as with the emotional availability within the parent-child of interaction; only non-hostility within the parent-child interaction correlated significantly with child's internalizing behavior and total problems. A mediation model with emotional availability as a mediator between maternal posttraumatic stress and children's psychosocial functioning did not hold (Van Ee, Kleber, & Mooren, 2012). Even though maternal emotional availability encompasses key markers of the parent–child interaction, it does not explain the relation between maternal posttraumatic stress and child functioning. Still, it is possible that posttraumatic stress hinders a parent interacting with or attuning to the child. Maybe more extreme alterations within the parent–child interaction, such as parental dissociation and extreme insensitivity, could then lead to the child's symptoms.

What is striking is the combination of a negative association between

maternal posttraumatic stress symptoms and sensitivity of the mother, as well as a negative association with responsiveness of the child. A child's responsiveness to the mother is reflected in a positive affect and the regulation of emotions in response to the mother. A mother's sensitivity to the child is reflected in a warm affect and an emotional connectedness. It is precisely this capacity that might be hindered by posttraumatic stress symptoms, as it includes impairment of the ability to regulate affect and arousal. Lack of caregivers' regulation impairs the development of the child's self-regulation, and as a consequence behavioral adaptations may result.

Considering these results it makes sense for clinicians counseling refugee parents, and perhaps even traumatized parents in general, to inquire about parenthood and the wellbeing of children. In addition, the results indicate a need to re-establish 'attunement' between traumatized parents and their children. However, most parent-child interventions are aimed at the mothers, while the quality of involvement of both fathers and mothers is equally affected by posttraumatic stress symptoms. As the quality of father-involvement is of importance to the development of the child, traumatized fathers are as much in need of clinical intervention as mothers.

Multifamily therapy groups with refugee families

How to facilitate bonding and improve emotional availability of parents towards their children? How to apply interventions to refugee families with various cultural backgrounds? The remaining of this chapter will describe the efforts at our institute to strengthen resilience and parenting competencies in a high-risk population of families, as has been described earlier. We have adopted a specific psychosocial treatment format, which has been used in the treatment of various mental disorders: multi-family group therapy (MFT). Although alternative approaches are possible as well (such as Parent-Child Interaction Therapy and Video-feedback Intervention to promote Positive Parenting) and have also been applied by us, we elaborate on MFT because we consider it particularly useful for improving parent-child interaction in refugees.

Multiple family therapy, or multifamily therapy, is a form of systemic therapy that uses principles derived from family therapy as well as group therapy. Laqueur and his colleagues developed MFT in the 1960s (Asen, 2002; Kiser, Donahue, Hodgkinson, Medoff, & Black, 2010; Lemmens, 2007; McFarlane, 2002). At that time it was decided to involve the patients' relatives as an attempt

to better help people with schizophrenia. The consequence of involving family members was that patients, family members and professional staff altered their manner of communicating about and with schizophrenic patients. Since that beginning, multifamily groups have been developed with different foci (e.g., psycho-education (Anderson, 1983)), for different target groups (adolescents with eating disorders, mother-infant troubled attachment relationships), and in various settings (e.g., schools) (Asen, 2002; Lemmens, 2007). In general, it has been found that MFT groups are accepted well by the participants and lead to an increase of knowledge about the problem at stake, a better collaboration with the mental health professionals and a decrease of stigmatization. MFT has resulted in a decrease of drop-outs of therapy, of patients' relapse, and to a symptom improvement (Asen, 2002; Lemmens, 2007; McFarlane, 2002).

It is our opinion that MFT works well for refugee families coping with traumatic stress and parenting difficulties because of the following elements: a. a multi-family format; b. the facilitation of mentalizing; c. bringing in the context. We will discuss these three elements below.

Multi-family format

The central idea behind MFT is bringing together different families suffering with traumatic stress, creating connections among them and thereby using their strengths and resources (empowerment). Creating solidarity as well as counteracting or overcoming of stigmatization and social isolation stem from this group work and will lead to a mutual understanding and acknowledgement of the problem and of the efforts of dealing with it. As a result of sharing commonalities, the self-confidence of both parents and children can grow within a group because of the feeling of hope ("others have problems as bad or even worse") and competencies can be discovered and practiced. Mutual recognition and feedback generate social support and sharing. Group members learn from each other and provide each other with new perspectives.

The presence of several families sharing similar difficulties provides the opportunity for both family and individual work. The group creates a kind of micro-society with certain rules and values and this elicits different aspects of the roles of the members (e.g., being a mother, daughter, sister, professional etc.). These different roles evoke various narratives that are needed to change disruptive family patterns. A group setting in which parents and children feel comfortable and are curious to learn about themselves and others is the basis for the exchange of beliefs. Further, family narratives reveal how certain

parental beliefs have prevailed throughout different generations or in different communities. In general: telling stories helps to generate meaning to the experiences of the families and gives a sense of control.

Facilitating mentalizing

The type of MFT that has been developed in London (Asen, 2002; Asen & Scholz, 2010) underlines the importance of mentalization. This can be defined as the ability to distinguish and to see one's own and other person's mind as separate perspectives (having one's mind in mind). The concept is grounded in object-relation theory. Being capable of mentalizing contributes to the development of sensitivity and a good attachment relationship between parents and children and will eventually lead to a healthy increase of autonomy. Viewing different perspectives and being curious about differences rather than similarities offers freedom of thinking. Psychological disturbances are frequently chained to more or less rigid cognitions ("nobody is to be trusted"). Reduction of symptoms is achieved by allowing oneself to think differently, to see more alternatives than just the dominant idea (Allen, Fonagy, & Bateman, 2008; Asen, Dawson, & McHugh, 2001; Fonagy & Bateman, 2006; Schore, 2003). To increase mentalizing capacities and parental emotional availability, the group can be used for 'mirroring' purposes and encouraged to offer feedback. Parents may be for instance encouraged in coaching each other (using walky-talky's) when interacting with their child. In some activities parents are invited to play with other children than their own – thereby increasing their critical observation and curiosity.

Bringing in the context

By inviting family members to therapy, it means bringing in the outside world while at the same time it makes the therapy setting more representative of daily reality. The functioning of the patient within his or her own naturalistic context is crucial. MFT is therefore a context-based method. In therapy sessions, contexts for interaction are created that elicit representative family interactions. Through explicit attention for the behavior of families during the session, experiences are intensified and feedback of group members is used. New target parenting behavior may be experimented with in a safe environment.

A group of refugee families gathered for their multifamily therapy. One mother, worried about the delayed development of her baby of 6 months old, tended not to accept feedback about her interactions with the child. She attributed the delay

to some unrevealed disorder of the child. The therapist kindly and respectfully responded that it is difficult for any parent to receive feedback on their parenting style. She had also been worried about her own babies but had discovered that paying proper attention was very helpful. Mrs. C. found these comments supportive.

Within the session families were mixed and asked to work together in creating houses made of board. They were organized by working at three different tables. At one table difficulties arose when a fantasy house was created. For one girl, aged 12, it caused trouble that the house was not like a 'real house'. A younger girl enjoyed building a funny, mushroom-like house with strange sculptures. During reflection, there was an exchange first of all on the significance of having a house, being refugees and asylum seekers. Next, the importance of playfulness and fantasy was underlined for parents and children.

MFT as a method can be well combined with other forms of therapy; at the same time, within a MFT group different techniques derived from other methods such as cognitive behavior therapy and EMDR may be applied. MFT may also be used with open or closed groups. An open group has the advantage of having senior members or families who serve as seniors and models to newcomers. Closed groups may be preferred when trust is a significant issue to members and the opportunity to create strong bonding is aimed at. The number and duration of sessions differ. In general, several subsequent phases may be distinguished: gathering and introduction, problem-focused work, relation-focused work and relapse prevention (Asen & Bianchi, 2011). Sessions are manual-based and have a defined structure: there is an ice-breaking activity, an energizing, pleasant and interactive game (such as playing a ball or jumping a rope). The main activity usually develops around a theme that is of significance to the group. The therapist facilitates interactions between families and individuals. Where needed, the therapist zooms in and focuses on certain interactions. Other than that, he or she refrains from interventions in the group activity as much as possible but is however responsible for facilitating interactions. The last part of the session is spent on reflection and exchange. Because MFT involves adults and children, it is important to create fun in the session, for instance by physical exercise or music making. Consequently, interactions are more frequent and learning is more likely to occur.

Originally, multifamily therapy was introduced to change the manner of working in a group of difficult-to-treat patients: family members of schizophrenic patients were invited into the hospital wards. The work with multi-problem and traumatized refugee families appears to benefit from this contextual approach.

The combination of family work with group dynamics creates a setting in which the relationships of a hurt individual with himself or herself, significant others and their future can be healed. Nonetheless, there is a necessity to examine the prerequisites (e.g. using competent interpreters) and the outcomes of this therapy in a scientifically thorough way. Unfortunately, controlled studies of the results of system therapy with regard to traumatic stress are still extremely rare.

Epilogue

Refugees have faced many major events. They struggle with the serious consequences of the various horrors and hardships they experienced. Consequently, their difficulties are complicated. Understanding and addressing these difficulties requires special attention, especially when it comes to families. The children – how young sometimes – can suffer from the aftermath of the experiences and the current problems of the parents. In this chapter we sought to make this issue comprehensible. The concept of intergenerational traumatization has been discussed and attention has been paid to developmental interferences, as manifested in the difficulties with regard to emotional availability. Sensitivity, in particular, is of importance to the development of the child. A warm affect, an emotional connectedness and an ability to read and respond to the cues of the child is precisely the capacity that might be hindered by posttraumatic stress symptoms. It is clear that the area of the impact of traumatic stress on families and children is still quite unexplored, clinically as well as empirically. There is undoubtedly a need for more research and more fine-tuned interventions. Nevertheless, it is clear that re-establishing attunement is an important starting point for treatment. To see one another with genuine interest and curiosity is a welcome experience for both parents and children. Patients frequently mention the experience of hope as a major outcome of family focused treatment. This experience fosters intimacy and growth, at the individual as well as relational level.

References

Ahmadzadej, Gh., & Malekian, A. (2004). Aggression, anxiety, and social development in adolescent children of war veterans with PTSD versus those of non-veterans. *Journal of Research in Medical Sciences*, *5*, 231-234.

Allen, J. G., Fonagy, P., & Bateman, A. W. (2008). *Mentalizing in clinical practice.* Washington: American Psychiatric Publishing.

Al-Turkait, F. A., & Ohaeri, J. U. (2008). Psychopathological status, behavior problems, and family adjustment of Kuwaiti children whose fathers were involved in the first Gulf War. *Child and Adolescent Psychiatry and Mental Health*, *2*, 2-12.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders.* (4th ed.). Washington, DC: Author.

Anderson, C. M. (1983). A psychoeducational program for families of patients with schizophrenia. In W-R. McFarlane (Ed.), *Family Therapy in Schizophrenia.* New York: Guilford Press.

Asen, E. (2002) Multiple family therapy: An overview. *Journal of Family Therapy*, *24*, 3-16.

Asen, E. & Bianchi, S. (2011). Multi-Family approach training package for professionals working with abusive and violent high risk families (E-Manual). London: Marlborough Centre

Asen, E., Dawson, N., & McHugh, B. (2001). Multiple family therapy. The Marlborough Model and its wider applications. Londen & New York: Karnac.

Asen, E. & Scholz, M. (2010). Multi-family therapy. Concepts and techniques. London: Routledge.

Banyard, V. L., Williams, L. M., & Siegel, J. A. (2003). The impact of complex trauma and depression on parenting: An exploration of mediating risk and protective factors. *Child maltreatment*, *8*, 334- 349.

Bar-On, D., Eland, J., Kleber, R. J., Krell, R., Moore, Y., Sagi, A., ... & Van IJzendoorn, M. H. (1998). Multigenerational perspectives on coping with the Holocaust experience: An attachment perspective for understanding the developmental sequelae of trauma across generations. *International Journal of Behavioral Development*, *22*, 315-338.

Biringen, Z. (2008). *The emotional availability (EA) scales (4th ed.)*. Boulder, CO. Available at: emotionalavailability.com

Biringen, Z., & Robinson, J. (1991). Emotional availability in mother-child interactions: A reconceptualization for research. *American Journal of Orthopsychiatry*, *61*, 258-271.

Bowlby J. (1969). *Attachment: Attachment and Loss*, Vol. 1. London: The Hogarth Press and the Institute of Psycho-Analysis.

Brom, D. & Kleber, R. J. (2009). Resilience as the capacity for processing traumatic experiences. In: D. Brom, R. Path-Horenczyk & J. D. Ford (Eds.), *Treating traumatized children: Risk, resilience and recovery* (pp.133-149). New York: Routledge.

Cohen, L. R., Hien, D. A., & Batchelder, S. (2008). The impact of cumulative maternal trauma and diagnosis on parenting behavior. *Child Maltreatment*, *13*, 27-38.

Danieli, Y. (Ed.) (1998). *International handbook of multigenerational legacies of trauma*. New York: Kluwer Academic/ Plenum Publishing Corporation.

Daud, A., Klinteberg af, B., & Rydelius, P. (2008). Resilience and vulnerability among refugee children of traumatized and non traumatized parents. *Child and Adolescent Psychiatry and Mental Health*, *2*, 7-17.

Downey, G., & Coyne, J. C. (1990). Children of depressed parents: an integrative review. *Psychological Bulletin*, *108*, 50-76.

Ehlers, A., & Clark, D.M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, *38*, 319-345.

Eland, J., Van der Velden, P. G., Kleber, R. J. & Steinmetz, C. H. D. (1990). *Tweede generatie Joodse Nederlanders: een onderzoek naar gezinsachtergronden en psychisch functioneren*. Deventer: Van Loghum Slaterus.

Essex, M. J., Klein, M. H., Cho, E. & Kalin, N. H. (2002). Maternal stress beginning in infancy may sensitize children to later stress exposure: effects on cortisol and behaviour. *Biological Psychiatry*, *52*, 776-784.

Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: A systematic review. *The Lancet*, *365*, 1309-1314.

Field, T. (1995). Infants of depressed mothers. *Infant Behavioural Development*, *18*, 1-13.

Fonagy, P. & Bateman, A. W. (2006). Mechanism of change in mentalization-based treatment of BPD. *Journal of Clinical Psychiatry*, *62*, 411-430.

Gewirtz, A. H., Polusny, M. A., DeGarmo, D. S., Khaylis, A., & Erbes, C. R. (2010). Posttraumatic stress symptoms among national guard soldiers deployed to Iraq: Associations with parenting behaviors and couple adjustment. *Journal of Consulting and Clinical Psychology*, *78*, 599-610.

Gold, J. I., Taft, C. T., Keehn, M. G., King, D. W., King, L. A., & Samper, R. E. (2007). PTSD symptom severity and family adjustment among female Vietnam veterans. *Military Psychology*, *19*, 71-81.

Halligan, S. L., Murray, L., Martins, C. & Cooper, P. J. (2006). Maternal depression and psychiatric outcomes in adolescent offspring: A 13-year longitudinal study. *Journal of Affective Disorders*, *97*, 145-154.

Hay, D. F., Pawlby, P., Sharp, D., Asten, P., Mills, A. & Kumar, R. (2001). Intellectual problems shown by 11-year-old children whose mothers had postnatal depression. *Journal of Child Psychology and Psychiatry*, *42*, 871-889.

Hobfoll, S. E., Watson, P., Bell, C. C., Bryant, R. A., Brymer, M. J., Friedman, M. J., … Ursano, R. J. (2007). Five essential elements of immediate and mid-term mass trauma intervention: Empirical evidence. *Psychiatry*, *70*, 283-315.

Janoff-Bulman, R., & McPherson Frantz, C. (1997). The impact of trauma on meaning: From meaningless world to meaningful life. In M. Power, & C. R. Brewin (Eds.), *The transformation of meaning in psychological therapies* (pp. 91-106). Hoboken, NJ, USA: John Wiley & Sons Ltd.

Jordan, K. B. Marmar, C. R., Fairbank, J. A., Schlenger, W. E., Kulka, R. A., Hough, R. L. & Weiss, D. S. (1992). Problems in families of male Vietnam veterans with posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, *60*, 916-926.

Kiser, L. J., Donohue, A., Hodgkinson, S, Medoff, D., & Black, M. M. (2010). Strengthening Family Coping Resources: The feasibility of a multifamily group intervention for families exposed to trauma. *Journal of Traumatic Stress*, *23*, 802-806.

Kleber, R. J. & Brom, D. in collaboration with Defares, P. B. (2003). *Coping with trauma: Theory, prevention and treatment*. London: Taylor & Frances.

Lauterbach, D., Bak, C., Reiland, S., Mason, S., Lute, M. R., & Earls, L. (2007). Quality of parental relationships among persons with a lifetime history of posttraumatic stress disorder. *Journal of Traumatic Stress*, *20*, 161-172.

Lemmens, G. (2007). *Multi-family group therapy in the treatment of major depression* (Doctoral dissertation University of Leuven, Belgium*)*.

Leon, G. R., Butcher, J. N., Kleinman, M., Goldberg, A., & Almagor, M. (1981). Survivors of the Holocaust and their children: Current status and adjustment. *Journal of Personality and Social Psychology*, *41*, 503-516.

Levav, I., Levinson, D., Radomislensky, I., Shemesh, A., & Kohn, R. (2007). Psychopathology and other health dimensions among the offspring of Holocaust survivors: Results from the Israel national health survey. *Israel Journal of Psychiatry*, *44*, 144-151.

Lindert, J., Von Ehrenstein, O. S., Priebe, S., Mielck, A., & Brähler, E. (2009). Depression and anxiety in labor migrants and refugees: A systematic review and meta-analysis. *Social Science & Medicine*, *69*, 246-257.

Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior: a meta-analytic review. *Clinical Psychology Review*, *20*, 561-592.

Lyons-Ruth, K. & Block, D. (1996) The disturbed caregiving system: Relations among childhood trauma, maternal care giving, and infant affect and attachment. *Infant Mental Health Journal*, *17*, 257-275.

McFarlane, W. R. (2002). *Multifamily groups in the treatment of severe psychiatric disorders*. New York: Guilford Press.

Momartin, S., Silove, D., Manicavasagar, V., & Steel, Z. (2004). Comorbidity of PTSD and depression: Associations with trauma exposure, symptom severity and functional impairment in Bosnian refugees resettled in Australia. *Journal of Affective Disorders*, *80*, 231-238.

Mooren, T. & Stöfsel, M. (2014). *Diagnosing and treating Complex Trauma*. London: Routledge, forthcoming.

Moro, M. R. (2003). Parents and infants in changing cultural context: Immigration, trauma and risk. *Infant Mental Health Journal*, *24*, 240-264.

Nickerson, A., Bryant, R. A., Brooks, R., Steel, Z., Silove, D., & Chen, J. (2011). The familial influence of loss and trauma on refugee mental health: A multilevel path analysis. *Journal of Traumatic Stress*, *24*, 25-33.

Papadopoulos, R. K. (Ed.). (2002). *Therapeutic care for refugees: No place like home.* London: Karnac Books.

Rohlof, H. & Haans, T. (2005). *Groepstherapie met vluchtelingen. Transculturele praktijk.* Houten: Bohn Stafleu van Loghum.

Rosenheck R., & Nathan, P. (1985). Secondary traumatization in the children of Vietnam veterans with posttraumatic stress disorder. *Hospital and Community Psychiatry*, *36*, 538-539.

Rothbaum, F., Rosen Schneider, K., Pott, M., Beatty, M. (1995). Early parent-child relationships and later problem behavior: A longitudinal study. *Journal of Developmental Psychology*, *2*, 133-151.

Ruscio, A. M., Weathers, F. W., King, L. A., & King, D. W. (2002). Male war-zone veterans' perceived relationships with their children: The importance of emotional numbing, *Journal of Traumatic Stress*, *15*, 351-357.

Rutter, M., & Quinton, D. (1984). Parental psychiatric disorder: effects on children. *Psychological Medicine*, *14*, 853-880.

Samper, R. E., Taft, Casey T., King, D. W. & King, L. A. (2004). Posttraumatic stress disorder symptoms and parenting satisfaction among a national sample of male Vietnam veterans. *Journal of Traumatic Stress*, *17*, 311-315.

Scheeringa, M. S. & Zeanah, C. H. (2001). A relational perspective on PTSD in early childhood, *Journal of Traumatic Stress*, *14*, 799-815.

Schechter, D. S., Willheim, E., Hinojosa, C., Scholfield-Kleinman, K., Turner, J. B., McCaw, J., …, & Myers, M. M. (2010). Subjective and objective measures of parent-child relationship dysfunction, child separation distress, and joint attention. *Psychiatry*, *37*, 130-144.

Schore, A. N. (2003). *Affect regulation and repair of the self.* New York: W.W. Norton & Company.

Sigal, J. J., & Weinfeld, M. (1989). *Trauma and rebirth: Intergenerational effects of the Holocaust*. New York: Praeger.

Solomon, Z., Kotler, M., & Mikulincer, M. (1998). Combat-related posttraumatic stress disorder among second-generation Holocaust survivors: Preliminary findings. *American Journal of Psychiatry*, *145*, 865-868.

Speksnijder-Bregman, M. H. (2012). *Behavioural problems of refugee and asylumseeker children: The impact of maternal comorbid posttraumatic stress symptoms and negative maternal perceptions.* Unpublished Master thesis Universiteit van Amsterdam (written under supervision of the first author).

Suedfeld, P. (2000). Reverberations of the Holocaust fifty years later: Psychology's contributions to understanding persecution and genocide. *Canadian Psychology-Psychologie Canadienne*, *41*, 1-9.

Vaage, A. B., Thomsen, P. H., Rousseau, C., Wentzel-Larsen, T., Thong, V. T., & Hauff, E. (2011). Paternal predictors of the mental health of children of Vietnamese refugees. *Child and Adolescent Psychiatry and Mental Health*, *5*, 1-11.

Van Ee, E., Kleber, R. J., & Mooren, T. T. M. (2012). War trauma lingers on: Associations between maternal posttraumatic stress disorder, parent–child interaction, and child development. *Infant Mental Health Journal*, *33*, 459-468.

Van Ee, E. , Sleijpen, M., Kleber, R.J., & Jongmans, M.J. (2013). Father-involvement in a refugee sample: Relations between posttraumatic stress and caregiving. *Family Process*. doi: 10.1111/famp.12043

Van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., & Sagi-Schwartz, A. (2003). Are children of Holocaust survivors less well-adapted? A meta-analytic investigation of secondary traumatization. *Journal of Traumatic Stress*, *16*, 459-469.

Velden, P. G. van der, Eland, J. & Kleber, R. J. (1994). *De Indische na-oorlogse generatie: een psychologisch onderzoek naar gezinsachtergronden en gezondheid.* Houten: Bohn Stafleu van Loghum.

Walsh, F. (1996). The concept of family resilience: Crisis and challenge. *Family Process*, 35, 261-281.

Walsh, F. (2003). Family resilience: A framework for clinical practice. *Family process*, 42, 1-18.

Yehuda, R., Schmeidler, J., Wainberg, M., Binder-Brynes, K., & Duvdevani, T. (1998). Vulnerability to posttraumatic stress disorder in adult offspring of Holocaust survivors. *American Journal of Psychiatry*, 155, 1163-1171.

Zeanah, C. H., Boris, N. W. & Larrieu J. A. (1997). Infant development and developmental risk: a review of the past 10 years. *Journal of the American Academy of Child and Adolescent Psychiatry*, *36*, 165-178.

Intermezzo

Children born of wartime rape

Chapter 6

Child in the shadowlands

Elisa van Ee & Rolf J. Kleber
Child in the shadowlands
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"Mankind owes to the child the best it has to give"

Geneva Declaration of the Rights of the Child, 1924

She shivered as she entered the hotel room. It was not that the team of investigators from the International Criminal Court did not seem friendly. It was not that she was afraid to give her testimony and go through her traumatic experiences all over again. It was the air-conditioned, dark hotel room that made her shiver: a sharp contrast with the outside heat and sun-beaten colours of Bangui.

Dressed in bright colours, hair styled with care, her head proudly lifted, the woman approached the team. Her impression of strength made the young boy behind her seem almost invisible. Behind the folds of his mother's dress, we saw her 5-year-old son clinging to her. His clothes were dusty and his trousers were torn. Most striking, though, was his shy and fragile appearance. His movements had an awkward quality and clearly he was anxious. We tried to set the boy at ease but he kept avoiding eye contact. His mother did not seem to take much notice of him.

The investigators introduced themselves and the procedure to the woman. Before the legal interview started, a psychosocial assessment had to take place to evaluate her mental health and her capacity to go through with the interview. As we sat down to begin, the boy's anxiety seemed to dissolve into a sudden eagerness for attention. He eagerly told us that his mother's name was Arya, his name was Anselme. Then we began the interview, asking Arya about the violence she had witnessed.

We talked about Arya's war experiences, her symptoms, and how she was coping with her memories of conflict. In 2003, during the coup d'état in the Central African Republic Arya had been raped by a group of soldiers. They came to her house and, while her husband was forced to watch, they assaulted her. Her husband resisted fiercely and fought to protect her, but he was shot dead by one of the soldiers. Before she passed out, five soldiers had raped her. What happened after that she did not know. She later discovered that she had become pregnant as a result of being raped. Some 9 months later, Anselme was born.

Arya is one of many women we have met who had been raped during conflict in the Central African Republic. In recent years, increased legal attention to the suffering of such women led the International Criminal Tribunal for the former Yugoslavia to describe rape as a violation of an individual's physical integrity and personal autonomy. In response to events in former Yugoslavia, rape was convicted as a crime

against humanity under international humanitarian law for the first time in the case of The Prosecutor vs Kunarac, Kovac and Vukovic. In 2007, the International Criminal Court opened the investigation of the case of the Central African Republic. Although mass rape and forced impregnation have been used as a weapon of war in many countries at different times, this is the first investigation in which allegations of sexual crimes far outnumber alleged killings. Despite this increased legal attention to the suffering of women who have been raped, very little attention has been paid to the fate of children born of rape.

These children are generally regarded with disdain by their communities—they are referred to by such names as "devil's children" in Rwanda, "children of shame" in East Timor, "monster babies" in Nicaragua, "dust of life" in Vietnam, or "Chetnik babies" in Bosnia-Herzegovina. WHO has described children born of rape as at risk of being neglected, stigmatised, ostracised, or abandoned. Cases of infanticide have also been reported. Despite such general concerns, little is known about the fate of these children.

When Arya was asked about the effect of the violent sexual assault she had endured, she reported that she suffered from nightmares and feelings of intense distress when she was reminded of the rape. The memories made her anxious, but also depressed. A tear rolled down her face as she whispered that she had lost everything. We asked her how she had managed to live with these symptoms and raise her son by herself? Arya stared out of the window and remained silent. Then she spoke. Arya told us how the nightmares were not the worst reminder of that horrendous morning. Day and night her son served as a living reminder of her ordeal. "Anselme is like a shadow", Arya said, "a shadow of a past that will haunt me forever".

Arya told us that she could not stop wondering which of those five soldiers had fathered her child, and she kept comparing her child's face with her horrible memories of the soldiers' faces. Maybe she was not even conscious when the rapist father of her son had defiled her. Arya described her complex feelings for her son: she loved him because he was her own blood, but she also hated him since he resembled the rapists. She told us how sometimes she was tender towards Anselme, yet on other occasions she was harsh and wanted to beat the rapist part out of him. Most of the time, though, she just did not notice him so consumed was she with her own memories and sorrow.

Anselme had become expert in knowing what was expected of him and when to make himself invisible. Most of the time, Arya told us, he managed to take care of himself. At other times he was demanding and excessively clingy with his mother. During these times he insisted on physically holding onto her. If he was not allowed to do so, Anselme would have tantrums that scared his mother. This behaviour towards

her was in stark contrast with his behaviour towards strangers. His indiscriminate friendliness made him easy-going with others. He always found someone to talk to. Then again, his friendships never lasted long and in the school yard he either fought with other children or played by himself. It was not his fault, his mother insisted, as the community treated him differently. Many of the women in her area had been sexually assaulted and everyone knew that hundreds of rapes had taken place. Despite religious objections, many impregnated women had opted for abortions. Arya had made a different choice though, and had kept her son. Her child was born of rape, and therefore perceived by the community as different, as a child of the enemy. They called him names and stigmatised him whenever possible. Even at this young age, Anselme was never free of his involuntary past.

So what had moved Arya to keep her son? When Arya discovered she was pregnant, she told us how she felt devastated and did not know what to do. One night, though, she dreamed that God commanded her to keep the unborn child. Her dream convinced her of the innocence of her child and in this moment, she said, she felt that she could love this child. In our experience of working with women who have had children after being raped, many give religious considerations when explaining their choice to raise a child born of rape. Almost all of them recall a distinct moment in which they felt an unconditional love for their unborn child, despite at other times having feelings of repulsion and anxiety. However, the fact that these mothers can feel such unconditional love, does not prevent the children born of rape from being especially vulnerable.

Clinical case reports describe a high rate of ambivalent parent-child relationships or even abusive relationships and a high rate of serious discrimination within the societies in which these children are raised. These relational difficulties have serious consequences for the child, who might experience attachment disorders, disturbances in psychosocial development, and identity issues. Out of shame many women who have been raped want to hide their trauma and the way their child was conceived. Consequently, even when they receive care, many women are reluctant to address issues such as the mother-child relationship or child development. The issues are denied. Many practitioners who care for women who have been raped maintain this silence because either their focus is on the wellbeing of the mother or they genuinely believe that the interests of the mother and child are not served by articulating relational difficulties. It is much easier to focus on the health of the mother and to blame an absent rapist father than to hold a victimised mother accountable for her behaviour towards her child. Even health practitioners usually regard women who have been raped as the victim, and raising a child born of rape is considered an

ongoing trauma for these mothers. When the focus is on the mother and her plight includes the child, it becomes difficult to treat the child as an affected individual too.

While some mothers acknowledge that they experience difficulties in caregiving and its effect on the child, many others do not. Yet most of the mothers we have worked with tell us that they desire safety and happiness for their children. When health care is needed for the child, this can be the entry point for a practitioner to help both mother and child.

Arya fiercely held on to her dream as a source of resilience and together they tried to reframe Anselme's life from rape-born to God-given. Nevertheless, we were concerned for Anselme, but since we were there to assess Arya, our hands were tied. As the legal interview continued, the plight of the mother became the sole focus of interest. The case of Anselme was never addressed in our interview. Arya would possibly receive some justice as part of the legal process, as well as trauma therapy as part of the restoration, but neither option would be available to Anselme. After the interview, Arya and Anselme walked out of the hotel and disappeared into the heat of Bangui.[4]

[4] In order to avoid identification, the case of Arya and Anselme was created from different cases seen by E. van Ee at Centrum '45 and the International Criminal Court.

Chapter 7

Growing up under a shadow: Key issues in research on and treatment of children born of rape

Growing up under a shadow, Key issues in research on and treatment of children born of rape
Elisa van Ee, Trudy & Rolf J. Kleber
Child Abuse Review, article first published online (2013).

Mass rape and forced impregnation have been used as a weapon of war all over the world. Reports of tens of thousands of rapes as part of a systematic policy of ethnic cleansing in the former Yugoslavia stirred the international community to discuss rape and forced impregnation as crimes against humanity, war crimes and even genocide. In the case of *The Prosecutor* v. *Kunarac, Kovac and Vukovic* (Buss, 2002), rape was treated as a crime against humanity under international humanitarian law for the first time. The International Criminal Tribunal for the former Yugoslavia described rape as a violation of an individual's physical integrity and personal autonomy. In *The Prosecutor* v. *Tadic* (1995), the tribunal stated that crimes of humanity, such as rape, "affect the whole of mankind and shock the conscience of all nations of the world" (para. 42).

"Russian brat" (German), "devil's children" (Rwanda), "children of shame" (East Timor), "monster babies" (Nicaragua), "dust of life" (Vietnam), "children of hate", or "Chetnik babies" (Bosnia-Herzegovina) are among the names given to the children born of rape. Despite the increased legal attention for the suffering of raped women, almost no attention is paid to the fate of children born of rape. Based on the right to preserve identity and family relations (United Nations Convention on the Rights of the Child), the War and Children Identity Project develops organizational means to assist children born of war in their search for identity. In 2001, they released a report which stated that tens of thousands of infants have been born as a result of wartime rape or sexual exploitation in the last fifteen years alone (Grieg, 2001). In 2000, the WHO (World Health Organization, 2000) released a report in which children born of rape were described as at risk of being neglected, stigmatized, ostracized, or abandoned. The World Health Organization also noted that infanticide could occur. Despite these concerns, little is known about the fate of children born of rape, their mothers, and their integration within communities (United Nations, 2002).

Children born of rape are a taboo. For example, even though the estimates of the total number of rape victims of Soviet occupation troops in Germany (1945-1949) range from tens of thousands to two million, these rapes were not discussed until 40 years after the war (Naimark, 1995; Schissler, 2000). Many of these rapes resulted in pregnancies, and the resulting children were frequently despised in German society. Recent research of mostly qualitative data reveals that children of Soviet occupation troops were confronted with racial, ideological and moral prejudice and faced serious identity issues (Repke & Wensierski, 2007; Stelzl-Marx, 2009). In Norway, between 10,000 and 12,000 children were fathered by German soldiers during the German occupation (1940-1945). While most of

these children were the result of love affairs and not rape, analyses of register data still show that these children have poorer health, higher suicide rates, lower education and income levels than other Norwegians from the same age cohort. Even in their adult lives, the children of the German soldiers in Norway reported symptoms such as concentration difficulties, sadness or depression, nightmares, restlessness, fatigue and sleeping problems (Ellingsen, 2004; Mochmann & Larsen, 2008). In 2005, UNICEF conducted a preliminary fact-finding study on the fate of children born of rape in Bosnia-Herzegovina but decided, under pressure from the government and civil society groups, that the report should remain an internal document only (Carpenter, 2010). Until this day, systematic research into the wellbeing of these children born of rape has remained absent.

The objective of the present paper is twofold. First, it will analyze by way of a literature review whether these children born of rape are at risk and identify risk factors for their wellbeing. Second, it will identify certain key issues which should direct research and clinical practice. We hope to initiate a discussion within health care on the needs and rights of children born of rape as well as contribute to a discussion on best practice in the treatment of these children.

Method

Articles for this paper were identified by searches of EMBASE, MEDLINE, PILOTS, PsychInfo and Pubmed using the Medical Subject Headings "rape" and "unwanted child" or "unwanted pregnancy". The time period was left open for these searches. Furthermore, writings of keyscholars were used to explore historical, sociological and human rights literature.

A case example

To delineate the status of children born of wartime rape and to give a human face to numbers and data, we present the case of Hamza and Amira. In order to avoid identification the case example was anonymised and constructed from two cases seen by the first author at Centrum '45, the Dutch national expert institute for treatment of and research into the consequences of psychotrauma. The statements were taken from an interview which was part of a larger research project in which both mothers consented to participate.

Hamza is a gentle three years old boy. He is the son of Amira, a young Bosnian woman and victim of one of the so-called "rape-camps", where she was held

with the specific aim to impregnate her with a child of the enemy. After her release, she fled and applied for asylum in the Netherlands. Hamza befriends everyone instantly, but before the trained eye it does not take long to see that his relationships are superficial; interaction with Hamza feels empty. The relationship between Hamza and his mother seems ambivalent. Hamza often ignores his mother, especially when he is interacting with others. However, Hamza does not ignore his mother when she cries or behaves depressed. Hamza brings her tissues and gently pets her hand. At these moments, he does not dare to play or leave her out of his sight and he does not allow her to leave him. When she leaves, he cries anxiously and sometimes even starts vomiting. Hamza hardly speaks; most of the time he uses crying to communicate his desires and he can communicate his desires fiercely. Hamza has difficulties playing with other children. He prefers to play with younger children, but at the same time he can be very aggressive towards them. This scares other children and frustrates Amira.

It took some time in therapy before Amira dared to speak about the origins of Hamza. Amira believes she brought shame on herself and her family because she was raped; she feels she cannot return to her family, as her family would consider Hamza both illegitimate and a child of the enemy. Amira continues to be ambivalent about Hamza's existence and has suicidal and homicidal ideations. At night, Amira keeps Hamza close because she needs to feel he is safe. Amira: "I am scared because he is all I have got. If he dies I will be alone again." However, waking up after some nightmares, she saw her rapist's face projected on her child's face and beat him until this projection disappeared. During the day, Amira sometimes raged at Hamza, and identified Hamza with his father: "I cannot control myself. He knows my weak points and he uses that. He cries to get at me, just like his father" At other times, Amira is scared of him. Especially when Hamza gets angry, Amira reports to relive the anxiety she experienced during the rape.

Amira feels she made a sacrifice in keeping Hamza and because of this Hamza needs to compensate for her losses. Hamza needs to bring Amira her happiness, but at the same time Amira is afraid of Hamza growing up: "As soon as he grows up, he will be just as bad as his father. He will be a danger to me." Because of this anxiety, she demands Hamza to excel, even at this young age. Hamza needs to be "smart, loving, kind and righteous." Hamza sees himself as a bad boy, never able to do good.

Mental health risks

Various studies have researched the mental health needs of victims of rape and have established fairly high levels of symptoms across a wide range of problem areas. Walsh et al. (1992) report that 94% of 95 female rape victims studied met the symptomatic criteria for posttraumatic stress disorder (PTSD) within two weeks after the assault. Within six weeks, the PTSD-related psychopathology decreased sharply, but after three months 47% of these women still met the criteria of PTSD. Breslau et al. (1998) estimate the life time prevalence of exposure to rape as 5.4% and the probability of PTSD after exposure as 49%. Even after many years, the trauma of rape continues to have a major impact on women's lives. Cohen and Roth (1987) describe that, eight years after a rape, interpersonal sensitivity, extended family adjustment, and parental adjustment are the most affected areas in comparison to normative samples. Longitudinal data suggest that there is little added improvement after three months post-rape (Atkeson & Calhoun, 1982; Kilpatrick, Best, & Veronen, 1984). Research has shown the distinct negative effect of parental mental disorders such as depression, anxiety, or posttraumatic stress disorder on the development of the child (Van Ee, Kleber, & Mooren, 2012; Lovejoy et al., 2000; Weich et al., 2009). The mental health of children born of rape is at heightened risk as rape-induced pregnancy is considered an added traumatic stressor and the child is seen as a living reminder of the rape and rapist. With regard to mental health risks we identified four risk-factors:

Pregnancy and delivery

Children born of rape face several risks during pregnancy and delivery. Young girls, whose bodies are not mature enough for labor and delivery, and women with serious pelvic injuries, for example from the physical damage caused by gang rape, run significantly higher risks during childbirth (Harvard Humanitarian Initiative (HHI), 2010). In addition, these mothers typically lack maternal care and sometimes unsuccessfully try to abort the baby: complications of illegal abortions such as post-procedure infections have been reported in Congo (HHI, 2010). The exact effects of unsuccessful abortions on the child are unknown. Cases of infanticide have been reported, and to some, because of the agony of the mother, infanticide is considered a legitimate response (Carpenter, 2000; Smith, 2000; Weitsman, 2008). In Norway, among children born of rape and even in the case of those born as a result of love-relationships with the "enemy", records indicate that infanticide might have occurred. These records convey that the number of stillborn children fathered by German soldiers was higher

than among the average population (Nedrebø, 2008). The number of stillborn children increased significantly in 1945 compared to that in the previous war years. Nedrebø attributes these increased numbers to infanticide. Perinatal and postnatal complications, or even infanticide, constitute life-threatening risks for a child born of rape.

The child born of rape is brought to term by a mother who has suffered physically and psychologically and will likely continue to be under severe stress. This stress causes higher levels of cortisol concentrations, which are associated with the risk for PTSD and *in utero* effects. Maternal PTSD symptom severity has a correlation with infant cortisol levels regardless of the pregnancy trimester in which the trauma took place (Yehuda et al., 2005). In addition, maternal exposure to glucocorticoids during pregnancy can result in influences on fetal brain development, lower birth weight and the subsequent development of metabolic syndrome and other diseases (e.g. hypertension, insulin resistance, hyperlipidemia, and depression) (Halligan et al., 2004; Reynolds et al., 2001; Seckl, 2004). Trauma experienced by the mother can lead to maternal rejection and consequently child malnutrition that resist medical treatment (Rezzoug et al., 2008). In addition, research has shown long-lasting effects on the child's physical, emotional, and cognitive development resulting from maternal prenatal and postnatal chronic anxiety, depression and stress (Berg, van den, et al., 2006; Bruijn, 2010; Mennes, 2008).

Poor parent-child relationships

Children born of rape face the risk of poor parent-child relationships, abuse, or neglect. Some studies have reported on the association between psychological sequelae of rape and poorer parent-child relationships in general (DiLillo, Tremblay, & Peterson, 2000; Draijer & Langeland, 199; Reid-Cunningham, 2009). Even though these studies addressed the relationship with children not conceived through rape, the parent's capacity to provide intimacy or care was still affected, sometimes leading to abusive parenting.

In the case of children born of rape, psychotherapists and psychiatrists at Centrum '45, report poor parent-child relationships, for example, ambivalent and detached relationships. Our case example of Hamza and Amira not only demonstrates an ambivalent relationship, but also the effect on the child. The ambivalence of the mothers can be expressed in the naming of these children. Apio's study (2008) shows that the majority of children born to mothers captured by the Lord's Resistance Army in Uganda received names reflecting

their traumatic experience. Names such as *Komakech*, ("I am unfortunate") or *Anenocan* ("I have suffered") were not uncommon. The extreme ambivalence of these mothers can be expressed in unpredictable and sometimes frightened or frightening behavior. Examples of these types of behavior are vocal, verbal, or physical attacks on the child, or persistent and repeated backing away from the child. Amira was frightened by Hamza's aggression, but her reaction to Hamza's resemblance to his father was frightening. When fear is part of the experience of the parent-child relationship the child can become disorganized in the attachment with this parent. As a consequence of this maternal frightened and frightening behavior, clinicians at Centrum '45 report a high rate of disorganized attachment among children born of rape.

A growing body of empirical studies recognizes that threatening events may also result in psychological benefits (Helgeson, Reynolds, & Tomich, 2006). Taylor's theory of cognitive adaptation (1983) assumes that self-enhancing biases can buffer current threats by increasing self-esteem, developing an optimistic outlook, and regaining a sense of mastery over the event. Some rape survivors give a positive meaning to the child born of rape. They construct their baby as a life-saver, a gift from God, or as a new family to replace the one that was taken. A positive reframing can function as a form of protection against the ambivalence (van Ee & Kleber, 2012; Papineni, 2003; Rezzoug et al., 2008).

Discrimination and stigmatization

The success of mass rape and forced impregnation as weapons of war depends not on what identity perpetrators ascribe to the children of the rapes but on how the affected community views the children (Carpenter, 2000). As a result of a patriarchal identity, the community frequently ends up being the oppressor. The children are perceived as objects of shame and humiliation (Ericsson & Simonsen, 2005; Mazowiecki, 1993). For example, the Acholi culture (Northern Uganda) condemns illegitimacy, with some tribes discriminating against the children. In this context, children born to mothers captured by the Lord's Resistance Army fall into the lowest possible social group as they bear the stigma deriving from the rebel status as well as illegitimate status (Apio, 2008). Mochmann and Larsen (2008) conducted a survey among Norwegian and Danish children fathered by German soldiers. They included 1,000 children born of rape and of love-relationships alike. While this study did not focus on children born of rape alone, the results are a strong indication that these children were exposed to exclusion, harassment and medical problems. Erjavec and Volčič (2010) conducted in-depth interviews with eleven adolescent rape born girls on

their self-representation, life situation and relationships. A majority of the eleven girls defined themselves as scapegoats or the enemy to all. Ten out of eleven girls experienced the discovery of their origins as the most traumatic event in their life. This discovery was experienced as traumatic as a consequence of the negative reactions of the wider community.

Identity issues

Forced impregnation is viewed as a weapon of war to erase the identity of the mother and to leave her with a child belonging to another cultural group. Because of the ascribed patriarchal identity, perpetrators, mothers and children all view the children as belonging to the other group, despite the mothers' identities and despite the children being raised in their mothers' ethnic or cultural group (Weitsman, 2008). Case studies from Denmark and the Netherlands showed that children born of rape and of love-relationships during World War II faced serious identity questions when they learned about their fathers' identity (Diederichs, 2010; Mochmann & Øland, 2010). The children's identity is inextricably linked to that of their rapist fathers, even if a child never meets the father and a mother raises the child (van Ee & Kleber, 2012; Erjavec & Volčič, 2010).

Several girls interviewed by Erjavec and Volčič (2010) reported identity issues related to their relationship with their mother. These girls experienced guilt towards their mother and perceived themselves as a "live reminder of rape". In their opinion, their mothers suffered because of them. One of these girls described this poignantly: "my mother is all about pain and suffering, and my hugs bring her even more pain. (...) I know she loves me and hates me at the same time" (p. 372). A minority defined themselves as destructive in personal relationships. Other girls described parentification in their interview and defined themselves as the caregiver in the relationship. Self-image and presentation of the parent-child relationship of these adolescent girls born of rape are considered the results of the guilt that is a consequence of both the mother's suffering and the child's own feelings of perpetratorship.

Key issues for future research and treatment

Although children born of rape are at risk of mental health disturbances, clinical discourse hardly includes their fate. Combining available knowledge from research and clinical practice, albeit limited, we formulated three key issues that should lead in setting a research agenda and consequently in developing clinical guidelines for the treatment of children born of rape. These issues are:

perceiving children born of rape as secondary rape victims; the existence of multiple perpetrators; and competing rights and interests.

Children born of rape as secondary rape victims

What is perhaps the most striking phenomenon is the silence surrounding children born of rape, possibly due to the complexity characterizing the victimization of children born of rape. Legal discourse may have deemed forced impregnation a war crime and a crime against humanity, but it has remained silent about the children involved. This has led to a development in which it was the women who alone were seen as the victims. Carpenter (2000) comments: "Constructions of forced impregnation as genocide acknowledged and depended on the child's presence but treated the child not as a member of the victimized group but as either a non-victim or a member of the perpetrating group" (p. 457). This fallacy encountered in legal discourse is also prevalent in clinical discourse. Raped women are generally seen as the victim, and raising a child born of rape is considered an ongoing trauma. Consequently, it becomes difficult to conceptualize the child as an affected individual, too.

Nevertheless, it is crucial to recognize that victimization is different when the it is considered from the perspective of the child in comparison with the process as considered from the perspective of the female rape victim. While rape is a crime against the mother, the birth of a child can never be seen as a crime against this child itself. The event constituting a crime against the mother means life to the child (Carpenter, 2000). The child born of rape is victimized, not directly through its existence, but rather through the victimization of its mother. Identifying such children as "secondary victims" is of vital importance here as this highlights the risk of the confrontation with the posttraumatic disturbances of the mother developing into a vicarious trauma. The effects of the mother's symptomatology, ambivalence and sensitivity determine the effect of the rape on the child. For example, parental sensitivity and responsivity are crucial conditions for the development of safe attachment bonds. A mother's sensitivity to the child is reflected in a warm affect and an emotional connectedness. It is precisely this capacity that might be hindered by posttraumatic stress symptoms (Van Ee et al., 2011). Our case showed that Amira's symptoms of hyperarousal and re-experiencing had a major impact on the relationship with Hamza and threatened his development. Not all raped women develop pathology though, many are resilient (Bonanno, 2004; Kleber & Brom, 2003). These various responses affect the mother-child relationship. In conclusion, the mother-child relationship defines the complex interactions of the dyad and can ameliorate, sustain or exacerbate the disturbances in both partners.

Multiple perpetrators

Children born of rape can be viewed as victims in multiple ways: as victims of genocide and war crimes, of infanticide, of neglect, abuse or poor parenting, and finally of discrimination and stigmatization (also see Goodhart, 2007). In the first case, the violator appears to be the father; in the second and third it is usually the mother; in the fourth, it is the child's maternal community or society that is responsible. To end the victimization of children born of rape it is crucial to determine who is the perpetrator and who inflicts the damage. However, as this is a highly complex issue to address, the matter is often avoided. Clinicians refrain from blaming the mother or blaming another culture, and rightfully so. Blaming the father is easy, because he is the absent rapist. Still, in the end, the child grows up not with the rapist father, but with a possibly dysfunctional mother and affected by callous opinions held by its community. If these children continue to be associated with their rapist father, this will have devastating effects on their development. Therefore, in a gentle fashion, the mother needs to be held accountable for her behavior. If necessary, the mother needs to be empowered to combat and manage her posttraumatic stress and feelings of ambivalence when interacting with her child. In addition, the mother and child need to be enabled to challenge the convictions held by their cultural community.

Although attitudes and beliefs impact mother and child, it is unclear under what conditions and to what extent this takes place. Refugee mothers, who fled from their own country, raise children born of rape more often in a Western culture that is either neutral or accepting of the child. Since the mother lacks her natural support resources the child most often becomes very central to her life. Still, some of these mothers, like Amira in our case example, continue to be hostile to their children while others feel enabled to accept them. Mothers who raise their child within their own community can be confronted with the choice between the child or the community. Even so, research has shown that the rejection of children born of rape by their communities is not uniform (Rehn & Sirleaf, 2002). Further research is needed to fully understand the conditions under which rape survivors, their families and communities may become able to accept children born of rape.

Competing rights and interests

Many raped women feel ashamed: they tend to hide and try to deny their trauma. This reaction may be a reason for the silence surrounding children born of rape. Remaining silent has been described in traumatized families as a

common way of coping with humiliating and violent experiences (Almqvist & Broberg, 1997). In addition, many practitioners genuinely believe that the best interests of the child are not served by articulating the problems. It is assumed that it will be easier for the child and that it will protect the child from stigma if the child and the broader community remain unaware of the child's origins (Aaldrich & Baarda, 1994). McEvoy-Levy (2007) distinguishes two different kinds of silences concerning such children: strategic and imposed silences. A strategic silence protects the children and their mothers while through an imposed silence societies ignore or avoid the problem. It could be argued though that a strategic silence is also imposed as the children and mothers need this silence to be protected against society. Silence can deprive children born of rape of a much needed voice and recognition. It creates a conflict of rights: between the children and their mothers as well as between the children and the ethnic communities. A tension exists between a discussion of the rights and interests of children born of rape, the safety and privacy of children and their mothers, and societies eager to forget and defuse the issue (Goodhart, 2007).

Clinicians are forced to balance the rights of a rape victim to remain silent on the one hand and the rights of their children to know and cope with their origins on the other hand. Also, many anecdotal cases can be found in which, despite the silence of the mother, the children or the community did eventually learn about their rapist fathers. After this discovery, many children confirmed that not knowing about their father had been a defining feature of their childhood and that it had stirred identity issues (Mochmann & Lee, 2010). Attention must be given to the fact that many children born of rape will ultimately have to become informed about the violent circumstances of their conception. We need to understand when and how this information can best be given to the child, how this will affect the child, and what can be done to help children cope with this information. There is an urgent need to develop a clinical discourse covering the integration of the interests and rights of rape survivors with those of their children.

Setting the agenda

Children born of rape are particularly vulnerable and their case is complex as their needs intertwine – and sometimes interfere – with the needs of their mothers or their cultural community. It is this complexity which prevents the development of a simple and coherent framework related to victimhood and which contributes to the silence surrounding children born of rape. Substantial research on the

actual fate of these children is extremely limited. These children clearly face distinct risks through the life-span. To understand the complex issues concerned, more and thorough research is needed. Who are these children? What is their fate? What are their needs? How should we address the conditions in which these children grow up from a child protection and mental health perspective? How can we intervene effectively? Therefore, we have identified three key issues which we feel could set the agenda. One common element in all the issues involved is the theme of connectedness: both a mother and a community need to bond with a child that is not (completely) considered their own. A child must learn to thrive in a changing environment, one that is sometimes safe and sometimes hostile. To assist children born of rape, clinicians as well as researchers are confronted with the challenge to develop a comprehensive perspective that considers the needs and rights of both children and mothers.

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References

Aaldrich, G. H., & Baarda, T. A. (1994). *Final report of the conference on the rights of children in armed conflict held in Amsterdam, the Netherlands, on 20-21 June.* International Dialogues Foundation: Amsterdam, Netherlands.

Almqvist, K., & Broberg, A. (1997). Silence and survival: working with strategies of denial in families of traumatized preschool children. *Journal of Child Psychotherapy*, *23*, 417-435.

Apio, E. (2008). Bearing the burden of blame – the children of the Lord's Resistance Army, Northern Uganda. *Coalition to Stop the use of Child Soldiers*, *11*, 2-13.

Atkeson, B. M., & Calhoun, K. S. (1982). Victims of rape: Repeated assessment of depressive symptoms. *Journal of Consulting and Clinical Psychology*, *50*, 96-102.

Berg, van den B., Mulder, E., Mennes, M., & Glover, V. (2006). Antenatal maternal anxiety and stress and the neurobehavioral development of the fetus and child: links and possible mechanisms. A review. *Neuroscience & Biobehavioral Review*, *29*, 237-258.

Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, 59, 20-28.

Breslau, N., Kessler, R. C., Chilcoat, H. D., Schultz, L. R., Davis, G. C., & Andreski, P. (1998). Trauma and posttraumatic stress disorder in the community. The 1996 Detroit area survey of trauma. *Archives of General Psychiatry*, *55*, 626-632.

Bruijn, A. D. (2010). *Tied to mommy's womb? Prenatal maternal stress, postnatal parental interaction style and child development* (Doctoral dissertation from University of Tilburg, the Netherlands).

Buss, D. (2002). Case Note 'Prosecuting mass rape: The Prosecutor v. Drago jub Kunarac, Radomir Kovac and Zoran Vukovic. *Feminst Legal Studie*, *10*, 91-99.

Carpenter, R. C. (2000). Surfacing children: Limitations of genocidal rape discourse. *Human Rights Quarterly*, *22*, 428-477.

Carpenter, R. C. (2010). *Forgetting children born of war, setting the human rights agenda in Bosnia and beyond.* New York: Colombia University Press.

Cohen, L. J. & Roth, S. (1987). The psychological aftermath of rape: Long-term effects and individual differences in recovery. *Journal of Social and Clinical Psychology*, *5*, 525-534.

Diederichs, M. (2010). "'Moffenkinder': Kinder der Besatzung in den Niederlanden". *Historical Social Research*, *34*, 304-320.

DiLillo D., Tremblay, G. C. & Peterson, L. (2000). Linking childhood sexual abuse and abusive parenting: the mediating role of maternal anger. *Child Abuse & Neglect*, *6*, 767-779.

Draijer, N. & Langeland, W. (1999). Childhood trauma and perceived parental dysfunction in the etiology of dissociative symptoms in psychiatric inpatients. *American Journal of Psychiatry*, *156*, 379-385.

Ellingsen, D. (2004). En registerbasert undersökelse. Statistics Norway, Rapport Nr. 2004/19.

Ericsson, K., & Simonsen, E. (2005). *Children of World War II, the hidden enemy legacy.* Oxford/New York: Berg.

Erjavec, K. & Volčič, Z. (2010). Living with the sins of their fathers: An analysis of self-representation of adolescents born of war rape. *Journal of Adolescent Research*, *25*, 359-386.

Goodhart, M. (2007). Children born of war and human rights, philosophical reflections. In R. C. Carpenter (Ed.), *Born of war* (pp. 188-209). Blomfield: Kumarian:.

Grieg, K. (2001). *The war children of the world.* Bergen: The war and children identity project.

Halligan, S. L., Herbert, J., Goodyer, I. M. & Murray, L. (2004). Exposure to postnatal depression predicts elevated cortisol in adolescent offspring. *Biological Psychiatry*, *55*, 376-381.

Harvard Humanitarian Initiative & Oxfam International (2010). *"Now, the world is without me": An investigation of sexual violence in Eastern Democratic Republic of Congo.* Oxford: Author. Retrieved from: http://www.oxfam.org/sites/www.oxfam.org/files/DRC-sexual-violence-2010-04.pdf

Helgeson, V. S., Reynolds, K. A. & Tomich, P. L. (2006). A meta-analytic review of benefit finding and growth. *Journal of Consulting and Clinical Psychology*, *7*, 797-816.

Kilpatrick, D. G., Best, C. & Veronen, L. (1984). Factors predicting psychological distress among rape victims. In C. R. Figley (Ed.), *Trauma and its Wake: The study and treatment of posttraumatic stress disorder* (pp.113-141). New York: Brunner/Mazel.

Kleber, R. J. & Brom, D. (2003). *Coping with trauma*, *theory*, *prevention and treatment.* Lisse: Swets & Zeitlinger publishers.

Lovejoy, M. C., Graczyk, P. A., O'Hare, E. & Neuman, G. (2000). Maternal depression and parenting behavior: a Meta-analytic review. *Clinical Psychology Review*, *20*, 561-592.

Mazowiecki, T. (1993). *Situation of human rights in the territory of the former Yugoslavia.* Report submitted to the Commission of Human rights pursuant to Commission Resolution 1992/S-1/1 of 14 August 1992, February 23, 1993.

McEvoy-Levy, S. (2007). Children born of wartime rape and human rights culture. In R. C. Carpenter (Ed.), *Born of War* (pp. 149-179). Bloomfield: Kumarian.

Mennes, M. (2008). *Longitudinal study on the effects of maternal anxiety during pregnancy: Neuropsychological and neurophysiological examination of cognitive control in the adolescent offspring* (Doctoral dissertation from University of Leuven, Belgium)

Mochmann, I. C. & Larsen, S. U. (2008). "The forgotten consequences of war: The life course of children fathered by German soldiers in Norway and Denmark during WWII – some empirical results". *Historical Social Research*, *33*, 347-363.

Mochmann, I. C. & Lee, S. (2010). The human rights of children born of war: case analyses of past and present conflicts. *Historical Social Research*, *35*, 268-298.

Mochmann, I. C. & Øland, A. (2010). Der lange Schatten des Zweiten Weltkriegs: Kinder deutscher Wehr-machtssoldaten und einheimischer Frauen in Dänemark. *Historical Social Research*, *34*, 283-303.

Naimark, N. M. (1995). *The Russians in Germany: A history of the Soviet zone of occupation*, *1945-1949.* Boston: Harvard University Press.

Nedrebø, Y. (2008). Lebensborn, tyskerbarn og barnedødelgihet. *Bergensposten*, *2*, 56.

Papineni, P. (2003). Children of bad memories. *The Lancet*, 3*62*, 825-826.

Rehn, E. & Sirleaf, E. J. (2002). *Women*, *War and Peace.* New York: UNIFEM.

Reid-Cunningham, A. R. (2009). Parent-child relationship and mother's sexual assault history. *Violence Against Women*, *15*, 920-932.

Repke, I. & Wensierski, P. (2007, August 16). Lost red army children search for fathers. *Der Spiegel*.

Reynolds, R. M., Walker, B. R., Syddall, H. E., Andrew, R., Wood, P. J., Whorwood C. B. & Phillips D. I. (2001). Altered control of cortisol secretion in adult men with low birth weight and cardiovascular risk factors. *Journal of Clinical Endocrinology & Metabolism*, *86*, 245-250.

Rezzoug, D., Baubet, T., Broder, G., Taïeb, O., & Moro, M. R. (2008). Addressing the mother-infant relationship in displaced communities. *Child and Adolescent Psychiatric Clinic of North America*, *17*, 551-568.

Schissler, H. (2000). *The miracle years: A cultural history of West Germany*, *1949-1968.* Princeton: Princeton University Press.

Smith, H. (2000, April 16). Rape Victims' Babies Pay the Price of War. *The Observer*.

Seckl, J. R. (2004). Prenatal glucocorticoids and long-term programming. *European Journal of Endocrinology*, *151*, U49-U62.

Stelzl-Marx, B. (2009). Die unsichtbare Generation. Kinder sowjetischer Besatzungssoldaten in Österreich und Deutschland. *Historical Social Research*, *34*, 352-372.

Taylor, S. E. (1983). Adjustment to threatening life events: A theory of cognitive adaptation. *American Psychologist*, *38*, 1161-1173.

The Prosecutor v. Tadic, Case No. IT-94-1-T, Decision on the defense motion for interlocutory appeal on jurisdiction, 2 October 1995, para. 42, 1995.

United Nations (2002). *Women*, *Peace*, *and security: Study submitted by the Secretary-General pursuant to Security Council Resolution 1325.* New York: Author. Retrieved from: http://www.un.org/womenwatch/daw/public/eWPS.pdf

Van Ee, E., Kleber, R. J., & Mooren, G. T. (2012). War trauma lingers on... Associations between maternal PTSD, parent-child interaction and child development. *Infant Mental Health Journal*, *33*, 459-468.

Van Ee, E. & Kleber, R. J. (2012). Child in the shadowlands. The Lancet, 380, 642-643.

Walsh, W., Rothbaum, B. O., Foa, E. B., Riggs, D. S. & Murdock, T. (1992). A Prospective examination of posttraumatic stress disorder in rape victims. *Journal of Traumatic Stress*, *5*, 455-475.

Weich, S., Patterson, J., Shaw, R. & Stewart-Brown, S. (2009). Family relationships in childhood and common psychiatric disorders in later life: systematic review of prospective studies. *The British Journal of Psychiatry*, *194*, 392-398.

Weitsman, P.A. (2008). The politics of identity and sexual violence: A review of Bosnia and Rwanda. *Human Rights Quarterly*, *30*, 561-578.

World Health Organization (2000). *Reproductive Health During Conflict and Displacement: A guide for Program Managers.* Geneva: Author. Retrieved from: http://whqlibdoc.who.int/hq/2001/WHO_RHR_00.13.pdf

Yehuda, R., Engel, S. M., Brand, S. R., Seckl, J., Marcus, S. M. & Berkowitz, G. S. (2005). Transgenerational effects of posttraumatic stress disorder in babies of mothers exposed to the World Trade Center attacks during pregnancy. *The Journal of Clinical Endocrinology and Metabolism*, *90*, 4115-4118.

Is attachment a key in understanding relational patterns between the traumatized asylum seeker or refugee parent and the non traumatized child?

Chapter 8

Parental attachment representations and sensitivity towards children in refugees: The moderating role of parental trauma

Parental attachment representations and sensitivity towards children in refugees: the moderating role of parental trauma
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Submitted

The importance of a healthy parent-child relationship in order for children to prosper in their development is well established. Various studies have shown that trauma related disturbances, and, more specifically, posttraumatic stress disorder (PTSD) can affect healthy parenting. Symptoms of PTSD include the reoccurrence of traumatic experiences, the avoidance of stimuli, negative cognitions and moods, as well as persistent symptoms of arousal (American Psychiatric Association, 2013). Parents with symptoms of PTSD perceived the relationship with their child as poorer than those without symptoms of PTSD (Jordan et al., 1992; Lauterbach et al., 2007; Samper, Taft, King, & King, 2004; Van Ee, Sleijpen, Kleber, & Jongmans, 2013), perceived their child as more difficult in temperament and experienced more parenting stress (Davies, Slade, Wright, & Stewart, 2008; Holditch-Davis et al., 2009; McDonald, Slade, Spiby, & Iles, 2011) than parents without symptoms of PTSD. Mothers with more symptoms of PTSD were observed to be less sensitive and responsive (Feeley et al., 2011; Schechter et al., 2010; Van Ee, Kleber, & Mooren, 2012). However, the mechanisms that explain why certain individuals are affected in their parenting while others show resilience are poorly understood.

Adult attachment representations may offer an explanation for differences in post-trauma adjustment and parenting. Adult attachment reflects the mental representation of past and present attachment experiences (Riem, Bakermans-Kranenburg, Van IJzendoorn, Out, & Rombouts, 2012). These attachment representations have an important function of providing a personal framework for behavior and expectations in present relationships and during the construction of new relationships (Coppola, Vaughn, Cassibba, & Costantini, 2006). Bowlby (1973) proposed that, with age and cognitive development, sensorimotor representations of secure base experiences give rise to internalized mental representations, or working models of the world and of significant persons in it. A relationship exists between individual differences in attachment representations on the one hand and physical and mental health and adjustment on the other hand (Mikulincer, EinDor, Solomon, & Shaver, 2011). For example, individuals with secure attachment representations have higher self-esteem (Mikulincer & Shaver, 2007), are more efficient in adjusting to stressful experiences (Dozier, Stovall-McClough, & Albus, 2008), possess effective coping styles and are better in regulating their emotions (Mikulincer & Shaver, 2007). In contrast, insecure attachment might pose as a risk factor for the development of psychopathology (Berant, Mikulincer, & Florian, 2001). A meta-analysis by Van IJzendoorn and Bakermans-Kranenburg (2009) demonstrated a clear underrepresentation in clinical samples of secure classifications.

It is often assumed that attachment patterns are stable over time and that secure children grow up to become secure adults. However, individuals can change, update and revise attachment patterns in light of new attachment-relevant experiences that deviate from previous experiences and existing knowledge. Several studies examined the stability of attachment patterns from infancy through adulthood and have not found much continuity overall (Fraley, 2002; Fraley & Brumbaugh, 2004). Studies show that attachment relevant life events that occur in early life can produce discontinuities in attachment patterns later in life (e.g. Waters, Merrick, Treboux, Crowell, & Albersheim, 2000; Waters, Weinfield, & Hamilton, 2000; Weinfield, Sroufe, & Egeland, 2000). However, when focusing solely on change in adulthood, some studies, which used self-report measures, failed to find associations between attachment relevant life events and changes in attachment patterns (e.g. Baldwin & Fehr, 1995; Cozzarelli, Karafa, Collins, & Tagler, 2003; Davila & Cobb, 2004). According to Davila and Cobb (2004), life events will cause changes only when they counter current attachment models. Both stability and change of attachment patterns may appear in the course of life.

Traumatic experiences relate to events that threaten a person's life or physical integrity and invoke a response of intense fear, helplessness or horror (American Psychiatric Association, 2013). As acknowledged by Janoff-Bulman, these experiences have the ability to shatter people's basic assumptions. Hence, she suggested that the majority of people hold core assumptions that by providing people with expectations about themselves, others, and the world, will help them achieve an effective daily functioning and maintain a sense of invulnerability (Janoff-Bulman, 1989; Janoff-Bulman & McPherson, 1997). However, the traumatic experience may counter these prior held beliefs and induce the need for reappraisal and revision of fundamental schemas (Magwaza, 1999; Mikkelsen & Einarsen, 2002). Since these experiences affect these core models of self, others and the world, and these core models partially form attachment representations, they counter the formerly held working models and induce a need to revise attachment representations. Furthermore, since the basis of attachment representations and the models of self, others and the world are beliefs about the value of seeking help from attachment figures and the feasibility of attaining safety, comfort and protection (Mikulincer et al., 2011), these beliefs are likely to be affected by traumatic experiences. Beliefs about the value of seeking help from attachment figures and the feasibility of attaining safety, protection and comfort become more unstable and change attachment representations.

Attachment representations play a significant role in defining parent-child interaction. In general, a sense of security allows a person to attend less to his or her own needs and shift attention to the domains of other behavioral systems, such as caregiving. Security protects a caregiver from being overwhelmed by others' suffering or feeling threatened by the interdependence involved in providing care. In addition, secure adults have actually witnessed good care provided by their attachment figures, which provides them with positive models for their own behavior (Mikulincer & Shaver, 2007). Moreover, there is extensive evidence that parents with a 'secure state of mind' are more sensitive. They are more willing and able to perceive their children's actions correctly and to respond to them in a prompt, appropriate and contingent way. Parental sensitivity is one of the key mechanisms to an effective parent-child relationship and an important condition for the development of attachment security (Ainsworth, Blehar, Waters, & Wall, 1978; De Wolff & Van IJzendoorn, 1997; Van IJzendoorn, 1995).

In addition, the development of PTSD in response to traumatic experiences, can lead to a decreased sensitivity as well. Because PTSD involves repeated reactivation of the trauma (newly formed), negative models of self, others and the world may be amplified, resulting in attachment representations that reduce the likelihood of attaining a calm and secure mental state even long after the original experience (Mikulincer et al., 2011). A chronic sense of "current threat" and difficulties in reflective thinking may affect the way parents think and feel about and behave towards their children (Slade, 2005). In addition, they may interfere with parents' capacity to consider their children's perspective and correct interpretation of their thoughts and feelings (Kosslyn, 2005). Together with intense fear, sadness and anger, this can lead to degradation in parents' capacity to respond sensitively to their children and their possibility to serve as a secure base for them (Almqvist & Broberg, 1997; Lieberman & Knorr, 2007).

Several studies have shown the link between PTSD and reduced sensitivity, whereas caregiving behaviors are, at least in part, regulated by attachment representations. Therefore, PTSD may moderate the relation between insecure attachment representations and insensitivity. Some studies showed an increased risk for depressed mothers with insecure attachment representations to behave insensitively towards their children and to have an insecurely attached child (McMahon, Barnett, Kowalenko, & Tennant, 2006; Trapolini, Ungerer, & McMahon, 2008). Whether or not parents' symptoms of PTSD moderate the relation between attachment representations and sensitivity has, to our knowledge, not been studied before.

In the current study, we will assess the relationships between traumatic experiences, PTSD, sensitivity and attachment in a high-risk sample. Two hypotheses will guide this research:

1) Parents are more likely to be classified as having insecure attachment representations when they have experienced more events that are traumatic and/or more symptoms of PTSD.

2) The number of traumatic experiences and symptoms of PTSD moderate the relationship between parents' attachment representations and sensitivity towards their children.

Since there are no studies concerning trauma and attachment representations in relation to parent-child interaction, this study will contribute by providing a unique perspective to our understanding of the relations between trauma, parenting and attachment.

Methods

Participants

In this study asylum seekers and refugee parents (mothers, fathers or both) were included when they experienced a traumatic experience and had a child between 18 – 42 months of age who was born in the Netherlands. Asylum seekers and refugees with severe mental retardation, addictions or psychosis were excluded. Likewise, dyads were excluded when children had traumatic experiences themselves. Eighty participants consented to be part of the study, but ten participants refused to take the Secure Based Scripts (SBS) as they considered the test too difficult. One participant was excluded from the analyses because there were issues with the translation and thus the results were unreliable. Four people had too much missing data on the Harvard Trauma Questionnaire (HTQ) to be useful for analyses. Of 12 children both father and mother participated. To avoid dependency of the data we included only the mothers of these children, as they are most often the primary caregivers. Therefore, our final sample consisted of 53 participants.

To test whether participants that refused the SBS significantly differed from participants who did complete the assessment, independent samples – *t*-test and chi square tests for independence were performed for various descriptive statistics. Participants with missing scores on the SBS significantly spent

fewer years in the Netherlands prior to the study (t (15.44) = -2.76, p = .04) and completed lower levels of education. Most of them did not receive any education at all or only completed a few years of primary school (χ^2 (4, 73) = 15.10, p < .01). Participants with missing scores on the SBS did not significantly differ in age, sex, country of origin, or being an asylum seeker or refugee (granted a residence permit) from those participants who did complete the test.

The sample consisted of 30 mothers, 23 fathers, 21 girls and 32 boys. The mean age of the parents was 30.86 years (*SD* = 7.37), the mean age of the children was 28.04 months (*SD* = 9.62). The families had fled from all over the world (Africa: 35.8%, Middle East: 35.8%, South and Eastern Asia: 11.3%, Eastern Europe and Balkan: 7.5%, Russia and former Russia: 7.5%, South America: 1.9%) to the Netherlands from 3 months to 17 years (*M* = 6.80, *SD* = 4.75) prior to the study. Of all the parents, 31 had received a residence permit (58.5%), and 24 parents and their children (44.4%) lived in an asylum seeker center. Of all the parents, 16.3% had no or little education, 20.4% had finished primary school, 18.4% had finished secondary school, 10.2% had finished vocational education and 34.7% held a professional or university degree.

Measures

Traumatic experiences and symptoms of PTSD. Traumatization of parents was measured with the Harvard Trauma Questionnaire (HTQ: Mollica, Caspi-Yavin, Bollini, & Truong, 1992). The questionnaire consists of a list of 20 traumatic experiences and a 30-item trauma-symptom list. The first 16 items are derived from the Diagnostic and Statistical Manual of Mental Disorders criteria for PTSD (DSM-IV, American Psychiatric Association, 1994) and measure the severity of PTSD symptoms. The other 14 items describe symptoms related to specifically refugee trauma. The HTQ asks participants which traumatic experiences they experienced, witnessed or heard of. It also asks participants to rate to what degree particular PTSD symptoms have bothered them in the past week on a frequency scale of 1 (not at all) to 4 (extremely). A mean cutoff score of this rating of 2.5 was used in several studies to identify clinically significant PTSD (Mollica et al., 1992). A standard version of the HTQ is available in many languages. In the current study, if a specific language was not available, interpreters translated the questions in session.

The psychometric properties of the HTQ are adequate across cultures and in general applicable to measure symptoms of posttraumatic stress (Kleijn, Hovens, & Rodenburg, 2001). In a review of instruments used in studies of refugees, the

HTQ was found to be statistically reliable and valid in multiple studies across multiple traumatized populations (Hollifield et al., 2002). In the current study, internal consistency of the 30-item symptom list was high (Cronbach's α = .92; intrusion = .84, avoidance = .79, arousal = .82, refugee trauma-items = .89). Within this study, the mean score of the 30-item DSM posttraumatic stress symptoms and the number of traumatic experiences participants experienced themselves or witnessed were used in the analyses.

Attachment representations. Attachment representations of parents were measured with the Secure Base Script assessment (SBS; Waters & Rodrigues-Doolabh, 2004). The narrative-based SBS measure is a word-prompt method used for assessing participants' awareness of and access to a secure base script. SBS scores have substantial associations with Adult Attachment Interview coherence (*rs* .50 –.60) confirming convergent validity. They are theorized to form a foundation for attachment representations (Bakermans-Kranenburg, 2006; Bretherton, 1991; Waters & Waters, 2006). The method has been validly used across different sociocultural groups (Coppola et al., 2006; Vaughn et al., 2007; Verissimo & Salvaterra, 2006; Waters & Waters, 2006). Parents completed the SBS using word prompts that form the outline of six different stories. Each outline included three columns of four words and was presented one at a time. Parents were asked to read down from each column from left to right to produce a story. They were told that the stories would be recorded using an audio-recorder and that they could start the story over if they desired. Of the six word-prompt outlines presented, two were filler stories and four were attachment-related: two parent–child oriented lists (i.e., Baby's Morning and Doctor's Office) and adult-couple oriented lists (i.e., Troubles at Work and The Accident).

Narratives were coded on a 7-point scale for the extent to which they were organized around a secure base script. A secure base script is one in which there is a bid for help, the bid is recognized and help is offered, the help is useful in overcoming the problem, and the situation ultimately returns to normal. Narratives that show this structure clearly receive a seven; narratives that lack this structure completely receive a one. As is common, a composite score derived by averaging the secure base scriptedness scores across all four stories was used in our analyses. Inter-rater reliability for the SBS was established with Intraclass Correlation Coefficients (ICC) on the four attachment-related stories of a sample of 10 randomly selected cases. Within story rater agreement calculated was high (ICC ranging from .84 to .91). Inter rater agreement for the composite score was high as well (ICC = .97).

Sensitivity. Sensitivity of parents towards their children was measured with the Emotional Availability (EA) Scales, fourth edition (Biringen, 2008). Emotional availability refers to the degree to which each partner expresses emotions and is responsive to the emotions of others. Optimal emotional availability enhances secure-based behavior (Biringen, 2000). The EA Scales consist of six dimensions of the emotional availability of the parent toward the child and of the child toward the parent. The parental dimensions are sensitivity, structuring, non-intrusiveness, and non-hostility, and the child dimensions are the child's responsiveness to the parent and the child's involvement with the parent. For the purpose of the present study we only used scores on the EA Scale parental sensitivity dimension because of the specific relevance to our hypotheses. In other studies a similar selection was made (Koren-Karie, Oppenheim, Dolev, & Yirmiya, 2009; Van Den Dries, Juffer, Van IJzendoorn, Bakermans-Kranenburg, & Alink, 2012; Zelkowitz, Na, Wang, Bardin, & Papageorgiou, 2011). The score on this dimension ranges between one and seven with higher scores indicating higher levels of parental sensitivity. Examples of criteria are when a sensitive adult displays a balanced, genuine affect, clarity of perceptions and appropriate responsiveness.

In this study, parents and children were videotaped during a 15-min play session. The parents received the instruction to play with their children and the available toys as they liked. During this unstructured play, parent and child were alone in the room. Two raters, who were trained for reliability and were unaware of the maternal history of trauma or level of symptoms, independently coded the videotaped sessions. Interrater reliability, established on a randomly selected 30% of the videotapes, was high (sensitivity: ICC = .89).

Procedure

The sample for this study was recruited via Centrum '45, the Dutch national institute for the treatment of trauma resulting from war, persecution and violence, and via regional asylum seekers centers in The Netherlands. At Centrum '45, counselors informed eligible participants about the research project and asked their consent to be approached by research assistants. If eligible participants approved, a telephone meeting was scheduled to give information and answer questions on the project. A qualified interpreter was always present to help with the communication. If the parents consented to proceed, a research date was set. In addition, research assistants, together with interpreters, approached eligible participants at the asylum seekers centers to inform them of the project. If a parent was willing to participate, a research date was set. All parents came

with their child for one day to Centrum '45 or a designated area within the asylum seekers center. Before testing would start, a final informed consent was signed. Participants were aware that they could withdraw their consent at any time and that anonymity was guaranteed. An interpreter was present during the entire day. If questionnaires were not available in a specific language, items were translated during the session. Participants received 25 euros and reimbursement for traveling expenses. The study was approved by the medical ethics committee of the Medical Center of Leiden University, The Netherlands.

Statistical Analyses

Statistical analyses were performed using SPSS version 20.0. Hierarchical regression analyses were used to test whether the number of traumatic experiences and the PTSD symptom level contributed to variation in secure base scriptedness. Hierarchical regression analysis was also used to test whether secure base scriptedness was associated with parental sensitivity towards their child and whether this association was moderated by PTSD symptom level and number of traumatic experiences. To test the moderation effect of the PTSD symptom level and number of traumatic experiences, the interaction was computed between the standardized scores of secure base scriptedness and PTSD symptom level, as well as between secure base scriptedness and number of traumatic experiences. Each interaction term was added to a regression model together with the covariates sex and age, the standardized independent variable (i.e., secure base scriptedness), and the moderator (number of traumatic experiences or PTSD symptom level). Subsequently, the significance of the interaction term was tested. The significance of the interaction term indicates that the association between secure base scriptedness (independent variable) and parental sensitivity (dependent variable) is moderated by PTSD symptom level or the number of traumatic experiences (moderators). Simple slope analysis (Preacher, Curran, & Bauer, 2006) was used to test whether the slope for the regression of parental sensitivity on secure base scriptedness was significant at low (1 standard deviation below the mean of the moderator), average (mean of the moderator), and high (1 standard deviation above the mean of the moderator) levels of the moderators (number of traumatic experiences or PTSD symptom level).

Results

Descriptive statistics

Table 8.1 gives an overview of means and standard deviations for the number of traumatic experiences, PTSD symptoms, secure base scripts, and sensitivity towards the child as observed within the interaction. Means did not significantly differ between mothers and fathers (all *p*-values > .05). On average, participants experienced or witnessed about 11 traumatic experiences. Examples of the most common experienced traumatic experiences are lack of water or food (48.1%), unnatural death of a family member (44.4%), forced separation of family members (53.7%), imprisonment (44.4%), torture (46.3%) or threatened with torture (50.9%) and nearly died (55.6%). The mean PTSD symptom level is at the boundary between a normal and clinical range. In our sample, 51% of participants had a clinical PTSD level, whereas 49% had sub-threshold scores of PTSD symptomatology. Note that the secure base scriptedness elicits continuous score, where a score below five indicates in general the absence of a secure base script in the narratives. Within this sample, 69.8% of the scripts reflected the absence of an awareness of and access to a secure base script, 18.9% of the scripts reflected a weak and 11.3% reflected a strong awareness of and access to a secure base script.

Table 8.1. Descriptive Statistics for mothers, fathers and the total sample of parents

	Father (*n* = 12)		Mother (*n* = 41)		Total sample (*n* = 53)		
	M	*SD*	*M*	*SD*	*M*	*SD*	range
Traumatic experiences	12.33	4.03	10.78	6.78	11.13	6.27	0-20
PTSD symptoms	2.48	.80	2.37	.70	2.40	.72	1-4
Secure base script	3.02	.48	3.19	1.03	3.15	.94	1-7
Parental sensitivity	4.58	1.51	4.24	1.56	4.32	1.54	1-7

Associations between traumatic experiences, PTSD symptoms, secure base scriptedness and sensitivity

Table 8.2 presents the correlations between the number of traumatic experiences, PTSD symptom level, secure base scriptedness, and parental sensitivity. The positive association between the number of traumatic experiences and PTSD symptom level was significant, indicating that higher numbers of traumatic experiences were associated with higher levels of PTSD symptom levels. Parental sensitivity towards their children was significantly associated with the number of traumatic experiences and PTSD symptom level, indicating that

increased levels of parental sensitivity are associated with lower numbers of traumatic experiences and decreased PTSD symptom levels. Finally, there was a significant positive association between parental sensitivity and secure base scriptedness, suggesting that increased awareness and access to a secure base script is associated with increased levels of parental sensitivity towards their children. Secure base scriptedness was not significantly associated with number of traumatic experiences and PTSD symptom level.

Table 8.2 Pearson correlations between traumatic experiences, PTSD symptoms, secure base scriptedness, and parental sensitivity

	1.	2.	3.	4.
1. Traumatic experiences	-			
2. PTSD symptoms	.74**	-		
3. Secure base scriptedness	-.19	-.12	-	
4. Parental sensitivity	-.28*	-.42**	.32*	-

*Pearson correlation is significant at the .05 significance level (two-tailed);
** Pearson correlation is significant at the .01 significance level (two-tailed).

Traumatic experiences and PTSD symptoms as predictors of secure base scriptedness

Hierarchical regression analysis was used to test whether the number of traumatic experiences and PTSD symptom level contributed to variability in secure base scriptedness. Results are presented in Table 8.3. First, secure base scriptedness was adjusted for sex and age by adding them to the model in step 1. The number of traumatic experiences was added to the model in step 2, and the PTSD symptom level was added to the model in step 3. Traumatic experiences and PTSD symptom level were not independently associated with secure base scriptedness. In other words, neither number of traumatic experiences nor PTSD symptom level predicted the level of secure base scriptedness.

Table 8.3 Associations between traumatic experiences, PTSD symptoms, and secure base scriptedness

Step 1				0.01
Constant	3.05	0.28		
Sex	0.13	0.33	0.06^{ns}	
Age	-0.05	0.14	-0.06^{ns}	
Step 2				0.03
Constant	3.39	0.38		
Sex	0.09	0.32	0.04^{ns}	
Age	-0.05	0.14	-0.05^{ns}	
Traumatic experiences	-0.03	0.02	-0.19^{ns}	
Step 3				0.00
Constant	3.29	0.55		
Sex	0.09	0.33	0.04^{ns}	
Age	-0.05	0.14	-0.05^{ns}	
Traumatic experiences	-0.03	0.03	-0.23^{ns}	
PTSD symptoms	0.07	0.28	0.05^{ns}	

Note. Dependent variable: secure base scriptedness, ^{ns} not statistically significant ($p > .05$)

Moderation of the association between secure base scriptedness and parental sensitivity by number of traumatic experiences

Table 8.4 presents the results of the hierarchical regression analysis that was employed to test whether secure base scriptedness contributed to variation in parental sensitivity and whether the association between secure base scriptedness and parental sensitivity was moderated by the number of traumatic experiences. Parental sensitivity was adjusted for age and sex by adding them to the model in step 1. There was no significant contribution of parental sex and age to variation in parental sensitivity. To test whether secure base scriptedness contributed independently to variation in parental sensitivity it was added to the model in step 2. There was a significant positive association between secure base scriptedness and parental sensitivity, indicating that increased levels of awareness and access to a secure base script is associated with higher degrees of parental sensitivity. Secure base scriptedness accounted for 11% of the variation in parental sensitivity. In order to test the interaction effect between secure base scriptedness and traumatic experiences, the main effect of the moderator needs to be added to the regression model before the interaction is added. Therefore, the moderator variable, i.e. traumatic experiences, was added to the model in step 3. To test whether the association between secure base scriptedness and

parental sensitivity was moderated by traumatic experiences, the interaction between secure base scriptedness and traumatic experiences was added to the model in step 4. The interaction effect was significant and accounted for 7% of the variation in parental sensitivity, suggesting that the association between secure base scriptedness and parental sensitivity is moderated by traumatic experiences.

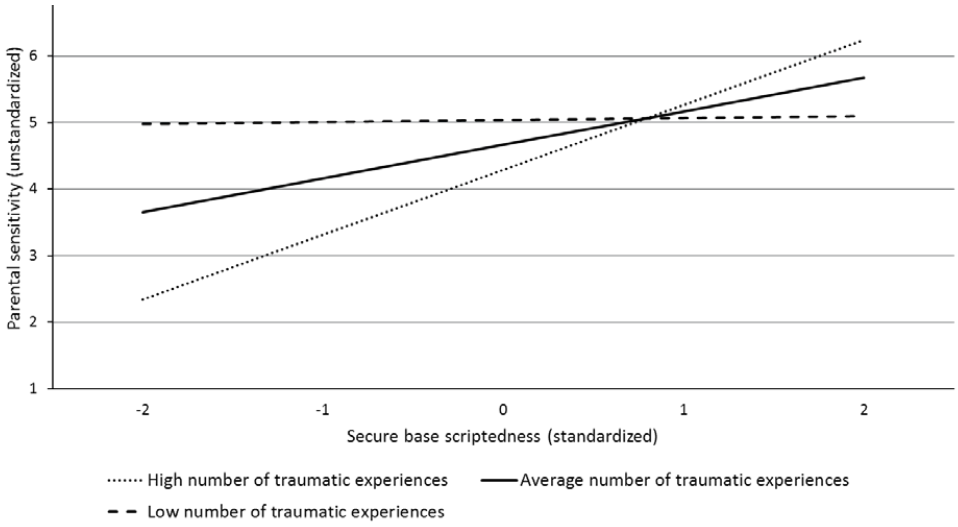
Table 8.4 Associations between secure base scriptedness, traumatic experiences, and parental sensitivity

	B	*SE B*	*B*	ΔR^2
Step 1				0.01
Constant	4.61	0.47		
Sex	-0.38	0.54	-0.10	
Age	-0.06	0.23	-0.04	
Step 2				0.11*
Constant	4.67	0.45		
Sex	-0.45	0.51	-0.12	
Age	-0.03	0.22	-0.02	
SBS	0.51	0.21	0.33*	
Step 3				0.06
Constant	4.73	0.44		
Sex	-0.53	0.50	-0.15	
Age	-0.03	0.21	-0.02	
SBS	0.44	0.21	0.29*	
Traumatic experiences	-0.37	0.21	-0.24	
Step 4				0.07*
Constant	4.66	0.42		
Sex	-0.33	0.49	-0.09	
Age	0.01	0.20	0.01	
SBS	0.50	0.20	0.33*	
Traumatic experiences	-0.38	0.20	-0.24	
SBS x traumatic experiences	0.47	0.22	0.28*	

Note. Dependent variable: parental sensitivity, * $p < .05$, ΔR^2 = change in R^2 compared to previous step, SBS = secure base scriptedness.

In Figure 8.1, the association between secure base scriptedness and parental sensitivity is presented as a function of traumatic experiences. Lines represent the association between secure base scriptedness and parental sensitivity for high numbers of traumatic experiences (1 standard deviation above the mean number of traumatic experiences in the sample), low numbers of traumatic experiences (1 standard deviation below the mean number of traumatic experiences in the sample), and average number of traumatic experiences (mean number of traumatic experiences in the sample).

Figure 8.1 Association between secure base scriptedness and parental sensitivity as a function of number of traumatic experiences.



It can be seen that the association between secure base scriptedness and parental sensitivity becomes stronger at increased numbers of traumatic experiences. Simple slope analysis indicated a significant positive association between secure base scriptedness and parental sensitivity for parents with high ($b = 0.97, p < 0.01$) and average ($b = 0.50, p < 0.05$) numbers of traumatic experiences, and a non-significant association for parents with low numbers of traumatic experiences ($b = 0.03, p = 0.91$). This indicates that parental sensitivity is negatively influenced by decreased levels of secure base scriptedness for parents who experienced more traumatic experiences but not for parents who experienced less traumatic experiences.

Moderation of the association between secure base scriptedness and parental sensitivity by PTSD symptom level.

Table 8.5 presents the results of the hierarchical regression analysis that was employed to test whether the association between secure base scriptedness and parental sensitivity was moderated by PTSD symptom level. Again, parental sensitivity was adjusted for age and sex by adding them to the model in step 1. In order to test the interaction effect between secure base scriptedness and PTSD symptom level, the main effects of the secure base scriptedness and the moderator, i.e. PTSD symptom level, need to be added to the regression model

before the interaction is added. This was done in step 2. To test whether the association between secure base scriptedness and parental sensitivity was moderated by PTSD symptom, the interaction between secure base scriptedness and PTSD symptom level was added to the model in step 3. The interaction effect was significant and accounted for 10% of the variation in parental sensitivity, suggesting that the association between secure base scriptedness and parental sensitivity is moderated by the PTSD symptom level.

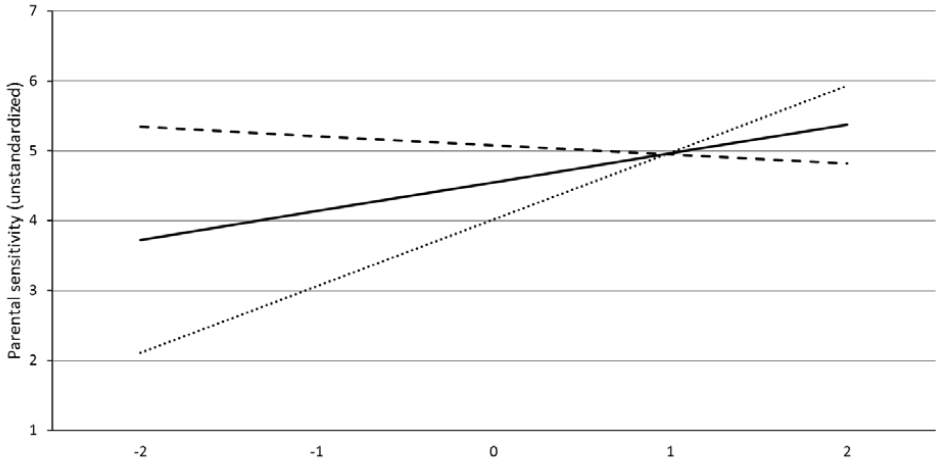
Table 8.5 Associations between secure base scriptedness, PTSD symptoms, and parental sensitivity

	B	*SE B*	*B*	*ΔR²*
Step 1				0.01
Constant	4.61	0.47		
Sex	-0.38	0.54	-0.10	
Age	-0.06	0.23	-0.04	
Step 2				0.27**
Constant	4.74	0.41		
Sex	-0.54	0.47	-0.15	
Age	-0.04	0.20	-0.03	
SBS	0.44	0.19	0.29*	
PTSD symptoms	-0.61	0.19	-0.40**	
Step 3				0.10*
Constant	4.55	0.39		
Sex	-0.22	0.46	-0.06	
Age	0.01	0.19	0.01	
SBS	0.41	0.18	0.27*	
PTSD	-0.53	0.18	-0.34**	
SBS x PTSD symptoms	0.54	0.20	0.33*	

Note. Dependent variable: parental sensitivity, * $p < .05$, ** $p < .01$, ΔR^2 = change in R^2 compared to previous step, SBS = secure base scriptedness.

In Figure 8.2, the association between secure base scriptedness and parental sensitivity is presented as a function of the PTSD symptom level. Lines represent the association between secure base scriptedness and parental sensitivity for high PTSD symptom levels (1 standard deviation above the mean PTSD symptom level in the sample), low PTSD symptom levels (1 standard deviation below the mean PTSD symptom level in the sample), and average PTSD symptom levels (mean PTSD symptom level in the sample). It can be seen that the association between secure base scriptedness and parental sensitivity becomes stronger at increased PTSD symptom levels. Simple slope analysis indicated a significant positive association between secure base scriptedness and parental sensitivity for parents with high (b = 0.95, $p < 0.01$) and average (b = 0.41, $p < 0.05$) PTSD symptom levels, and a non-significant association for parents with low PTSD symptom levels (b = -0.13, p = 0.64). This may indicate that parental sensitivity is negatively influenced by lower levels of secure base scriptedness for parents with increased PTSD symptom levels but not for parents with lower PTSD symptom levels.

Figure 8.2 Association between secure base scriptedness and parental sensitivity as a function of PTSD symptom level



Discussion

The working models of attachment can be defined as knowledge structures that serve to guide behavior in particular situations, such as the caregiving relationship (Bakermans-Kranenburg, 2006). Both early experiences as well as later life events are believed to influence the working models as determinants of attachment representations throughout life. In addition, symptoms of posttraumatic stress, such as a continuous reactivation of trauma and a state of fear, may amplify negative working models. Therefore, within this study we assessed the relations between traumatic experiences, PTSD, sensitivity and attachment in a high-risk sample and hypothesized that traumatic experiences and symptoms of PTSD are related to more insecure attachment representations. Secondly, as parents with insecure attachment representations and more symptoms of PTSD can be less sensitive towards their children, we hypothesized that both symptoms of PTSD and traumatic experiences can moderate the relation between parents' attachment representations and sensitivity.

In contrast with our expectations, the number of traumatic experiences was not related to attachment representations. Several explanations could account for this result. Adult attachment reflects the mental representation of past and present attachment experiences. In this study only experiences that are typical for refugees, such as war and persecution, were assessed. Other traumatic experiences that go beyond the refugee experience, such as for example childhood

experiences of abuse and neglect, were not questioned and therefore not reported by the participants. In our clinical experience, seriously traumatized asylum seekers and refugees frequently report a history of childhood abuse, neglect, or other negative experiences with attachment figures (see De Haene, Grietens, & Verschueren, 2010). The mean SBS score, within this sample, is one standard deviation below the mean score that was reported in studies on mothers and adolescents in the general population (Dykas, Woodhouse, Cassidy, & Waters, 2006; Vaughn et al., 2006). A lack of a secure base, as a consequence of these childhood experiences, is a possible explanation for the lack of a statistically significant association between refugee trauma and attachment representations. On the other hand, neither did we take positive experiences with attachment figures into account. Asylum seekers and refugees commonly report that they use these kinds of experiences as a source of resilience (Kleber, 2012; Tedeschi & Calhoun 2004). The interaction between both positive and negative experiences of the past and present could create an interaction that can be grasped only within a longitudinal study specifically designed for this question.

A final explanation is that mental representations of attachment also reflect recent experiences with the world and significant others. In our clinical experience, asylum seekers and refugees often report that their perception of the world and significant others was damaged to a greater extent by the reception in the host country than by their traumatic experiences. Having survived torture, rape, and persecution they expected to be safe and well-received in the host-country, but they discovered they were unwanted and were threatened to be sent back (e.g. Carswell, Blackburn, & Barker, 2011; Laban, Gernaat, Komproe, Van der Tweel, & De Jong, 2005). This disillusionment does not classify as a traumatic experience in clinical assessments, but according to these asylum seekers and refugees it is. It warrants a further exploration of the 'classification' of traumatic experiences and of experiences that affect mental representations.

In line with previous research, secure attachment representations are underrepresented in this clinical sample (Bakermans-Kranenburg & Van IJzendoorn, 2009). An insecure attachment has been postulated as a risk factor for mental health; a causal role, however, has not yet been established. Some studies associated PTSD with higher attachment insecurity (Mikulincer et al., 2011; Solomon, Dekel, & Mikulincer, 2008; Stovall-McClough, & Cloitre, 2006). Other studies did not establish this link but did confirm an association with unresolved trauma and loss (Harari et al., 2009; Nye et al., 2009). To our knowledge, this is the first study in a non-veteran sample that did not establish

an association between symptoms of PTSD and attachment representations. Stability of secure attachment representations has been extensively documented in low-risk samples (Harari et al., 2009). Perhaps, in the case of posttraumatic stress symptoms, instability of attachment representations requires that the traumatic experience be caused by an attachment figure. Future research needs to determine if there is an interaction between type of traumatic experience, posttraumatic stress disorder, and attachment representations.

Of particular importance is the finding that symptoms of PTSD moderate the relation between parent's attachment representations and parental sensitivity. When a parent reports low levels of PTSD symptoms, only a weak relation between awareness and access to secure base scripts and sensitivity in parenting exists. However, when parents cannot rely on secure attachment representations, high levels of symptoms of PTSD increases the risk on insensitive parenting. These findings suggest that a parent's sensitivity is affected not just by attachment representations but by the conjunction of risk factors such as traumatic experiences, symptoms of PTSD and insecure attachment representations. As this is the first study on parental trauma, attachment representations and sensitivity towards children, the results need to be replicated.

Whereas within trauma studies most often the attention is directed towards PTSD symptomatology and co-morbidity, within attachment studies most often the attention is directed towards experiences of trauma and loss. Our results show that the number of traumatic experiences of refugees also moderates the relation between parent's attachment representations and parental sensitivity. More experiences of war, violence and terror increase the risk of insensitive parenting when parents are less able to rely on secure attachment representations. In general, and also within this study, the number of traumatic experiences and symptoms of PTSD are highly correlated. Therefore, we could not define the unique contribution of the two moderators, but we hypothesize that they do both have this contribution. Where on the one hand experiences of war, violence and terror can lead to changed perceptions of the world and significant others, many recover well, and these experiences do not have to lead to a PTSD diagnosis (Fazel, Wheeler, & Danesh, 2005). On the other hand, it is possible to contain lower levels of PTSD symptomatology in a variety of situations, whereas higher levels of PTSD symptomatology can limit the availability of the parent. PTSD symptomatology has a larger unique contribution to the model than traumatic experiences and the model explains a larger proportion of the variance in parental sensitivity. Until recently attachment and trauma research have

developed along relatively separate lines (Stovall-McClough & Cloitre, 2006). The results call for a more thorough integration of these fields though, as such an integration may shed further light on the interaction between attachment and trauma in parenting.

Even though this study is unique for its structured and intensive observations of asylum seeker and refugee parents and their children, it also suffers from several limitations. First, the design was cross-sectional where in studying causality longitudinal designs are a requisite. From an ontogenetic perspective the attachment representations developed before the symptoms of PTSD developed. Therefore, we considered the attachment representations as the determining factor and the symptoms of PTSD as the moderating factor. However, these considerations need to be confirmed in longitudinal studies.

Second, the participants came from a heterogeneous cultural background. Although we used measurements that were validated over cultures, these are not necessarily valid for the specific culture of all our participants. Various studies have documented the reliability and validity of the secure base scripts in various cultural settings (Coppola et al., 2006; Vaughn, Waters et al., 2006; Verissimo & Salvaterra, 2006). However, none of these studies reported on the cultural acceptability of the measure. In a non-western, culturally-diverse sample, it was of interest that although almost all participants, without hesitation, reported their trauma experiences and symptoms and consented to being videotaped, some were reluctant to take the SBS. Despite the fact that well-trained psychologists with experience in working with asylum seekers and refugees carefully explained the SBS several times, ten participants (12.5%) refused this particular assessment. They considered the assessment as odd and too difficult to take. On the one hand, level of education might explain part of this hesitation as the assessment involves reading words. On the other hand, even though story-telling is in many cultures an accepted and pleasant activity, we noticed that during the assessment the presentation of the story-stems and the testing of story-telling seemed too much a test of performance. Although the easy administration and coding system for the secure base scripts can make large-scale international studies feasible, we conclude from our observations during the assessment that the presentation of the test might need refinement to make this a true cross-cultural measure.

Third, the asylum seekers and refugees who took part in the present study form a specific group of people at risk of clinical disturbances caused by traumatic experiences and forced migration, which may limit the generalizability of the

results. How the results translate to asylum seekers and refugees outside the Netherlands or to other at-risk populations remains to be explored within future studies.

We deem our results to be of clinical importance. In a high-risk population of traumatized parents, it is of importance to assess not just children but parents alike on attachment representations. A secure attachment representation may serve to protect a child against the effect of parental trauma, whereas insecure attachment representations together with high levels of PTSD symptoms increase the risk of insensitive parenting. Therefore, traumatized parents need to be supported in confirmation of secure models of the world and significant others, and the ability to offer a sensitive interaction and secure attachment relationship to the child. The therapeutic alliance and the establishment of a secure attachment can be of crucial importance in the treatment of (complex) PTSD (Charuvastra & Cloitre, 2008; Van der Kolk, 1989). It is via this therapeutic relationship with the parent that secure attachment representations can be confirmed, risks can be decreased, and indirectly the child can be reached.

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References

Ainsworth, M., Blehar, M., Waters, E., & Wall, S.(1978). *Patterns of Attachment: A Psychological Study of the Strange Situation.* Oxford, England: Lawrence Erlbaum.

Almqvist, K., & Broberg, A. (1997). Silence and survival: Working with strategies of denial in families of traumatized preschool children. *Journal of Child Psychotherapy*, *23*, 417-435.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders DSM-V.* Washington, DC.: Author.

Bakermans-Kranenburg, M. J. (2006). Script-like attachment representations: Steps towards a secure base for further research. *Attachment & Human Development*, *8*, 275-281.

Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (2009). The first 10,000 adult attachment interviews: Distributions of adult attachment representations in clinical and non-clinical groups. *Attachment & Human Development*, *11*, 223-263.

Baldwin, M. W., & Fehr, B. (1995). On the instability of attachment style ratings. *Personal Relationships*, *2*, 247-261.

Berant, E., Mikulincer, M., & Florian, V. (2001). Attachment style and mental health: A 1-year follow-up study of mothers of infants with congenital heart disease. *Personality and Social Psychology Bulletin*, *27*, 956-968.

Biringen, Z., Robinson, J., & Emde, R. (2008). Emotional availability (EA) scales, fourth edition. Boulder: emotionalavialability.com.

Biringen, Z. (2000). Emotional availability: Conceptualization and research findings. *American Journal of Orthopsychiatry*, *70*, 104-114.

Bowlby, J. (1973). *Separation: Anxiety and anger*, Vol. 2. London: The Hogarth Press and the Institute of Psycho-Analysis.

Bretherton, I. (1991). Pouring new wine into old bottles: The social self as internal working model. In M. R. Gunnar, & A. L. Sroufe, (Eds). *Self processes and development. The Minnesota symposia on child psychology*, Vol. 23., (pp. 1-41). Hillsdale: Lawrence Erlbaum Associates.

Carswell, K., Blackburn, P., & Barker, C. (2011). The relationship between trauma, post-migration problems and the psychological wellbeing of refugees and asylum seekers. *International Journal of Social Psychiatry*, *57*, 107-119.

Charuvastra, A., & Cloitre, M. (2008). Social bonds and posttraumatic stress disorder. *Annual Review of Psychology*, *59*, 301-328.

Chaudhuri, J. H., Easterbrooks, M. A., & Davis, C. R. (2009). The relation between emotional availability and parenting style: Cultural and economic factors in a diverse sample of young mothers. *Parenting: Science and Practice*, *9*, 277-299.

Coppola, G., Vaughn, B. E., Cassibba, R., & Costantini, A. (2006). The attachment script representation procedure in an Italian sample: Associations with adult attachment interview scales and with maternal sensitivity. *Attachment & Human Development*, *8*, 209-219.

Cozzarelli, C., Karafa, J. A., Collins, N. L., & Tagler, M. J. (2003). Stability and change in adult attachment styles: Associations with personal vulnerabilities, life events, and global construals of self and others. *Journal of Social and Clinical Psychology*, *22*, 315-346.

Davies, J., Slade, P., Wright, I., & Stewart, P. (2008). Posttraumatic stress symptoms following childbirth and mothers' perceptions of their infants. *Infant Mental Health Journal*, 29, 537-554.

Davila, J., & Cobb, R. J. (2004). Predictors of change in attachment security during adulthood. In W. S. Rholes, & J. A. Simpson (Eds.), *Adult Attachment: Theory, Research, and Clinical Implications* (pp. 133-156). New York: Guilford Press.

De Haene, L., Grietens, H., & Verschueren, K. (2010). Adult attachment in the context of refugee traumatization: The impact of organized violence and forced separation on parental states of mind regarding attachment. *Attachment & Human Development*, *12*, 249-264.

De Wolff, M., & Van IJzendoorn, M. H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development*, *68*, 571-591.

Dozier, M., Stovall-McClough, K. C., & Albus, K. E. (2008). Attachment and psychopathology in adulthood. In J. Cassidy, & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications, second ed.* (pp. 718-744). New York: Guilford Press.

Dykas, M. J., Woodhouse, S. S., Cassidy, J., & Waters, H. S. (2006). Narrative assessment of attachment representations: Links between secure base scripts and adolescent attachment. *Attachment & Human Development*, *8*, 221-240.

Easterbrooks, M., Biesecker, G., & Lyons-Ruth, K. (2000). Infancy predictors of emotional availability in middle childhood: The roles of attachment security and maternal depressive symptomatology. *Attachment & Human Development*, *2*, 170-187.

Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: A systematic review. *The Lancet*, *365*, 1309-1314.

Feeley, N., Zelkowitz, P., Cormier, C., Charbonneau, L., Lacroix, A., & Papageorgiou, A. (2011). Posttraumatic stress among mothers of very low birthweight infants at 6 months after discharge from the neonatal intensive care unit. *Applied Nursing Research*, *24*, 114-117.

Fraley, R. C. (2002). Attachment stability from infancy to adulthood: Meta-analysis and dynamic modeling of developmental mechanisms. *Personality and Social Psychology Review*, *6*, 123-151.

Fraley, R. C., & Brumbaugh, C. C. (2004). A dynamical systems approach to conceptualizing and studying stability and change in attachment security. In W. S. Rholes, & J. A. Simpson (Eds.), *Adult Attachment: Theory, Research, and Clinical Implications* (pp. 86-132). New York: Guilford Press.

Harari, D., Bakermans-Kranenburg, M., De Kloet, C., Geuze, E., Vermetten, E., Westenberg, H., & Van IJzendoorn, M. (2009). Attachment representations in Dutch veterans with and without deployment-related PTSD. *Attachment & Human Development*, *11*, 515-536.

Holditch-Davis, D., Miles, M. S., Weaver, M. A., Black, B., Beeber, L., Thoyre, S., & Engelke, S. (2009). Patterns of distress in African-American mothers of preterm infants. *Journal of Developmental and Behavioral Pediatrics*, *30*, 193-204.

Hollifield, M., Warner, T. D., Lian, N., Krakow, B., Jenkins, J. H., Kesler, J., ..., Westermeyer, J. (2002). Measuring trauma and health status in refugees: A critical review. *JAMA: Journal of the American Medical Association*, *288*, 611-621.

Howes, C., & Obregon, N. B. (2009). Emotional availability in Mexican-heritage low-income mothers and children: Infancy through preschool. *Parenting: Science and Practice*, *9*, 260-276.

Janoff-Bulman, R., & McPherson Frantz, C. (1997). The impact of trauma on meaning: From meaningless world to meaningful life. In M. J. Power, C. R. Brewin (Eds.), *The transformation of meaning in psychological therapies: Integrating theory and practice* (pp. 91-106). Hoboken: John Wiley & Sons.

Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events: Applications of the schema construct. *Social Cognition*, *7*, 113-136.

Jordan, B. K., Marmar, C. R., Fairbank, J. A., Schlenger, W. E., Kulka, R. A., Hough, R. L., & Weiss, D. S. (1992). Problems in families of male Vietnam veterans with posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, *60*, 916-926.

Kleber, R. J. (2012). Theoretische visies op trauma en posttraumatische stress-stoornis. In: E. Vermetten, R. J. Kleber & O. Van der Hart (Eds.), *Handboek Posttraumatische stress-stoornissen* (pp. 83-96). Utrecht: De Tijdstroom.

Kleijn, W., Hovens, J., & Rodenburg, J. (2001). Posttraumatic stress symptoms in refugees: Assessments with the Harvard trauma questionnaire and the Hopkins symptom checklist-25 in different languages. *Psychological Reports*, *88*, 527-532.

Koren-Karie, N., Oppenheim, D., Dolev, S., & Yirmiya, N. (2009). Mothers of securely attached children with autism spectrum disorder are more sensitive than mothers of insecurely attached children. *Journal of Child Psychology and Psychiatry*, *50*, 643-650.

Kosslyn, S. M. (2005). Reflective thinking and mental imagery: A perspective on the development of posttraumatic stress disorder. *Development and Psychopathology*, *17*, 851-863.

Laban, C. J., Gernaat, H. B., Komproe, I. H., Van der Tweel, I., & De Jong, J. T. (2005). Postmigration living problems and common psychiatric disorders in Iraqi asylum seekers in the Netherlands. *The Journal of Nervous and Mental Disease*, *193*, 825-832.

Lauterbach, D., Bak, C., Reiland, S., Mason, S., Lute, M. R., & Earls, L. (2007). Quality of parental relationships among persons with a lifetime history of posttraumatic stress disorder. *Journal of Traumatic Stress*, *20*, 161-172.

Lieberman, A. F., & Knorr, K. (2007). The impact of trauma: A development framework for infancy and early childhood. *Psychiatric Annals*, *37*, 416-422.

Magwaza, A. S. (1999). Assumptive world of traumatized South African adults. *The Journal of Social Psychology*, *139*, 622-630.

McDonald, S., Slade, P., Spiby, H., & Iles, J. (2011). Posttraumatic stress symptoms, parenting stress and mother-child relationships following childbirth and at 2 years postpartum. *Journal of Psychosomatic Obstetrics & Gynecology*, *32*, 141-146.

McMahon, C. A., Barnett, B., Kowalenko, N. M., & Tennant, C. C. (2006). Maternal attachment state of mind moderates the impact of postnatal depression on infant attachment. *Journal of Child Psychology and Psychiatry*, *47*, 660-669.

Mikkelsen, E. G., & Einarsen, S. (2002). Basic assumptions and symptoms of posttraumatic stress among victims of bullying at work. *European Journal of Work and Organizational Psychology*, *11*, 87-111.

Mikulincer, M., EinDor, T., Solomon, Z., & Shaver, P. R. (2011). Trajectories of attachment insecurities over a 17-year period: A latent growth curve analysis of the impact of war captivity and posttraumatic stress disorder. *Journal of Social and Clinical Psychology*, *30*, 960-984.

Mikulincer, M., & Shaver, P. R. (2007). Boosting attachment security to promote mental health, prosocial values, and inter-group tolerance. *Psychological Inquiry*, *18*, 139-156.

Moehler, E., Biringen, Z., & Poustka, L. (2007). Emotional availability in a sample of mothers with a history of abuse. *The American Journal of Orthopsychiatry*, *77*, 624-628.

Mollica, R. F., Caspi-Yavin, Y., Bollini, P., & Truong, T. (1992). The Harvard trauma questionnaire: Validating a cross-cultural instrument for measuring torture, trauma, and posttraumatic stress disorder in Indochinese refugees. *Journal of Nervous and Mental Disease*, *180*, 111-116.

Mollica, R. F., McInnes, K., Sarajlić, N., Lavelle, J., Sarajlić, I., & Massagli, M. P. (1999). Disability associated with psychiatric comorbidity and health status in Bosnian refugees living in Croatia. *JAMA: The Journal of the American Medical Association*, *282*, 433-439.

Nye, E. C., Katzman, J., Bell, J. B., Kilpatrick, J., Brainard, M., & Haaland, K. Y. (2009). Attachment representation and suicidal ideation in Vietnam combat veterans with posttraumatic stress disorder. *Archives of Suicide Research*, *13*, 195-199.

Oyen, A., Landy, S., & Hilburn-Cobb, C. (2000). Maternal attachment and sensitivity in an at-risk sample. *Attachment & Human Development*, *2*, 203-217.

Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, *31*, 437-448.

Riem, M. M. E., Bakermans-Kranenburg, M. J., Van IJzendoorn, M. H., Out, D., & Rombouts, S. A. (2012). Attachment in the brain: Adult attachment representations predict amygdala and behavioral responses to infant crying. *Attachment & Human Development*, *14*, 533-551.

Samper, R. E., S., Taft, C. T., King, D. W., & King, L. A. (2004). Posttraumatic stress disorder symptoms and parenting satisfaction among a national sample of male Vietnam veterans. *Journal of Traumatic Stress*, *17*, 311-315.

Schechter, D. S., Willheim, E., Hinojosa, C., Scholfield-Kleinman, K., Turner, J. B., McCaw, J., …, Myers, M. M. (2010). Subjective and objective measures of parent-child relationship dysfunction, child separation distress, and joint attention. *Psychiatry: Interpersonal and Biological Processes*, *73*, 130-144.

Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment & Human Development*, *7*, 269-281.

Solomon, Z., Dekel, R., & Mikulincer, M. (2008). Complex trauma of war captivity: A prospective study of attachment and posttraumatic stress disorder. *Psychological Medicine*, *38*, 1427-1434.

Stovall-McClough, K. C., & Cloitre, M. (2006). Unresolved attachment, PTSD, and dissociation in women with childhood abuse histories. *Journal of Consulting and Clinical Psychology*, *74*, 219-228.

Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, *15*, 1-18.

Trapolini, T., Ungerer, J. A., & McMahon, C. A. (2008). Maternal depression: Relations with maternal caregiving representations and emotional availability during the preschool years. *Attachment & Human Development*, *10*, 73-90.

Van den Dries, L., Juffer, F., Van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., & Alink, L. R. (2012). Infants' responsiveness, attachment, and indiscriminate friendliness after international adoption from institutions or foster care in China: Application of emotional availability scales to adoptive families. *Development and Psychopathology*, *24*, 49-64.

Van der Kolk, B. A. (1989). The compulsion to repeat the trauma. *Psychiatric Clinics of North America*, *12*, 389-411.

Van Ee, E., Kleber, R. J., & Mooren, T. T. M. (2012). War trauma lingers on: Associations between maternal posttraumatic stress disorder, parent–child interaction, and child development. *Infant Mental Health Journal*, *33*, 459-468.

Van Ee, E., Sleijpen, M. Kleber R. J., & Jongmans, M. J. (2013). Father-involvement in a Refugee Sample: Relations between Posttraumatic Stress and Caregiving. *Family Process.*

Van IJzendoorn, M. (1995). Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the adult attachment interview. *Psychological Bulletin*, *117*, 387-403.

Vaughn, B. E., Coppola, G., Verissimo, M., Monteiro, L., Santos, A. J., Posada, G., . . . Bost, K. K. (2007). The quality of maternal secure-base scripts predicts children's secure-base behavior at home in three sociocultural groups. *International Journal of Behavioral Development*, *31*, 65-76.

Vaughn, B. E., Verissimo, M., Coppola, G., Bost, K. K., Shin, N., McBride, B., . . . Korth, B. (2006). Maternal attachment script representations: Longitudinal stability and associations with stylistic features of maternal narratives. *Attachment & Human Development*, *8*, 199-208.

Vaughn, B. E., Waters, H. S., Coppola, G., Cassidy, J., Bost, K. K., & Verissimo, M. (2006). Script-like attachment representations and behavior in families and across cultures: Studies of parental secure base narratives. *Attachment & Human Development*, *8*, 179-184.

Verissimo, M., & Salvaterra, F. (2006). Maternal secure-base scripts and children's attachment security in an adopted sample. *Attachment & Human Development*, *8*, 261-273.

Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albersheim, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. *Child Development*, *71*, 684-689.

Waters, E., Weinfield, N. S., & Hamilton, C. E. (2000). The stability of attachment security from infancy to adolescence and early adulthood: General discussion. *Child Development*, *71*, 703-706

Waters, H., & Rodrigues-Doolabh, L. (2004). *Manual for decoding secure base narratives.* Unpublished Manuscript, State University of New York.

Waters, H. S., & Waters, E. (2006). The attachment working models concept: Among other things, we build script-like representations of secure base experiences. *Attachment & Human Development*, *8*, 185-197.

Weinfield, N. S., Sroufe, L. A., & Egeland, B. (2000). Attachment from infancy to early adulthood in a high-risk sample: Continuity, discontinuity, and their correlates. *Child Development*, *71*, 695-702.

Zelkowitz, P., Na, S., Wang, T., Bardin, C., & Papageorgiou, A. (2011). Early maternal anxiety predicts cognitive and behavioural outcomes of VLBW children at 24 months corrected age. *Acta Paediatrica*, *100*, 700-704.

Chapter 9

Parental PTSD, child attachment and extremely insensitive and disconnected parenting behavior

Parental PTSD, child attachment, and extremely insensitive and disconnected parenting behavior
Elisa van Ee, Rolf J. Kleber, Rens A.G.J. van de Schoot, Trudy T. M. Mooren, Dorothee Out & Marian J. Jongmans
Submitted

In the last decade, there has been an increase in research on the impact of symptoms of posttraumatic stress disorder (PTSD) on parenting. An association between symptoms of PTSD and the emotional availability of the traumatized parent to the child appears evident. Mothers with more PTSD symptoms have been reported to be less sensitive and responsive (Schechter et al., 2010; Van Ee, Kleber, & Mooren, 2012), more avoidant (Schechter et al., 2005, 2008), and more hostile and controlling when interacting with their child (Davies, Slade, Wright, & Stewart, 2008; Despars et al., 2011). Parental symptoms of PTSD have a significant positive association with internalizing and externalizing behavior problems in children (Bosquet Enlow et al., 2011; Lester et al., 2010; Lombardo & Motta, 2008). In addition, research findings have amounted to convincing evidence regarding the negative implications of parental symptoms of PTSD for parenting satisfaction and for the perception of and satisfaction with the child (Davies et al., 2008; Khaylis, Polusny, Erbes, Gewirtz, & Rath, 2011; Lauterbach et al., 2007; Samper, Taft, King, & King, 2004). Despite this increase in research studies, the mechanisms that explain the association between the consequences of trauma on parenting and child functioning are poorly understood.

Within attachment literature it has been proposed that parental expressions of fear (frightening, threatening and dissociative parenting behavior) related to traumatic experiences can explain the association between parental trauma disturbances and child functioning (Main & Hesse, 1990). Indeed, attachment research has demonstrated a link between childhood experiences of loss of significant others or childhood abuse on the one hand, and adult unresolved trauma or loss on the other hand (as measured with the Adult Attachment Interview; AAI) (Van IJzendoorn, Schuengel, & Bakermans-Kranenburg, 1999; Van IJzendoorn, 1995). Unresolved adults were observed to behave in a frightened or frightening way, which can be frightening to the child (Madigan, Moran, & Pederson, 2006; Schuengel, Bakermans-Kranenburg, & Van IJzendoorn, 1999). Parental frightened or frightening behavior includes unusual vocal patterns, animal-like pursuit movements without meta-signals indicating play or affection, avoidance, sudden retreats or startles in response to the child, timid or deferential behavior, looming, stilling or freezing (Main & Hesse, 1990). Dissociative phenomena have been proposed to explain the link between unresolved attachment representations of the parent and frightening parenting behavior (Hesse & Main, 2006). Evidence has also been found for a link between unresolved attachment representations, frightened or frightening parenting behavior and infant disorganization (for a meta-analysis see Madigan et al., 2006). A disorganized attachment is considered the most insecure form of infant

attachment and is presumed to result from a fear of the parent. As the parent is both a haven of safety and source of fear, the child is left with an irreconcilable paradox that leads to the breakdown of organized attachment behavior (Main & Hesse, 1990). In addition, Lyons-Ruth, Bronfman, and Parson (1990) suggested that children from extremely insensitive parents, who fail to soothe and comfort the child and thereby fail to regulate the child, may also develop a disorganized attachment. Therefore, in addition to frightening, threatening and dissociative parenting behavior, extreme insensitivity has been postulated as a robust predictor of disorganized attachment as well (Lyons-Ruth & Block, 1996; Madigan et al., 2006; Out, Bakermans-Kranenburg, & Van IJzendoorn, 2009).

Until recently, attachment and trauma research have developed along separate lines (Stovall-McClough & Cloitre, 2006). However, it has been theorized that the underlying mechanism behind unresolved trauma or loss (as defined by attachment theory) and PTSD might be very similar. Using a cognitive framework, Fearon and Mansell (2001) proposed a model where the notion of unintegrated memory systems related to trauma experiences linked unresolved loss with the intrusive and avoidant symptoms of PTSD. Persons classified as unresolved show striking lapses in the monitoring of reasoning and discourse when discussing a loss during the AAI. These momentary breakdowns might indicate dissociation, intrusions of frightening ideation, and/or lapses in metacognitive processes (Main & Morgan, 1996). The four PTSD symptom clusters consist of intrusion, avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity (American Psychiatric Association, 2013). Fearon and Mansell (2001) suggest that the loss of a close loved one can lead to intrusive memories and cognitions and to avoidance, and these symptoms are similar to symptoms of PTSD. Core symptoms of PTSD may play a key role in unresolved loss. Successful resolution of both PTSD and unresolved loss involves the integration of information regarding the trauma or loss with existing schematic representations of the self and the world. Similarly, Lyons-Ruth and Block (1996) argued that intrusive and avoidant symptoms of PTSD and trauma-related symptoms, such as dissociation, can be thought of as an index of a continuing state of fear. Considering the subtle common processes involved in unresolved trauma and loss (as defined by the AAI), and PTSD, an exploration of the impact of violence and terror on family relationships in the context of both trauma and attachment theory is needed.

Research has only begun to explore a combined model of PTSD and unresolved trauma and loss. Stovall-McClough and Cloitre (2006) examined the

distribution of unresolved trauma and loss, in adults with a history of abuse, and the potential connection to traumatic stress symptoms. Unresolved childhood abuse predicted the likelihood with a seven-and-a-half-fold increase that an adult survivor will be diagnosed with PTSD. These results were confirmed in two studies on male combat veterans (Harari et al., 2009; Nye et al., 2008). An indirect association was reported by Sagi-Schwartz, Van IJzendoorn and Grossmann (2003); Holocaust survivors showed more unresolved loss and more signs of traumatic stress than carefully matched comparison subjects. Bailey, Moran and Pederson (2007) studied complex trauma symptoms and found an association between unresolved trauma and loss, and a number of symptoms frequently associated with complex PTSD (dissociation, an inconsistent sense of self, and relationship problems). However, Turton, Hughes, Fonagy and Fainman (2004) studied the loss of a child and its consequences for a mother's later relationships with her children. Their results did not reveal a significant association between PTSD symptoms and unresolved loss on the AAI. However, it should be noted that only a small proportion of the participants received a diagnosis of PTSD, and most PTSD symptoms remitted within a year.

There is a dearth of studies on the link between PTSD, frightened, threatening and dissociative parenting behavior, and child attachment. As previous literature has consistently shown that parents with unresolved trauma and loss are more likely to have children with disorganized attachment (for a meta-analysis, see Madigan et al., 2006), it is possible that symptoms of PTSD have similar or identical consequences, and parents with PTSD are more at risk of having children with an insecure or even disorganized attachments. Especially disorganized attachment in infants is associated with an elevated risk for later psychopathology (for a meta-analysis, see Van IJzendoorn et al., 1999). Therefore, an understanding of the possible links between PTSD, disconnected (frightened, threatening and dissociative) parenting behavior, extremely insensitive parenting, and child attachment might have important implications for treatment.

This study extends previous work on the impact of PTSD on family relationships by studying the unique contribution of disconnected and extremely insensitive parenting behavior, and child attachment in a highly traumatized sample (asylum seekers and refugees). We hypothesize that: 1) there is an association between parent's symptoms of PTSD and the likelihood of an insecure or disorganized attachment of the child; 2) this association between parental PTSD and child attachment is mediated by disconnected parenting behavior

and by extremely insensitive parenting behavior; 3) the symptom clusters of PTSD – intrusion, avoidance and hyperarousal – have different weights in these associations.

Method

Participants

Participants in this study were asylum seekers and refugee parents in the Netherlands with traumatic experiences and a child between 18–42 months of age who was born in the Netherlands. Asylum seekers and refugees with severe mental retardation, addictions or psychosis were excluded. As traumatization of the child has its own effect on the parent-child interaction, dyads were excluded when children themselves had experienced traumatic experiences.

The participants were recruited from Dutch asylum seeker centers and from client groups at Centrum '45[5], a national treatment and expertise center for psychological trauma. At our first research site, Centrum '45, therapists asked all eligible patients if the research team could inform them about the project. Of the 80 eligible parents, 35 consented to participate in the study. Those who agreed to participate did not differ from those who did not in terms of age (t (101) = -1.57, p = .12), region of origin (X^2 (2) = 1.60, p = .45), education (X^2 (1) = .86, p = .35) or reported posttraumatic stress symptoms on the Harvard Trauma Questionnaire (t (89) = 1.04, p = .30). There was a significant difference (t (94) = 4.96, p < .001) in time spent in the Netherlands between participating (M = 6.66 years, SD = 4.78, range 0.3-20) and non-participating clients (M = 11.64, SD = 3.59, range 6–19). At our second research site, the asylum seeker centers, we used several strategies to recruit participants (word of mouth, leaflets in the living room, providing information door to door). Forty-nine parents consented to participate. Three fathers who were directly approached declined. Of the 84 parents who consented to participate from both research sites, 16 dyads were excluded: nine did not meet the inclusion criteria, one participant was in the final trimester of her pregnancy, one participant could not participate in the study because of work-related circumstances, four participants did not show up, and one dyad was removed from the analyses because the Strange Situation Procedure was not reliably administered.

[5] www.centrum45.nl

The final sample consisted of 68 parents and their children: 27 fathers, 41 mothers, 31 boys and 19 girls. Of these parents, 18 were single mothers, 36 were assessed as a couple, and 14 were living as a couple but only one of the parents consented to the assessment. Mean ages for fathers, mothers, and children were 35.53 years (*SD* = 8.46, range 23-56), 29.65 years (*SD* = 6.12, range 20–44) and 29.67 months (*SD* = 8.59, range 18-44), respectively. The socioeconomic status of the sample was low as, within the Netherlands, asylum seekers are not allowed to work or study, and most refugees are unemployed or working in low status jobs. The level of education among participants varied strongly: 23.8% had little or no education, 17.9% had finished primary school, 17.9% had finished secondary school, 14.9% had finished vocational education and 25.1% held a professional or university degree. Parents had fled from various geographical regions: Middle East (36.8%), Africa (36.8%), East Europe (14.7%), Asia (7.4%), and South America (1.5%).

Procedure

All parents came with their child for one day to Centrum '45 or a designated area within the asylum seekers center. Before testing started, inclusion and exclusion criteria were checked and a final informed consent was signed. Participants were aware that they could withdraw their consent at any time and that anonymity was guaranteed. An interpreter was present during the entire day. Participants received 25 euros and reimbursement for traveling expenses. The study was approved by the medical ethics committee of the Medical Center of Leiden University, The Netherlands.

Measures

Traumatic experiences and PTSD symptoms of parents were measured with the Harvard Trauma Questionnaire (HTQ: Mollica, Caspi-Yavin, Bollini, & Truong, 1992) in their own language. The questionnaire consists of a list of 20 traumatic experiences and a 30-item trauma-symptom list. The first 16 items were derived from the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV, American Psychiatric Association, 1994) criteria for PTSD and measures the severity of PTSD symptoms. The DSM-IV contains three symptom clusters: intrusion, avoidance and numbing, and hyperarousal. In the DSM-V, the avoidance and numbing cluster is split into two clusters: avoidance, and negative alterations in cognitions and mood. The other 14 items of the HTQ describe symptoms specifically related to refugee trauma. Participants are first asked to note which traumatic experiences they experienced, witnessed or

heard of and then to rate to what degree particular symptoms have bothered them in the past week on a scale of 1 (not at all) to 4 (extremely). A cut-off score of 2.5 was used in several studies to identify clinically significant PTSD (Mollica et al., 1992). Mollica and colleagues (1999) have also developed a scoring algorithm to adapt this measure to DSM-IV criteria and suggest this method for use in populations for which the instrument has not been validated.

The HTQ is available in many languages. The psychometric properties of the HTQ are adequate across cultures and in general appropriate to measure symptoms of posttraumatic stress (Kleijn, Hovens, & Rodenburg, 2001). In a review of instruments used in studies of refugees, Hollifield and colleagues (2002) noted that the HTQ has been found to be statistically reliable and valid in multiple studies with multiple traumatized populations. In the current study, internal consistency was high (intrusion $\alpha = .86$, avoidance $\alpha = .78$, hyperarousal $\alpha = .85$, specific refugee trauma-items $\alpha = .88$, DSM-symptoms $\alpha = .91$, total symptom scale $\alpha = .94$). In our analyses we used the mean score of the first 16 items DSM scale score and the algorithm for clinical levels of PTSD and symptom-cluster scores.

Parenting behavior was measured using the coding system for the observation of Disconnected and extremely Insensitive Parenting (DIP; Out et al., 2009; Out, Cyr et al., 2009). The DIP distinguishes between two types of adverse caregiving behaviors. The first dimension, disconnected behavior, is based on the coding system by Main and Hesse (1998) for the observation of frightening, frightened, dissociative and other anomalous parental behavior. Central to this dimension is the sudden change in normal (and possibly sensitive) parenting behavior. This may take the form of frightening and threatening behaviors (e.g., voice alterations); behaviors indicating fear of the child (e.g., startle in response to the child's behavior); dissociative behavior indicative of absorption or intrusion of an altered state of awareness (e.g., stilling or freezing); interacting with the child in a timid, submissive and/or deferential manner and sexualized/romantic behavior; or disorganized and disoriented behavior (e.g., contradictions between behaviors, vocalizations, facial expression and/or voice tone). The parent's behavior appears to be disconnected from the immediate environment and as such may indicate a dissociative state (Hesse & Main, 2006). Important considerations in the observation of these behaviors are the lack of meta-signals indicating play or affection (e.g., smiling), the absence of any explanation for the behavior, and the unpredictable and sudden appearance of it. The second dimension covers extremely insensitive caregiving and incorporates some of

the behaviors described in the coding system for atypical maternal behavior by Bronfman, Parsons and Lyons-Ruth (2004). This dimension focuses on withdrawal and neglect (e.g., parent remains unresponsive when the child is in distress) as well as intrusive, negative and aggressive behaviors (e.g., hostile or rejecting comments). Thus, a clear distinction in the DIP was made between disconnected behavior that may result from (traumatic) dissociation and extremely insensitive caregiving. Construct and discriminant validity of the DIP was established in two previous studies, with disconnected behavior predicting infant disorganization but not organized attachment security and extreme insensitivity predicting insecure attachment but not disorganized attachment (Luijk et al., 2011; Out et al., 2009).

Parents were instructed to play with their child as they like for 15 minutes. Two coders observed the video recordings of the parent-child interaction and coded discrete disconnected and extremely insensitive behaviors every time they occurred. A final score was assigned for each dimension, which was equal to the highest individual score or one point higher when the parental behavior was severe or occurred frequently. For reliability purposes, the two coders rated the entire video recordings at 12% of the participants. Inter-rater reliability ranged from .75 to .97 (Intra Class Correlation (ICC), single measure, absolute agreement for disconnected behavior = .83, ICC for subscale parental withdrawal and neglect = .97, ICC for subscale intrusive, negative, aggressive behavior ICC =. 83, ICC for extremely insensitive behavior = .75). Differences were resolved by conferencing. Coders were blind to the attachment classification of the child.

Attachment security was measured with the Strange Situation Procedure (SSP) for preschool children 2–4.5 years (Cassidy, Marvin, & the MacArthur Working Group, 1992). The different sequences in this well-known procedure reflect three mildly stressful events: an unfamiliar environment, entrance of an unfamiliar person, and two short separations from the parent. Based on this procedure, an attachment classification is assigned. Observations of five modalities of child behavior are taken into consideration: physical contact and/or seeking or maintenance of physical proximity, body positioning, content and style of parent-directed speech, looking behavior directed to the parent, verbal and non-verbal indices of affect. The attachment relationship of the children can be either classified as securely attached (B), or insecurely attached. Insecurely attached children are categorized as avoidant (A), resistant (C), or disorganized (D). Children whose insecure attachment behavior cannot be classified in one of the three insecure attachment organizations are judged to be insecure-other

(IO). For research purposes it is common to combine the classification of D and IO in one category. The categories B, A, and C are considered to be an organized reaction in response to the quality of caregiving behavior. Even though categories A and C are insecure attachment strategies, these children did develop a consistent pattern of attachment behavior to deal with an insensitive parent; avoidant children under-activate attachment behavior, whereas ambivalent children over-activate. A disorganized attachment is considered to be the most insecure and anxious form of attachment and is characterized by a breakdown of organized attachment behavior response to unpredictable and frightening caregiving behavior (Main & Hesse, 1990). Within this study, comparisons were made between secure (B) versus insecure attachment (C+A+D), and between organized (B+C+A) and disorganized attachment (D).

In consultation with R. Marvin, who developed the SSP for preschool children, we used the system for slightly younger children as well. To ensure reliability for the entire age range, all SSP's were coded by two well-trained and reliable coders. Cohen's kappa was good to very good (Peat, 2001): .79 for classification of attachment, .82 for B versus not B, and .86 for D versus not D. Differences were resolved by conferencing.

Statistical analysis

Multilevel structural equation modeling was used to test a combination of direct and indirect relations between the independent variable parent's symptoms of PTSD, the mediators extremely insensitive parenting and disconnected parenting, and the dependent variable child attachment. The model is represented in figure 9.1. We divided the children into a securely attached versus insecurely attached group and an organized versus disorganized group and analyzed the results for these variables sequentially. The model was tested with multilevel analysis, as the observations of the children were not independent but nested into families. Parents within a family have a relationship with the same child, and therefore multilevel analysis can be used to analyze first whether parents' symptoms of PTSD affect child attachment (dyadic level), and secondly whether children's attachment relationships with their parents were more similar within families than attachment relationships from different families (family level). As described by Hox (2010), a multi-level analysis is conducted over several steps. Similarity between families is presented by ICC and computed from the intercept-only model (model 0). This model serves as a benchmark as other models are compared to this null model. The outcome variable of the model is binary; therefore, the cluster variance is a constant. The ICC was computed as

$\sigma^2 / (\sigma^2 + (\pi^2 / 3))$ (Guo & Zhao, 2000). An ICC close to 0 indicates that members within a family are no more similar than other participants, whereas an ICC of 1 indicates that family members have identical responses.

To test whether there is a relationship between parents' symptoms of PTSD (mean DSM symptom scale from HTQ) and child attachment and whether extremely insensitive parenting and disconnected parenting mediate this relationship', the null-model is expanded with these explanatory variables (Model 1). First, the mean PTSD-scale according to the DSM was added as a predictor, followed by three separate models with the separate symptom clusters (intrusion, avoidance, hyperarousal) as predictors. We also tested for indirect effects of parental symptoms of PTSD on child attachment through extremely insensitive parenting and disconnected parenting.

As a next step, model 2 investigates whether the predictors can explain differences on the family-level: family composition (single parents versus traditional family composition), child sex and residence permit (asylum seekers versus refugees). To compute this model one family was removed because within this family one parent was awarded a residence permit while the other parent was not. To examine the effect of a clinical level of PTSD symptoms on a family level, we divided the families of which both parents participated (n = 36) into families with zero, one or two parents with a clinical level of PTSD symptoms according to the algorithm of Mollica (1999).

In the final step, the random slope model is computed (model 3). In this model the variance components on the family level for the explanatory variables are estimated. Significant variances for regression coefficients are further analyzed with the predictors on the family level (cross-level interactions).

For multilevel modeling of binary data, we used Mplus 7.11 (Muthén & Muthén, 2013) with MLR as the estimator. Because the dependent variable is dichotomous, Mplus does not provide model fit indices. To indicate how much of the variance was explained at both the parent and family level, we used the R^2 computed for each level separately. As it is expected that parental symptoms of PTSD increase the risk for maladaptive parenting, one-sided p-values are reported. Because of our small sample size, *p*-values between .05 and .10 are considered a trend.

Results

Preliminary analyses

Descriptive statistics for the trauma, parenting and attachment variables are summarized in Table 9.1. Examples of traumatic experiences are rape (26.5%), lack of food or water (47.1%), threatened with execution (47.1%), torture (48.5%), combat situation (48.5%), and near-death experience (59%).

Table 9.1 Descriptive statistics of explanatory variables

Measure		*M*	*SD*	Range	Freq.	%.
HTQ	Traumatic events	12.42	5.62	1-20		
	PTSD symptoms	2.71	0.74	1-4		
	PTSD algoritm					
	Subclinical symptoms				28	41.2
	Clinical symptoms PTSD				40	58.8
DIP	Disconnected parenting	2.96	2.07	1-9		
	Extremely insensitive parenting	2.97	1.87	1-9		
PSSP	Attachment classification					
	Secure				29	42.6
	Avoidant				5	7.4
	Ambivalent				16	23.5
	Disorganized				18	26.5

HTQ = Harvard Trauma Questionnaire, DIP = Disconnected and extremely insensitive parenting, PSSP = Preschool Strange Situation Procedure

It should be noted that many participants experienced trauma or loss within the family context: 60.3% of the participants reported to have experienced a forced separation from family members, 55.9% reported an unnatural death of a family member, and 44.1% reported a murder of a family member. The majority (59.4%) experienced a clinical level of PTSD symptoms. In this sample less than half of the children were classified as securely attached (42.6%), whereas 30.9% were classified as insecure organized and 26.5% where classified as disorganized.

Secure-Insecure Attachment

Null-model

The ICC for security of attachment was .07, which means that 93% of the total variability in outcome is attributable to factors on the dyadic level and 7% is attributable to factors on the family level (model 0).

Model 1: Model on the dyadic level

To test if the relationship between parental symptoms of PTSD (total score) and child's security of attachment was mediated by either extremely insensitive parenting or disconnected parenting, both explanatory variables were added to the null-model. The results are depicted in Figure 9.1. The direct effect of parental symptoms of PTSD on child's security of attachment was significant. An increase in parental symptoms of PTSD was associated with an insecure attachment in children. At a trend level, there was a relation between PTSD symptoms and parent's extremely insensitive behavior, indicating that an increase in parental symptoms of PTSD was associated with a more extremely insensitive parenting behavior. The relation between extremely insensitive parenting and security of attachment was not significant. The relation between PTSD symptoms and disconnected parenting behavior was not significant, but at a trend level there was a relation between disconnected parenting behavior and insecure attachment. More disconnected parenting behavior was associated with a higher likelihood of an insecure attachment relationship.

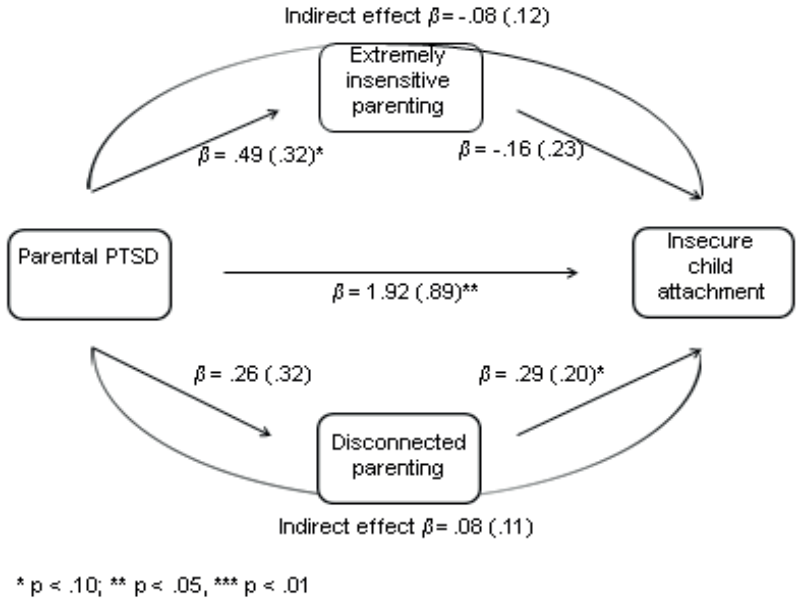

Figure 9.1 Associations between parental PTSD and security of child attachment (Model 1)

Neither of the indirect effects was significant, indicating that the amount of mediation of disconnected and extremely insensitive parenting behavior was not significant. Model 1 explained 43% out of the 93% variance in child attachment at the dyadic level.

When we analyzed parental symptoms of PTSD separately for the clusters intrusion, avoidance and hyperarousal, the direct effect of every PTSD symptom-cluster on security of attachment was significant (see Table 9.2). In addition, intrusion and avoidance were significant in explaining extremely insensitive parenting. Neither of the indirect effects was significant. The model with intrusion explained 39%, avoidance 30%, and hyperarousal 38% out of the 93% variance in child attachment at the dyadic level.

Table 9.2 Associations between PTSD symptom-clusters and security of child attachment (Model 1)

	Intrusion		Avoidance		Hyper arousal	
	β	*SE*	*β*	*SE*	*β*	SE
Insecure attachment	.33**	.13	.20*	.13	.28*	.14
Disconnected parenting	.03	.06	.02	.05	.03	.05
Extreme insensitive parenting	.09*	.06	.08*	.05	.07	.06
Indirect effect disc. parenting	-.02	.02	-.01	.02	-.01	.02
Indirect effect extremely insensitive parenting	.01	.01	.01	.01	.01	.02

* $p < .05$, ** $p < .01$

Model 2: Model on the family level

To explain the variance in attachment security at the family level, we added the predictors – family composition, child sex, having a residence permit, and number of parents with clinical level of PTSD within the family. Child sex was marginally associated with attachment security (β = 0.48, *SE* = 0.30, p = 0.06); being a girl is associated with an insecure attachment relationship. In addition, there was a marginally significant association for residence permit (β = 0.88, *SE* = 0.69, p = .10); having no residence permit was associated with an insecure attachment relationship but only at a trend level. The model explained 45% out of the 7% of the variance at the family level. The predictors family composition (β = 0.83, *SE* = 0.76, p = .33) and clinical level of PTSD within the family (β = -0.17, *SE* = 0.44, p = 0.36) were not significant.

Model 3: Random slope model

As a final step, the variance components for the explanatory variables were estimated. None of the variances around the slopes were significant (Table 9.3).

Table 9.3 Model of the random slopes with security of child attachment

Slope security of attachment	*M*	*SE*	*б*	*SE*
PTSD symptoms	2.57	0.14	0.03	0.05
Disconnected parenting	0.44	0.03	0.01	0.01
Extremely Insensitive parenting	0.74	0.72	1.16	1.97

Note: б = variance components on the family level for the explanatory variables

Organized-Disorganized Attachment

Null-model:

The ICC for organized versus disorganized attachment classification was .02, which means that 98% of the total variability in the outcome is attributable to factors on the dyadic level, and only 2 % is attributable to factors on the family level. The variance in children's attachment organization can almost completely be attributed to the dyadic level.

Model 1: Model on the dyadic level

In model 1, depicted in figure 2, the direct effect of parental PTSD symptoms (total score) on children's attachment organization was significant, indicating that higher levels of PTSD symptoms were associated with a higher likelihood of a disorganized attachment. The effects of PTSD symptoms on extremely insensitive parenting behavior and of extremely insensitive parenting behavior on organization of child attachment were only at a trend level present. These associations indicate, at a trend level, that parental PTSD symptoms were associated with an increase in extremely insensitive behavior, and extremely insensitive parenting behavior was associated with a higher likelihood of disorganized attachment. The indirect effect did not reach significance. The effect of PTSD symptoms on disconnected parenting behavior was not significant, whereas the effect of disconnected parenting behavior on children's disorganized attachment was significant; indicating that the risk for a disorganized attachment increased when the parent displayed more disconnected behavior. The model explained 52% of the 98% variance located at the dyadic level.

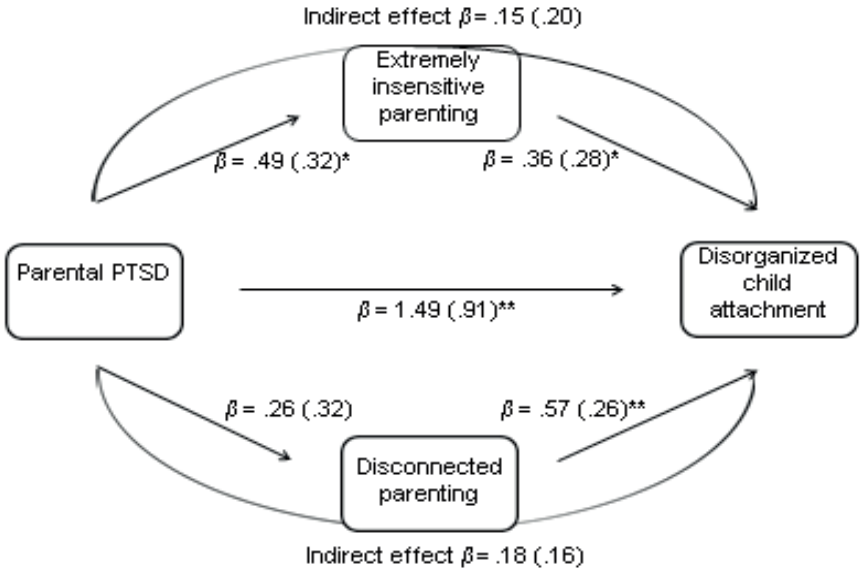

Figure 9.2. Associations of the relations between parental PTSD and organization of child attachment (Model 1)

As a next step, parental symptoms of PTSD were analyzed on the cluster level. The direct effects of intrusion and avoidance, but not hyperarousal, on children's attachment organization were significant (see Table 9.4). In addition, intrusion and avoidance independently predicted extremely insensitive parenting. Neither of the indirect effects was significant, indicating that the amount of mediation was not significant. The model with intrusion explained 48%, and avoidance 44% out of the 98% variance located at the dyadic level.

Table 9.4 Associations between PTSD symptom-clusters and organization of child attachment (Model 2)

	Intrusion		Avoidance		Hyperarousal	
	β	*SE*	*β*	*SE*	*β*	SE
Disorganized attachment	.24*	.14	.17*	.10	.15	.13
Disconnected parenting	.03	.06	.02	.05	.03	.05
Extremely insensitive parenting	.09*	.06	.08*	.05	.07	.06
Indirect effect disc. parenting	.03	.03	.03	.02	.03	.02
Indirect effect extremely insensitive parenting	.02	.04	.01	.03	.02	.03

* $p < .05$, ** $p < .01$

Model 2: Model on the family level

To explain the variance on the family level, we added the predictors – family composition, child sex, residence permit, number of parents with clinical level of PTSD within families. Again, only child sex was marginally associated (β = 0.96, *SE* = 0.76, p = 0.10; being a girl was associated with a disorganized attachment relationship. The predictors family composition (β = 0.34, *SE* = 0.72, p = .32), residence permit (β = 0.45, *SE* = 0.66, p = .25) and clinical level of PTSD within families (β = -0.04, *SE* = 0.59, p = .48) were not significant. The model explained 43% out of the 2% located at the family level.

Model 3: Random slope model

As a final step, the variances around the slopes for the explanatory variables were estimated, but none were significant. The results are summarized in table 9.5.

Table 9.5 Model of the random slopes with organization of child attachment

Slope organization of attachment	*M*	*SE*	*б*	*SE*
PTSD symptoms	2.02	1.24	0.71	1.35
Disconnected parenting	0.73	0.30	0.18	0.41
Extremely insensitive parenting	0.74	0.72	1.16	1.97

Note: б = variance components on the family level for the explanatory variables

Discussion

To examine the relationship between parental PTSD and child attachment, this study investigated the unique contribution of disconnected (frightened, threatening and dissociative behavior) and extremely insensitive parenting behavior as a mediator in the association between parental symptoms of PTSD and insecure or disorganized child attachment. The results show that parental symptoms of PTSD are directly related to children's insecure attachment and disorganized attachment to the parent.

These results are in line with studies that used less robust measurements of attachment. Schwerdtfeger and Goff (2007) found that a history of interpersonal trauma experiences was related to more PTSD symptoms and a lower maternal attachment to the unborn child, as assessed by a questionnaire. Other studies showed that mothers with symptoms of PTSD perceived their attachment to their infant as less optimal (Davies et al., 2008; Hairston et al., 2011; Parfitt & Ayers, 2009). In contrast with these results are the findings among women

with childhood trauma experiences that maternal symptoms of PTSD were not related to infant attachment as measured by the SSP (Lyons-Ruth & Block, 1996). Different mechanisms may be at work in survivors of chronic childhood trauma versus survivors of refugee trauma. In our sample, extremely insensitive or frightened, threatening and dissociative parenting behavior explained only part of the relation between parental PTSD and child attachment. The greatest proportion of the risk could be attributed to factors related to the dyad and not the family. Therefore, in this sample, parental symptoms of PTSD have negative effects on the ability of a parent to create a safe and constituting environment in which a child can thrive.

The majority of the children in this sample were insecurely attached. In comparison to other samples, the proportion of ambivalently attached children was especially high (Van IJzendoorn & Sagi-Schwartz, 2008). In an exploration of three international studies on the potential long-term effects of the Holocaust on the next generation (Bar-On et al., 1998), an attachment perspective was used to explain the pattern of preoccupied and overprotective interactions between parents and children. On the one hand, parents expressed the need to protect their children in an unsafe world. On the other hand, they desired them to be successful and make up for their own missed opportunities. It was hypothesized that the ambivalent strategy is possibly the most adequate response to a child-rearing environment marked by the traumatic memories of the past. It is very likely that asylum seeker and refugee parents develop comparable interaction-patterns with their children. Indeed, parents from the current sample described on the one hand their difficulties with the developing autonomy of their children as they wanted to protect them, while on the other hand they had very high aspirations for the future of their children (van Ee, Sleijpen, Kleber, & Jongmans, 2013). Other parents were observed as being fully immersed in their symptoms and withdrawn from their child. A meta-analytical study showed that neglect is especially a risk factor for the development of an organized insecure attachment whereas physical abuse is a risk factor for the development of a disorganized attachment (Cyr, Euser, Bakermans-Kranenburg, & Van IJzendoorn, 2010). Our results underscore the increased risk for children of traumatized parents to develop an ambivalent or disorganized attachment strategy.

In line with other studies, particularly intrusion and avoidance are associated with adverse parenting behavior. "The traumatized adult's continuing state of fear" (Main & Hesse, 1990, p. 163) may set the stage for frightening experiences for the child and disorganized attachment to develop. Our model suggests that the

pathway between PTSD symptoms, and thereby perhaps unresolved trauma or loss, in parents and disorganized attachment in children may, in part, be different than hypothesized previously (Hesse & Main, 2006; Madigan et al., 2006). In our sample the pathway did not run via disconnected parenting behavior. Avoidance and intrusion, but not hyperarousal, had on a trend level an effect on extremely insensitive parenting behavior, and extremely insensitive parenting behavior, in turn, had on a trend level an effect on disorganized attachment. As parents with PTSD symptoms are at times occupied with their own experiences, they may fail to regulate the child and, for example, withdraw or display aggressive parenting behaviors, while at other times they may find the ability to attune to the needs of their child. The behavioral oscillation creates an inherent unpredictable and thereby unsafe environment for the child.

In our study, the association between frightened, threatening and dissociative parenting behavior and child attachment was confirmed. No significant association between PTSD and disconnected parenting behavior was established. Although temporarily being disconnected from the immediate context could be part of PTSD, it may not necessarily be the case for all individuals. In contrast with PTSD, complex PTSD is typically not the result of exposure to a single traumatic experience, but the result of exposure to repeated or prolonged experiences or multiple forms of interpersonal traumatic experiences (Cloitre et al., 2011; Herman, 1997). Our sample of asylum seekers and refugees reported on the HTQ multiple forms of traumatic experiences often with an interpersonal character. The accumulation of these stressful events can lead to considerable psychological problems (Mollica, McInnes, Poole, & Tor, 1998; Steel, Silove, Phan, & Bauman, 2002). It can be argued that besides PTSD, complex PTSD will be prone in this sample. Complex PTSD is characterized by the core symptoms of PTSD in conjunction with five domains of disturbances in self-regulatory capacities (Cloitre et al., 2011). Dissociation is explicitly mentioned under 'alterations in attention and consciousness' and thereby considered to be one of the core symptoms of complex PTSD. Dissociative phenomena are considered to lie underneath disconnected parenting. Thus, an assessment of complex PTSD may reveal associations with frightened, threatening and dissociative parenting behavior and may indirectly have an effect on disorganized child attachment.

Refugees and asylum seekers have dealt with multiple stressful events in their home country such as forced migration. After fleeing they face new difficulties, such as obtaining legal residency, learning a new language and adjusting to a new culture. In our sample, many asylum seekers reported serious

concerns and stress over the asylum procedure, and some were even close to deportation. Even though the Dutch government did not perceive their situation or home country as dangerous, to them deportation felt life-threatening. Under these circumstances the uncertainty of having no residence permit explains part of the variance in the relation in insecure child attachment. This increased risk may not be attributable to parenting behavior but to the insecure condition of the family-situation.

The obviousness of the results should not obscure the harrowing implications of these results. Last year, worldwide an estimated 4.3 million people were newly displaced as a result of persistent or new conflicts and persecution. The 38 countries of the European Union received 355.500 asylum claims, while North America received 103.900 asylum claims (UNHCR, 2012). The insecure condition of the family-situation and the associated risks for the child is of an unwarranted scope (see also Fazel, Reed, Panter-Brick, & Stein, 2012). Lingering asylum-procedures fail to take 'the best interest of the child' into account and violate children's rights (e.g., article 3, 6, & 19 United Nations Convention on the rights of the child, 1990).

Whether or not the factors on the family level that were investigated in the current study are either a risk or protective factor remains an issue that should be further explored. First, this study showed that in a sample of traumatized asylum seeker and refugee families, growing up with a single-parent or a two-parent household was neither a risk nor a protective factor. These results are in line with studies which demonstrated that for certain ethnic groups no differences were found in psychosocial functioning for refugee children who were living in a two-parent or single-parent households. In children with a Southeast Asian origin, more internalizing symptoms were reported for children from a single-parent household as compared to children from a two-parent household (Hodes, Jagdev, Chandra, & Cunniff, 2008; Rousseau, Drapeau, & Corin, 1998; Rousseau, Drapeau, & Platt, 1999). In contrast, living in a single-parent household has been associated with higher feelings of competence, while living in a two-parent household has been associated with a lower prevalence of psychological problems (Rousseau, Drapeau, & Platt, 2004; Tousignant et al., 1999).

Second, this study demonstrated that growing up with a parent with symptoms of PTSD contributed significantly to the prediction of child attachment, but growing up with either one or two parents with a clinical level of PTSD did not contribute significantly to the prediction of child attachment. Research has consistently associated parental mental health with the refugee

children's wellbeing (Almqvist & Broberg, 1997; Angel, Hjern, & Ingleby, 2001; Ekblad, 1993; Hjern, Angel, & Jeppson, 1998). However, as the quality of the attachment relationship between parent and child is mainly determined at the dyadic level, the impact of the other parent's PTSD symptoms may be limited, suggesting that even in these circumstances, it is possible to reach beyond and build a secure relationship between parent and child.

Several limitations and strengths are important to discuss. The current study had a cross-sectional design with a relatively small and heterogeneous sample. However, the sample size is commendable as asylum seekers and refugees are difficult to reach and recruit for research studies. Sixty-eight parents, fathers and mothers, have agreed to participate with their children. The study-methods consisted of extensive observations of both parent and child combined with self-report. While it is a limitation that this study did not use a structured clinical interview that could yield a formal PTSD diagnosis, it is a strength that both the quality of the parent-child interaction as well as the attachment relationships were observed using a well validated and structured coding system.

In conclusion, parental symptoms of PTSD have the potential to set the stage for an unsafe environment for the child and increase the risk for an insecure or even disorganized attachment relationship. The results indicate the need for clinical attention beyond PTSD symptomatology on the individual level of the parent. Traumatized parents and their children require support to establish or re-establish a relationship that is marked by predictability and security. Parental symptoms of PTSD were not related to disconnected parenting, but disconnected parenting, or parental expressions of fear, was related to child attachment. Therefore disconnected parenting, in particular, should alert the clinician for more disturbed parent-child interaction and the risk for insecure and disorganized child attachment. In the case of asylum seekers and refugees, the stress over the asylum procedure should not be grounds for postponing or modifying the intensity of treatment; instead it should be grounds for modifying the focus of treatment.

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References

Almqvist, K., & Broberg, A. (1997). Silence and survival: Working with strategies of denial in families of traumatized preschool children. *Journal of Child Psychotherapy*, *23*, 417-435.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders DSM-V.* Washington, DC.: Author.

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders DSM-IV.* Washington, DC.: Author.

Angel, B., Hjern, A., & Ingleby, D. (2001). Effects of war and organized violence on children: A study of Bosnian refugees in Sweden. *American Journal of Orthopsychiatry*, *71*, 4-15.

Bailey, H. N., Moran, G., & Pederson, D. R. (2007). Childhood maltreatment, complex trauma symptoms, and unresolved attachment in an at-risk sample of adolescent mothers. *Attachment & Human Development*, *9*, 139-161.

Bar-On, D., Eland, J., Kleber, R. J., Krell, R., Moore, Y., Sagi, A., . . . Van IJzendoorn, M. H. (1998). Multigenerational perspectives on coping with the Holocaust experience: An attachment perspective for understanding the developmental sequelae of trauma across generations. *International Journal of Behavioral Development*, *22*, 315-338.

Bosquet Enlow, M., Kitts, R. L., Blood, E., Bizarro, A., Hofmeister, M., & Wright, R. J. (2011). Maternal posttraumatic stress symptoms and infant emotional reactivity and emotion regulation. *Infant Behavior and Development*, *34*, 487-503.

Bronfman, E., Parsons, E., & Lyons-Ruth, K. (2004). *Atypical Maternal Behavior Instrument for Assessment and Classification (AMBIANCE): Manual for coding disrupted affective communication (2nd ed.).* Unpublished manual, Havard University Medical School.

Cassidy, J., Marvin, R., & with the MacArthur Working Group. (1992). *Attachment organization in preschool children: Procedures and coding manual.* Unpublished Manuscript, University of Virginia.

Cloitre, M., Courtois, C. A., Charuvastra, A., Carapezza, R., Stolbach, B. C., & Green, B. L. (2011). Treatment of complex PTSD: Results of the ISTSS expert clinician survey on best practices. *Journal of Traumatic Stress*, *24*, 615-627.

Cyr, C., Euser, E. M., Bakermans-Kranenburg, M. J., & Van Ijzendoorn, M. H. (2010). Attachment security and disorganization in maltreating and high-risk families: A series of meta-analyses. *Development and Psychopathology*, *22*, 87.

Davies, J., Slade, P., Wright, I., & Stewart, P. (2008). Posttraumatic stress symptoms following childbirth and mothers' perceptions of their infants. *Infant Mental Health Journal*, *29*, 537-554.

Despars, J., Peter, C., Borghini, A., Pierrehumbert, B., Habersaat, S., Müller-Nix, C., . . . Hohlfeld, J. (2011). Impact of a cleft lip and/or palate on maternal stress and attachment representations. *The Cleft Palate-Craniofacial Journal*, *48*, 419-424.

Ekblad, S. (1993). Psychosocial adaptation of children while housed in a Swedish refugee camp: Aftermath of the collapse of Yugoslavia. *Stress Medicine*, *9*, 159-166.

Fazel, M., Reed, R. V., Panter-Brick, C., & Stein, A. (2012). Mental health of displaced and refugee children resettled in high-income countries: Risk and protective factors. *The Lancet*, *379*, 266-282.

Fearon, R. P., & Mansell, W. (2001). Cognitive perspectives on unresolved loss: Insights from the study of PTSD. *Bulletin of the Menninger Clinic*, *65*, 380-396.

Guo, G., & Zhao, H. (2000). Multilevel modeling for binary data. *Annual Review of Sociology*, *417*, 441-462.

Hairston, I. S., Waxler, E., Seng, J. S., Fezzey, A. G., Rosenblum, K. L., & Muzik, M. (2011). The role of infant sleep in intergenerational transmission of trauma. *Sleep*, *34*, 1373.

Harari, D., Bakermans-Kranenburg, M., De Kloet, C., Geuze, E., Vermetten, E., Westenberg, H., & Van IJzendoorn, M. (2009). Attachment representations in Dutch veterans with and without deployment-related PTSD. *Attachment & Human Development*, *11*, 515-536.

Herman, J. L. (1997). *Trauma and recovery: The aftermath of violence – from domestic abuse to political terro*r. New York: Basic Books.

Hesse, E., & Main, M. (2006). Frightened, threatening, and dissociative parental behavior in low-risk samples: Description, discussion, and interpretations. *Development and Psychopathology*, *18*(2), 309-343.

Hjern, A., Angel, B., & Jeppson, O. (1998). Political violence, family stress and mental health of refugee children in exile. *Scandinavian Journal of Public Health*, *26*, 18-25.

Hodes, M., Jagdev, D., Chandra, N., & Cunniff, A. (2008). Risk and resilience for psychological distress amongst unaccompanied asylum seeking adolescents. *Journal of Child Psychology and Psychiatry*, *49*, 723-732.

Hollifield, M., Warner, T. D., Lian, N., Krakow, B., Jenkins, J. H., Kesler, J., . . . Westermeyer, J. (2002). Measuring trauma and health status in refugees: A critical review. *JAMA: Journal of the American Medical Association*, *288*, 611-621.

Hox, J. (2010). *Multilevel analysis: Techniques and application*s Routledge Academic.

Khaylis, A., Polusny, M. A., Erbes, C. R., Gewirtz, A., & Rath, M. (2011). Posttraumatic stress, family adjustment, and treatment preferences among national guard soldiers deployed to OEF/OIF. *Military Medicine*, *176*, 126-131.

Kleijn, W., Hovens, J., & Rodenburg, J. (2001). Posttraumatic stress symptoms in refugees: Assessments with the harvard trauma questionnaire and the Hopkins symptom checklist-25 in different languages. *Psychological Reports*, *88*, 527-532.

Lauterbach, D., Bak, C., Reiland, S., Mason, S., Lute, M. R., & Earls, L. (2007). Quality of parental relationships among persons with a lifetime history of posttraumatic stress disorder. *Journal of Traumatic Stress*, *20*, 161-172.

Lester, P., Peterson, K., Reeves, J., Knauss, L., Glover, D., Mogil, C., …, & Beardslee, W. (2010). The long war and parental combat deployment: Effects on military children and at-home spouses. *Journal of the American Academy of Child & Adolescent Psychiatry*, *49*, 310-320.

Lombardo, K. L., & Motta, R. W. (2008). Secondary trauma in children of parents with mental illness. *Traumatology*, *14*, 57-67.

Luijk, M. P., Tharner, A., Bakermans-Kranenburg, M. J., Van IJzendoorn, M. H., Jaddoe, V. W., Hofman, A., . . . Tiemeier, H. (2011). The association between parenting and attachment security is moderated by a polymorphism in the mineralocorticoid receptor gene: Evidence for differential susceptibility. *Biological Psychology*, *88*, 37-40.

Lyons-Ruth, K., & Block, D. (1996). The disturbed caregiving system: Relations among childhood trauma, maternal caregiving, and infant affect and attachment. *Infant Mental Health Journal*, *17*, 257-275.

Madigan, S., Moran, G., & Pederson, D. R. (2006). Unresolved states of mind, disorganized attachment relationships, and disrupted interactions of adolescent mothers and their infants. *Developmental Psychology*, *42*, 293-304.

Madigan, S., Bakermans-Kranenburg, M. J., Van IJzendoorn, M. H., Moran, G., Pederson, D. R., & Benoit, D. (2006). Unresolved states of mind, anomalous parental behavior, and disorganized attachment: A review and meta-analysis of a transmission gap. *Attachment & Human Development*, *8*, 89-111.

Main, M., & Hesse, E. (1990). Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In M. T. Greenberg, D. Cicchetti, & E. M.Cummings, (Eds.), *Attachment in the preschool years: Theory*, *research*, *and intervention* (pp. 161-182). Chicago: University of Chicago Press.

Main, M., & Hesse, E. (1998). *Frightening*, *frightened*, *dissociated*, *deferential*, *sexualized and disorganized parental behavior: A coding system for parent-infant interactions (6th ed.).* Unpublished manual, University of California at Berkeley.

Main, M., & Morgan, H. (1996). Disorganization and disorientation in infant strange situation behavior. In L. K. Michelson, W. J. Ray (Eds.), *Handbook of Dissociation: Theoretical*, *Empirical*, *and Clinical Perspectives* (pp. 107-138). New York: Plenum Press.

Mollica, R. F., Caspi-Yavin, Y., Bollini, P., & Truong, T. (1992). The Harvard trauma questionnaire: Validating a cross-cultural instrument for measuring torture, trauma, and posttraumatic stress disorder in Indochinese refugees. *Journal of Nervous and Mental Disease*, *180*, 111-116.

Mollica, R. F., McInnes, K., Sarajlić, N., Lavelle, J., Sarajlić, I., & Massagli, M. P. (1999). Disability associated with psychiatric comorbidity and health status in Bosnian refugees living in Croatia. *JAMA: The Journal of the American Medical Association*, *282*, 433-439.

Mollica, R. F., McInnes, K., Poole, C., & Tor, S. (1998). Dose-effect relationships of trauma to symptoms of depression and posttraumatic stress disorder among Cambodian survivors of mass violence. *British Journal of Psychiatry*, *173*, 482-488.

Muthén, B. O., & Muthén, L. K. (2013). Mplus (version 7.11). Los Angeles, CA: Muthén & Muthén.

Nye, E. C., Katzman, J., Bell, J. B., Kilpatrick, J., Brainard, M., & Haaland, K. Y. (2008). Attachment organization in Vietnam combat veterans with posttraumatic stress disorder. *Attachment & Human Development*, *10*, 41-57.

Out, D., Cyr, C., Pijlman, F., Beijersbergen, M., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (2009). Disconnected and extremely insensitive parenting (DIP). Leiden: Rommert Casimir Publishers.

Out, D., BakermansKranenburg, M. J., & Van IJzendoorn, M. H. (2009). The role of disconnected and extremely insensitive parenting in the development of disorganized attachment: Validation of a new measure. *Attachment & Human Development*, *11*, 419-443.

Parfitt, Y. M., & Ayers, S. (2009). The effect of post-natal symptoms of posttraumatic stress and depression on the couple's relationship and parent-baby bond. *Journal of Reproductive and Infant Psychology*, *27*, 127-142.

Peat, J. (2001). Health science research: A handbook of quantitative methods. Sydney: Allen & Uwin.

Rousseau, C., Drapeau, A., & Corin, E. (1998). Risk and protective factors in central American and southeast Asian refugee children. *Journal of Refugee Studies*, *11*, 20-37.

Rousseau, C., Drapeau, A., & Platt, R. (1999). Family trauma and its association with emotional and behavioral problems and social adjustment in adolescent Cambodian refugees. *Child Abuse & Neglect*, *23*, 1263-1273.

Rousseau, C., Drapeau, A., & Platt, R. (2004). Family environment and emotional and behavioural symptoms in adolescent Cambodian refugees: Influence of time, gender, and acculturation. *Medicine*, *Conflict and Survival*, *20*, 151-165.

Samper, R. S., Taft, C. T., King, D. W., & King, L. A. (2004). Posttraumatic stress disorder symptoms and parenting satisfaction among a national sample of male Vietnam veterans. *Journal of Traumatic Stress*, *17*, 311-315.

Sagi-Schwartz, A., Van IJzendoorn, M. H., & Grossmann, K. E. (2003). Attachment and traumatic stress in female Holocaust child survivors and their daughters. *American Journal of Psychiatry*, *16*0, 1086-1092.

Schechter, D. S., Willheim, E., Hinojosa, C., Scholfield-Kleinman, K., Turner, J. B., McCaw, J., . . . Myers, M. M. (2010). Subjective and objective measures of parent-child relationship dysfunction, child separation distress, and joint attention. *Psychiatry: Interpersonal and Biological Processes*, *73*, 130-144.

Schechter, D. S., Coots, T., Zeanah, C. H., Davies, M., Coates, S. W., Trabka, K. A., . . . Myers, M. M. (2005). Maternal mental representations of the child in an inner-city clinical sample: Violence-related posttraumatic stress and reflective functioning. *Attachment and Human Development*, *7*, 313-331.

Schechter, D. S., Coates, S. W., Kaminer, T., Coots, T., Zeanah, C. H., Davies, M., . . . Myers, M. M. (2008). Distorted maternal mental representations and atypical behavior in a clinical sample of violence-exposed mothers and their toddlers. *Journal of Trauma and Dissociation*, *9*, 125-147.

Schuengel, C., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (1999). Frightening maternal behavior linking unresolved loss and disorganized infant attachment. *Journal of Consulting and Clinical Psychology*, *67*, 54-63.

Schwerdtfeger, K. L., & Nelson Goff, B. S. (2007). Intergenerational transmission of trauma: Exploring mother-infant prenatal attachment. *Journal of Traumatic Stress*, *20*, 39-51.

Steel, Z., Silove, D., Phan, T., & Bauman, A. (2002). Long-term effect of psychological trauma on the mental health of Vietnamese refugees resettled in Australia: A population-based study. *The Lancet*, *360*, 1056-1062.

Stovall-McClough, K. C., & Cloitre, M. (2006). Unresolved attachment, PTSD, and dissociation in women with childhood abuse histories. *Journal of Consulting and Clinical Psychology*, *74*, 219-228.

Tousignant, M., Habimana, E., Biron, C., Malo, C., Sidoli-LeBianc, E., & Bendris, N. (1999). The Quebec adolescent refugee project: Psychopathology and family variables in a sample from 35 nations. *Journal of the American Academy of Child & Adolescent Psychiatry*, *38*, 1426-1432.

Turton, P., Hughes, P., Fonagy, P., & Fainman, D. (2004). An investigation into the possible overlap between PTSD and unresolved responses following stillbirth: An absence of linkage with only unresolved status predicting infant disorganization. *Attachment & Human Development*, *6*, 241-253.

Van Ee, E., Kleber, R. J., & Mooren, T. T. M. (2012). War trauma lingers on: Associations between maternal posttraumatic stress disorder, parent–child interaction, and child development. *Infant Mental Health Journal*, 33, 459-468.

Van Ee, E., Sleijpen, M., Kleber, R. J. & Jongmans, M. J. (2013). Father-involvement in a refugee sample, relations between posttraumatic stress and caregiving. *Family Process*.

United Nations Convention on the Rights of the Child, No. 27531, New York, 20 November 1989. Retrieved from: http://treaties.un.org

United Nations High Commissioner for Refugees (2012) *A year of Crisis*, *UNHCR global trends 2011.* Geneva: UNHCR.

Van IJzendoorn, M. H. (1995). Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the adult attachment interview. *Psychological Bulletin*, *117*, 387-403.

Van IJzendoorn, M. H., Schuengel, C., & Bakermans-Kranenburg, M. J. (1999). Disorganized attachment in early childhood: Meta-analysis of precursors, concomitants, and sequelae. *Development and Psychopathology*, *11*, 225-249.

Van IJzendoorn, M. H., & Sagi-Schwartz, A. (2008). Cross-cultural patterns of attachment, universal and contextual dimensions. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment. Theory, research, and clinical applications, second edition* (pp. 880-905). New York/London: The Guilford Press.

Chapter 10

Summary, general discussion and conclusion

Once upon a time there was a ghost in the nursery. In order to discover a solution to this problem, wizards from all over the world came together bringing their wise books filled with difficult words. They revealed to everyone who wanted to listen that they did not need to be afraid because the ghost simply did not exist. All of the adults, and especially the parents, were relieved because the ghost in the nursery had been expelled. However, the little child who had to sleep in the nursery was still afraid... but no one listened to the child.

Fraiberg, Adelson and Shapiro (1975) introduced the concept of "ghosts in the nursery" in order to describe visitors from a parent's past. These intruders from the past represent traumatic childhood experiences most often committed by attachment figures. This kind of traumatization may harm the bond between the parent and his or her child. Even though this concept was introduced as early as 1975, whether or not children can be affected by the traumatization of their parents has remained a discussion ever since.

This dissertation tries to contribute to our understanding of the effect of parental traumatization on children by a unique combination of parental report and close observations of parent-child interaction and attachment of asylum seeker and refugee mothers, fathers and their young children (born in the Netherlands). To understand these complex dynamics we looked at two main questions:

1. How does traumatization affect the asylum seeker or refugee parent and his/her non traumatized child?

2. And, is attachment a key in understanding relational patterns between the traumatized asylum seeker or refugee parent and his/her non traumatized child?

In order to study these questions, asylum seeker or refugee parents with traumatic experiences and varying levels of posttraumatic stress symptoms, and their child in the age of 18 – 42 months were assessed. Whether levels of posttraumatic stress were related to parent-child interaction quality, the nature of the attachment relationship and the development of the child was analyzed. Furthermore, factors such as the perception of the relationship, the amount of caregiving, and attachment representations of parents were explored. Here, the findings of the different studies will be integrated in response to the more specific questions that were posed:

1. What are the developmental difficulties presented by young children of traumatized asylum seeker and refugee parents?

2. In what manner do symptoms of posttraumatic stress affect the quality of the parent-child interaction?

3. Which mechanisms explain the association between posttraumatic stress symptoms of asylum seeker and refugee parents and the wellbeing of children?

This chapter will first summarize the results of the various studies that are part of this dissertation and subsequently discuss some conceptual issues that have not been addressed before. Furthermore, it will elaborate on some clinical implications of the integrated findings and end with a general conclusion.

Summary

What are the developmental difficulties presented by young children of traumatized asylum seeker and parents?

To study parental traumatization as a risk factor for child functioning first the relations among maternal posttraumatic stress symptoms and childrens' psychosocial functioning and development were analyzed among 49 asylum seeker and refugee mothers and their children. Asylum seeker and refugee mothers with more severe symptoms of posttraumatic stress reported more internalizing behavior (anxious and depressed behavior) of their children. These mothers did not report more externalizing behavior (attention problems and aggressive behavior). Severity of posttraumatic stress symptoms of mothers was not related to the mental and psychomotor development of children. Nevertheless, children were observed to be less responsive to and involved with their mothers (chapter 3). Then relations among parental posttraumatic stress and child attachment among 69 asylum seeker and refugee parents were analyzed. Symptoms of posttraumatic stress of both mothers and fathers were directly related to an insecure or disorganized attachment organization of their children. Disconnected parenting, which is hypothesized to be a reflection of dissociation, was also related to the attachment organization of the child (chapter 9). In the specific case of children born of wartime rape, a group in which the consequences of the traumatization can be magnified because of the connection between the child and the traumatic experience, attachment disorders, or more specifically disorganized attachments, and identity issues were identified as a risk factor (chapters 6 & 7).

The combination of observational measures and parent report confirmed results of earlier studies conducted among other populations (chapter 2) and, moreover, add objectivity to these results. The developmental difficulties presented by children of traumatized parents cannot solely be ascribed to the, perhaps colored, perception of the parent or clinician, but were confirmed by systematic observations of children's behavior in response to their parents. The evidence suggests that although many parents recover well after extreme life events and many children show resilience despite having affected parents, traumatization can cause parenting limitations, and these limitations can disrupt the development of the young child.

In what manner do symptoms of posttraumatic stress affect the quality of the parent-child interaction?

To further explore these parenting limitations a relational perspective was taken (chapter 2). The influence of posttraumatic stress on the quality of the parent-child interaction among 80 asylum seeker and refugee parents and their children was assessed. Parents showing more symptoms of posttraumatic stress were less sensitive and structuring, and more hostile to their children (chapters 3 & 4).

To our knowledge, this is the first time that the interaction of traumatized fathers with their children was observed. No gender differences were found; symptoms of posttraumatic stress equally affect mothers and fathers in their parenting. Many fathers indicated, during the qualitative interviews, that their own issues had a negative impact on their relationship with their child. Only some fathers recognized that their own mental health is a condition for doing well together. Nevertheless, almost all fathers perceived the relationship with their child as good and their child as very important to them (chapter 4).

The perception of mothers with a child born of wartime rape can become colored because the child is seen as a living reminder of a traumatic experience. This perception leads to extreme ambivalence and detachment of the mother, often leading to abuse and neglect (chapters 6 & 7). Furthermore, in a sample of 69 asylum seeker and refugee parents, symptoms of posttraumatic stress were, on a trend level, related to more extreme insensitive parenting behavior. Symptoms of avoidance and intrusion particularly are related to extreme insensitive parenting behavior (chapter 9). Parent–child interaction did not function as a mediator between maternal trauma symptoms and children's psychosocial functioning, but was related to child attachment (chapters 3 & 9).

From a clinical perspective, the results call for a need to re-establish attunement within these relationships. It is of importance to invite both mothers as fathers as they both are in need for intervention (chapters 4 & 5). Clients frequently mention the experience of hope as a major outcome of family focused treatment. This experience fosters intimacy and growth at the individual as well as the relational level (chapter 5). From a research perspective these results highlight the importance of further exploration of the impact of traumatization on family relationships embedded within trauma and attachment theory as they broaden our understanding.

Which mechanisms explain the association between posttraumatic stress symptoms of asylum seeker and refugee parents and the wellbeing of children?

Within this dissertation several mechanisms have been proposed that explain part of the relation between posttraumatic stress symptoms of parents and wellbeing of children.

First, the impact of parental posttraumatic stress disorder (PTSD) on child regulation of affect and arousal has been proposed as an underlying mechanism for the association between parental trauma and child development (chapter 3). A parent's ability to respond sensitively to the needs of the child is theorized to be a stepping-stone for the child's ability to self-regulate. Some evidence for an association between maternal PTSD and child regulation was found as our data suggest that non traumatized children of traumatized mothers exhibit negative adaptations in their regulation of affect and arousal. These negative adaptations are associated with reduced sensitivity of parents and posttraumatic stress of parents. On a trend level, posttraumatic stress of parents was associated with extreme insensitive parenting. Lyons-Ruth, Bronfman, and Parson (1990) suggested that disorganized attachment of the child could also be the result of an extremely insensitive parent who fails to soothe and comfort the child and thereby fails to regulate the child. Extreme insensitive parenting was associated with disorganized attachment of children on a trend level as well. Further research should clarify if this negative adaptation of children is in response to unavailable parenting.

A second mechanism that has been proposed is frightening, threatening and dissociative parenting behavior (disconnected parenting; chapter 9). Dissociative phenomena have been proposed to explain the link between parental trauma, disconnected parenting and consequently disorganized attachment of children.

Our results suggest that the pathway between PTSD symptoms and disorganized attachment may be different than hypothesized previously. In our study, a strong association between disconnected parenting behavior and disorganized child attachment was confirmed. However, no significant association between PTSD and disconnected parenting behavior was established. The pathway did not run via disconnected parenting behavior but on a trend level via extreme insensitive parenting. Symptoms of intrusion and avoidance were of particular importance. An explanation could be that as parents with PTSD symptoms are at times occupied with their own experiences they may either withdraw from the child and show, for example, neglectful, rough or aggressive parenting behaviors while at other times they may find the ability to attune to the needs of their child. The behavioral oscillation creates an inherent unpredictable and thereby unsafe environment for the child.

A third mechanism that has been proposed to explain part of the relation between posttraumatic stress of parents and the wellbeing of children is the attachment representation of the parent (chapter 8). Traumatic experiences and posttraumatic stress can influence attachment representations negatively while, in general, a sense of security allows a person to attend less to his or her own needs and shift attention to caregiving. In our sample, both symptoms of posttraumatic stress as well as less secure attachment representations were associated with less sensitivity of the parent towards the child. An interaction between attachment representations, symptoms of PTSD and parental sensitivity were present. Parent's traumatic experiences and symptoms of PTSD increased the risk on insensitive parenting when parents cannot rely on secure attachment representations. These findings suggest that a parent's sensitivity is affected not just by symptoms of PTSD but by the conjunction of risk factors such as traumatic events, symptoms of PTSD and insecure attachment representations.

In the specific case of children born of wartime rape the role of meaning making was examined. When the attributed meaning to a child is 'an ongoing trauma' or 'object of shame and humiliation', it becomes difficult to conceptualize the child as an innocent and beloved child. The perception of the community, as the child is perceived as a child of the enemy and therefore a danger, leads to discrimination and stigmatization. The process of meaning making creates the opportunity for the consequences of trauma to perpetuate over generations (chapters 6 & 7).

Finally, a protective mechanism has been tentatively explored amongst fathers (chapter 4). It has been hypothesized that fathers tailor their interaction

style and focus more on the needs of their children when facing extra-familial challenges. By adjusting their interaction style or by investing more energy in the interaction with their child traumatized fathers may try to compensate for the difficulties that their children may face. Furthermore, as these fathers did not spend as much time with their children as mothers, they have more opportunity to withdraw when symptoms of stress worsen. This might enable them to achieve a style of interaction that is qualitatively comparable to that of mothers. As a result perhaps, fathers' and mothers' levels of emotional availability did not differ.

General discussion

The results of this dissertation raise some fundamental issues that have not been addressed within this dissertation before: When is a human being allowed to break? Can traumatized parents be held responsible? What about the agency of the child and the system? What is cultural, what is universal? What is attachment under unsafe conditions? Does trauma "brush off"? And trauma and attachment: is it actually one perspective?

When is a human being allowed to break?

"What is believed to be essential for mental health is that the child should experience a warm, intimate and continuous relationship with his parent in which both find satisfaction and enjoyment."

(Bowlby, 1951, p. 179).

The experience of a warm, intimate and continuous relationship in which both find satisfaction and enjoyment is what is needed for children and therefore demanded of parents. The sample in this dissertation consisted mainly of traumatized parents, some of whom were even severely traumatized. On average they reported 12 traumatic experiences, ranging from torture, combat situation, rape, to separation and death of family members. When is a person allowed to break and to have difficulties with satisfaction and enjoyment of the child? On average these parents reported clinical levels of posttraumatic stress, depression and anxiety symptoms. Indeed, the interaction with their children was affected: high levels of posttraumatic stress symptoms were detrimental to the quality of the interaction with and the wellbeing of the child. The focus on improvement begets the questions: do we allow human beings to break, can we bear to witness this suffering, and whose interest do we serve when we focus on improvement?

Important to note is that despite their apparent difficulties these parents did the recommendable job of taking care of their children. Almost all described their child as very important to them and tried to give their best to their child. Resilience is a key concept for understanding positive adaptation within the context of significant adversity (Sleijpen, Ter Heide, Boeije, Mooren, & Kleber, 2013). Resilience has been operationalized in various ways, but in general, it is regarded as an individual's capacity to withstand, adapt to and rebound from challenging or threatening circumstances. How a family confronts crises and challenges and reorganizes and reinvests in life will influence the adaptive abilities of all of its members and their relationships (Walsh, 2003). The ability of traumatized fathers to withdraw from the interaction when symptoms worsen, but to invest energy when they are able may help them to raise the quality of the parent-child interaction. In therapy often the request to these fathers is to be more available to the mothers and the children. The pattern of withdrawal and compensation can be called resilience, though. Clinical efforts to improve availability may collide with developed mechanisms in order to withstand and adapt.

So, in general, is it sufficiently acknowledged what traumatized parents do instead of what they do not do? Issues that deserve further exploration are: what does resilience in a family look like after extreme adversity? Within this high-risk sample is resilience taking good care or 'simply' taking care of your children? If resilience can be framed as taking care of your children than it is of interest how this kind of parental resilience will be framed, with or without treatment, by children when they grow older and how this kind of resilience will impact their wellbeing in the long-term.

Can traumatized parents be held responsible?

"Sometimes I imagine the map of the world spread out and you stretched diagonally across it. And then it seems to me as though I could consider living only in those places that you either do not cover or that do not lie within your reach. And, in keeping with the conception that I have of your size, these are not many and not very comforting regions."

(Kafka, 1919, p. 65)

Kafka beautifully depicts the sensed restriction in the development of an own identity. Even in adulthood, Kafka's father occupied the place needed for him to individuate and thrive. Parents can have a lasting impact on the development

of the child, for the good and the bad. In the previous paragraph it was argued that it is human to have a breaking point and under certain conditions it can be called resilience to take care of your child even if the quality is questionable. However, this argument cannot lead to a waiver of parental responsibility for the wellbeing of the child.

What does parental responsibility mean when a parent is severely traumatized? A quick literature review on how parental responsibility is viewed in general revealed two trends. First, parental responsibility is framed within legal responsibilities or medical debates. Outside these frameworks a fear of 'mother-blaming' seems to be present and perhaps to avoid 'mother blaming' the general issue of parental responsibility for the well being of children is better to be avoided at all. A second trend seems to be that parental responsibility is viewed as either present or lacking. The lack of a notion of a 'sliding scale' limits the possibilities to directly appeal on parents' responsibilities, as it is apparently absent. These trends are in contrast though with the results of this dissertation which call for attention for the impact of parenting on the child. Even though the outcome for the child is multi-factorial, which includes child characteristics, it does not rule out parental responsibility.

In therapy, traumatized parents are often occupied with their own experiences and symptoms. They feel they cannot fulfill their parental responsibilities until they are relieved from their past. Psychological disturbances are frequently chained to more or less rigid cognitions. Unfortunately, treatment results have shown that this kind of 'liberation' can take quite some time, if ever (Ter Heide, Mooren, Kleijn, De Jongh, & Kleber, 2011). Therefore, the interest of the child calls for a mindset in which parents take control of their responsibilities despite their past. Parents need to be enabled to view different perspectives including the perspective of the child (mentalizing). Multi-family therapy is one example of an intervention that could elicit this process.

Furthermore, in the context of stress, adversity and mental health problems, it can be appropriate to use a different framework of parental responsibility: as a parent, how are you going to limit the possible impact of your mental health issues on your child (until you have received adequate treatment)? Some suggestions for parental responsibility of severely traumatized clients: Apply what is learned in treatment. Be open-minded towards parent-child interventions. Look for safe attachment figures in the environment (compensation). Create a space to withdraw to when not in control, while the child remains in a safe environment. Use a 'good day' for the benefit of the relationship with the child. Make arrangements for when things go out of control.

Parental responsibility should not mean that a parent has to do all him- or herself. Parental responsibility should mean that within the context of the parent's abilities the parent creates an environment in which the child can be safe and thrive.

What about the agency of the child and the system?

"Transactions are omnipresent. Everyone in the universe is affecting another or is being affected by another. Everything in the universe is affecting something else or is being affected by something else. Everything is in a relationship, from the most complex society to the most elementary particle."

(Sameroff, 2009, p. 3)

How does one explain that one child in a family seems deeply affected by the traumatization of a parent while another child seems to develop well? Is the child a victim of, or an agent in the relationship? From a transactional point of view (Sameroff & Chandler, 1975), the development of the child is a product of the continuous dynamic interaction of the child and the setting. The influence is reciprocal; regulation is at the core of parent-child interaction. Therefore a problem is never completely attributable to the parent or the child but always located in their relationship (Sameroff, 2009). From an ecological perspective (Bronfenbrenner, 1979, 1999), the individual's interpretation or the meaning of the setting in both time and space is more emphasized. It is not the objective reality, but what someone defines as the reality that guides behavior. As a result, Bronfenbrenner places considerable importance on one's behavior and perceptions of activities, roles, and interpersonal relations in a setting (Bronfenbrenner, 2005). These types of interactions exist between all levels of the ecology: the microsystem (parents, family, neighborhood), the mesosystem (the interaction among various settings within the microsystems), the exosystem (social settings), the macrosystem (cultural values), and the chronosystem (the sociohistorical events of one's lifetime). Both theories view the child as an active agent that reacts to a stimuli, evokes a response and shapes the environment. However, proximal influences, such as interactions with the parent, have more influence on child development than more distal influences, such as social-economic status and culture.

So, the idea that parents' behavior affect their children and children's behavior affect their parents is well established among developmental scientists. It is however, rarely demonstrated in research designs on traumatized

parents and their children. Clearly, within this study the focus was on the interaction of the traumatized parent with the child. As with many other studies, child characteristics and other interactions between the systems were not incorporated in this study. Nevertheless, we demonstrated that asylum seeker and refugee parents experienced high levels of current stress over, for example, housing, asylum procedure and family members left behind in the country of origin and that a refugee status was of some importance in the explanation of the development of a disorganized attachment of the child. The importance of other interactions such as the context of living (asylum seeker center or neighborhood), cultural ideas of parenting, the motivation for fleeing, the social historical background of the group in the country of origin, the political climate in the host country, and perhaps most importantly the meaning that is attributed to these, seems obvious. Therefore, interactions between the different levels of the ecology are of critical importance in the life of asylum seekers and refugees, but require further examination. Noteworthy, Dallaire and Weinraub (2005) rated parenting behaviors annually over a 6-year period and found that positive parenting behaviors where consistent over these years, whereas negative aspects of parenting where not. Further research needs to determine whether the observed parenting behaviors in this dissertation and the impact on children and their attachment organization is stable over time. Or whether other factors or contexts exert an increasing influence on parents or children thereby exacerbating or diminishing the negative associations.

What is cultural, what is universal?

"Culture … is an acquired 'lens', through which individuals perceive and understand the world that they inhabit, and through which they learn how to live within it"

(Kleber, Figley, & Gersons, 1995, p. 4)

In this dissertation parents from different cultural backgrounds, with their own history and marked traumatic experiences, were compared on the manner in which they interacted with their child. Despite obvious differences at the individual level conclusions were drawn at the group level. Culture has been described as the prime context for determining associations between activity, such as parent-child interaction, and meaning (Bornstein, 1995). However, in this dissertation the mechanisms underlying the impact of posttraumatic stress on parent-child interaction were considered as cross-cultural and did not take the specific cultural backgrounds of participants into account.

Even though there is great variety in parenting between and within cultures it can be argued that fundamental elements of healthy parent-child interaction are universal. For example, North-American parents value autonomy in their children, and in their interaction foster physical and verbal independence in children. By contrast, Japanese mothers tend to see their children as an extension of themselves and work with their children to consolidate and strengthen a mutual dependence. American mothers encourage their infants' attention to properties, objects and events in the environment and stress functional exploratory play with their toddlers while Japanese mothers encourage their infants' participation in social interactions and stress symbolic representational play with their toddlers. Despite these differences, mothers in France, Japan, and the United States all respond to their infants' vocalizing distress predominantly by nurturing (Bornstein et al., 1992). Different interactions with different meanings all can reflect sensitivity. The amount of sensitivity within parent-child interaction can vary between cultures, but the underlying pattern of sensitivity as a healthy component to a parent-child interaction that is beneficial to the child is universal (Rohner, 2004; Van IJzendoorn & Sagi-Schwarz, 2008).

On the other hand, it is the question whether this sample of asylum seeker and refugee parents was marked by cultural differences or similarities. The assessed parents had entered the Netherlands 3 months to 20 years ago. On average, they had spent 7 years within the Netherlands. Most often, the time between leaving their home or their country of origin was even longer as fleeing can take up years. Upon arrival they entered a condition in which they could not live as they would at home, but also not adjust to a new home. One could argue that they all were in a similar situation: the so-called 'condición migrante' (Graafsma & Tieken, 1987), a combination of different post-migration issues connected to the lives of migrants such as experiences of loss of family relationships, social support and identity. This condition may be applicable to asylum seekers and refugees alike, but be even more complicated because of a lack of control and insecurity over the near future. Acculturation demands, such as cultural affiliation and obtaining instrumental skills, were significantly related to mental health symptoms (Knipscheer & Kleber, 2006, 2007). Asylum seekers are confronted with prolonged asylum procedures in which acculturation is seriously restricted as they are prohibited to work or to take language classes and often live at isolated locations. It is not surprising that the length of the asylum procedure has been shown to be an important risk factor for psychopathology (Laban et al., 2005). The result is a life in between cultures that may feel temporary, but can become permanent. Within this condition of insecurity and in-between, the

children of these parents are raised.

What is attachment under unsafe conditions?

"I love you", the mother said, and she picked him up, while the police barged in to take them to an aliens' detention center.

An asylum seeker within the Netherlands

Bowlby (1969) suggested that attachment relationships serve the survival of the species and thereby is the outcome of evolution. Indeed, attachment processes have also been observed in nonhuman primates and other species. For some people survival of the fittest is not something from the evolutionary past, though, but a reality of the present. The experiences asylum seekers and refugees have been through and are confronted with are endangering to their integrity and life and most parents continue to be in a state of fear. These traumatized parents are still in survival mode; for some part unnecessary, but for some part necessary. The fear of retaliation from friends or enemies, imprisonment, deportation, and re-traumatization can be real.

This is the setting in which their children grow up and have to fulfill their needs for safety and exploration. Perhaps in such an environment an attachment organization that stretches the dependency of the child on the parent and calls the attention to the relationship, or, in contrast, an attachment organization that stretches the independency of the assurance of the parent is more adept than a secure organization. Perhaps in such an environment a parental directive style to impress on children what they need to know and do or a withdrawing style to increase the independency of the child is more adept than a focus on the child's cues. In the asylum seeker and refugee sample, the proportion of ambivalent attached children was noteworthy and the proportion of disorganized attached children considerable. Research on abused children, children who grow up in an unsafe environment, has documented a large proportion of disorganized attachment strategies (Aspelmeier, Elliott, & Smith, 2007; Carlson, Cicchetti, Barnett, & Braunwald, 1989; Cyr, Euser, Bakermans-Kranenburg, & Van IJzendoorn, 2010). The difference between abused children and asylum seeker and refugee children is that abused children may experience danger from their caregivers, while asylum seeker and refugee children may experience some danger from their caregivers and society at large.

So, where on the long-term a secure attachment is the most desirable strategy, on the short-term an insecure attachment may contribute to adaptation to the

circumstances. The results from this dissertation lead to the conclusion that parental trauma can affect children as they are not able to find the security within the relationship that is a requisite for their continuing development. This might seem, however, an easy conclusion to draw from a safe position within a safe country. Asylum seekers live under insecure and sometimes unsafe conditions. Further research needs to explore whether a secure attachment under unsafe conditions is the preferred strategy and how asylum seeker refugee children with different strategies fare under these unsafe perceived or real conditions. If the unsafe conditions continue, does an insecure attachment organization contribute to overcoming the circumstances? If the conditions change, how does this impact the attachment organization? And what does a secure or an optimal attachment organization look like under unsafe conditions?

Does trauma brush off?

"As we grow up, most of us fall far short of experiencing the entire syndrome of childhood psychic "trauma". But as we are exposed either directly or indirectly to traumatic events and to the symptoms of others we experience a kind of toughening process. And we may pick up symptoms ourselves. We do not develop the whole syndrome, mind you. Just a few findings. And these findings may indicate changes in our developing psychologies."

(Terr, 1990, p. 318)

In her profound book 'Too scared to cry', Terr (1990) writes on how trauma affects children… and ultimately us all. In her final chapter, she argues the power of exposure to indirect trauma. Surprisingly, she is not referring to exposure to traumatic experiences or symptoms of parents but for example, to trauma in the media, or symptoms of peers. In her opinion, everyone has been either directly or indirectly exposed to traumatic experiences and to the symptoms of others, and because of this affected. She continues with describing children not directly exposed themselves but presenting significant symptoms of posttraumatic stress. Indeed these experiences may affect children for the short-term or long-term. Moreover, if the effect of media or peers can be this extended would the effect of more proximal factors, parental trauma experiences or symptoms not be even more profound? It is precisely this effect of parental trauma that is of much more importance to the development of the child.

Parents interact with their children on a daily basis. These interactions include communication, caring, accountability, availability, and conflict. And

even the absence of all of these interactions is an interaction with the child. A father in this study, for example, hardly spoke a word to his daughter who vocalized regularly to him. His eyes, though, watched his daughter closely, with a grim expression. When he spoke he whispered just the necessary or responded with sighs, looking down, grins, yawns, and disinterest. A mother neither spoke a word to her daughter who vocalized regularly to her. Her eyes stared at the ground with a flat expression. When she spoke she whispered just the necessary or responded with pulling her shoulders down, tears, and disinterest. Small differences within the interaction conveyed a different meaning. The weight of these interactions or absence of interactions was tangible within the room. As is inherent to parenting, the lives of these parents and children are tied together, interwoven; it almost strikes as a natural consequence that the wellbeing of parents affects their children.

Terr has contributed significantly to our thinking of the impact of trauma on children. Still, the conclusion of this dissertation leads to a slightly different perspective. Trauma is highly likely to brush off as symptoms of posttraumatic stress can impair the parent in his or her sensitivity and responsivity to the child. It is not the symptoms of posttraumatic stress that are transmitted though. Traumatization can cause limitations in parenthood and these limitations can disrupt the development of young children. There is considerable evidence that a parental psychological disorder generally increases the risk of disturbed child development and poor mental health in adulthood. The links which have been found between parental disorder and the presence of similar or the same forms of disturbance or disorder in the child have mostly been weak, to say the least. The main threat to child development does not lie in temporary situation-specific stress reactions, but in disturbances that are pervasive across various situations and persistent over time (Rutter & Quinton, 1984).

In this dissertation parents that experienced high levels of posttraumatic stress, in general, also experienced high levels of depression and anxiety. Even though the re-experiencing cluster is unique to PTSD, the diagnosis shares a range of symptoms with mood and anxiety disorders. Therefore the 'unique contribution' of PTSD is difficult to study. Perhaps the effect of posttraumatic stress disorder and other parental mental disorders is not on the level of these defined mental disorders but at the level of disturbances within the emotional interaction. Parent's symptoms brush off on the children because the chronic basic emotions of fear, sadness, and anger surround and pervade the child. Children need 'a warm, intimate and continuous relationship with his parent in

which both find satisfaction and enjoyment' or in a layman translation a loving relationship. It is not that parents with psychological disorders do not love their children; their symptoms get in the way of expressing it. When fear, sadness, and anger brushes off on children, instead of love and happiness, their development is affected.

Trauma and attachment: is it actually one perspective?

"Have patience with everything that remains unsolved in your heart. Try to love the questions themselves, like locked rooms and like books written in a foreign language. Do not now look for the answers. They cannot now be given to you because you could not live them. It is a question of experiencing everything. At present you need to live the question. Perhaps you will gradually, without even noticing it, find yourself experiencing the answer, some distant day."

(Rilke, 1929, p.23)

The issue of "intergenerational transmission of trauma" has long divided the scientific community. Especially in the 1980s and the 1990s there was a strong debate about the issue of the so-called second generation of Holocaust survivors: do the concentration camp experiences of parents lead to similar or related disturbances in their adult children born after World War II? It is not until the last 5 years that an increase can be noted in systematic studies of traumatized parents and their minor children. Even though evidence is not (yet) consistent, the available evidence seems to be convincing of an impact of trauma on parenting and, thereby, children. By combining a trauma and attachment perspective this dissertation was able to add new insights to the existing evidence.

The study reported in chapter nine convincingly has shown a relation between parents' symptoms of posttraumatic stress and an insecure child attachment. Although it has been argued previously that parenting, via adaptations to parents' traumatic experiences, may foster insecure attachment strategies in children (Bar-on et al., 1998) this mainly has been related to a verbal level of interaction; what is said or unsaid ("conspiracy of silence"). This study demonstrated that in asylum seeker and refugee families mechanisms that foster an insecure attachment are already at work when the child hardly has the capability to understand the complex process of meaning making. In addition, this study showed the important contribution of the attachment representations of parents. The findings suggest that a parent's sensitivity is affected not just by symptoms of PTSD but by the conjunction of risk factors such as traumatic experiences, symptoms of PTSD and insecure attachment representations.

The results of this dissertation lead to the conclusion that in order to understand parenting after extreme experiences, trauma and attachment cannot be considered separately. Parents affect children by providing them with either a secure or insecure base from which they need to withstand future adversities. Trauma affects parenting by reducing parent's availability. Parental trauma affects children by reducing their safe haven; two perspectives that interact in an intriguing way. When the interaction between trauma and attachment in research or clinical perspectives is not taken into account, it inevitably leads to inconsistent results and misunderstandings.

Even though it seems obvious to combine these perspectives, some barriers need to be resolved before a consistent integration in research endeavors is possible. First, there is the issue of theory. Attachment theory has one root and is based on the work of founding scholars such as Bowlby, Ainsworth and Main. There is discussion over certain issues and dissenting opinions, but the general framework of attachment theory is not under debate. The trauma field, however, is much more divided, marked by several theories, and even the concept of posttraumatic stress disorder is still under debate. Perhaps the unity of attachment theory limits the possibilities to diverge to unexplored pathways and changes in paradigm (Kuhn, 1962), whereas the diversity of trauma theory limits the possibilities to integrate and build more developed and tested theories (Kleber, 2007). The combination of unity and diversity in one field is needed to integrate multiple fields.

Secondly, is the issue of methodology. Perhaps the unity in attachment theory has led to a stable framework built from concepts around the main idea of attachment. Some of these concepts are strongly linked to a certain assessment. For example, unresolved trauma and loss is one of the classifications following the Adult Attachment Interview (AAI; Main & Goldwyn, 1998). While a large fraction of attachment theory has developed around these unresolved attachment representations, publications do not describe what this unresolvedness means beyond a classification. Although the conceptualization is coherent, it limits the possibilities to integrate with other fields or translate to daily reality. The trauma field however, lacks coherent conceptualizations and uses a large variety of assessments of all sorts of concepts to be explored. It creates diffusion and confusion and veils the limited knowledge of what trauma is or is not.

Thirdly, there is the issue of terminology. In the two fields, terms are used that sound similar, but are not (completely) the same. Where trauma within the attachment field refers to unresolved trauma and loss as measured on the AAI, it

refers in the trauma field to traumatic experiences and/or to posttraumatic stress disturbances most often as defined by the Diagnostic and Statistical Manual of Mental Disorders or International Classification of Diseases. Where dissociation in the attachment field refers to a parent's unintegrated or dissociated state, including concomitant fears and fantasies, likely to be exhibited in parent-child interaction as frightening and frightened or dissociative behavior (Hesse & Main, 1999), in the trauma field it most often refers to disruptions or breakdowns of consciousness, memory, identity or perception (American Psychiatric Association, 2013). The mixed use of concepts creates confusion between the fields and difficulties to integrate research findings from these two fields.

Finally, there is the issue of reasoning. In the limited studies that combine a trauma and attachment perspective an inclination to merge the fields, as actually studying the same concepts with different strings attached, can be detected. The reasoning seems to be: unresolved trauma or loss (as defined by attachment theory), and PTSD have somehow similar expressions and therefore unresolved trauma and PTSD are somehow the same. This is however a syllogistic fallacy (undistributed middle). To enhance our understanding of trauma and attachment it is important to understand what unresolved trauma or loss conceptually means, beyond a measurement on an interview, how it is distinct or similar to PTSD, when and how these concepts affect the child, and how a negative interaction can be negated. As Rilke wrote, perhaps we need to live the questions at present.

Although combining the trauma and attachment perspective needs work, it is a promising perspective because it offers new opportunities to understand the complex interplay between traumatized parents and their children. Perhaps the wizards were right to say that the ghosts in the nursery do not exist. However, let us at least listen to the child in order to find out what it is that scares him.

Implications for clinical practice

Several clinical implications result from this dissertation. First of all, therapists of traumatized asylum seekers and refugees have the responsibility to inquire about the client's parenting and their child. The assumption that the client as a parent, or the child of a client, is either doing well or poorly cannot be made. Considering the risks, though, questions need to be asked and issues need to be explored. These kinds of explorations with a parent can help therapists to signal children in need, even when this is not obvious. Therapists have an important task in putting an end to silent victims, such as children born of wartime rape,

and arranging the needed help. Therefore, therapists need to remain open-minded and curious about the context of their clients. An important tool to foster this open-mindedness is intervision and supervision, not only among therapists but also between institutions. Certain clients warrant a standard assessment of the parent-child relationship. Within the studies included in this dissertation two groups stood out. On the one hand, mothers with children born of wartime rape were identified as a high-risk group for severely disturbed mother-child interactions. Solely the experience of a rape-born child gives reason for concern. On the other hand, parents with frightened, frightening or dissociative behavior were identified as a high-risk group for disturbed parent-child relationships. Based on their symptoms there is ground to assess the parent-child relationship.

Asylum seeker and refugee families face unique challenges such as forced migration, asylum procedures and enduring insecurities in comparison to other at-risk families. Nevertheless, asylum seeker and refugee families can be viewed to share challenges with other at-risk families such as migrants, veterans and families in which a child is born extremely premature or with a life-threatening disease. So where, on the one hand, the results of this dissertation are difficult to generalize, on the other hand they do have implications for other groups. What stands out is that traumatic experiences and posttraumatic stress can affect parenting and child development. Our understanding of traumatized parents and their children reveals similarities to depressed or anxious mothers and their children. Therefore, in general, a clinician should be alert to parent-child interaction and child development when parents face extreme events or develop mental disturbances. In treatment of children of traumatized parents it is plausible that programs developed for other target groups will be effective to alleviate the issues (e.g., Video-feedback Intervention to promote Positive Parenting, Multi-family therapy, Children of Parents with a Mental Illness). Research should further explore the effectiveness of these programs for traumatized parents and their children. In treatment, specific attention though, needs to be given to regulation of arousal in response to trauma triggers but also in response to the unique triggers of parent–child interaction. For example, traumatized fathers spoke about agitation as part and parcel of a posttraumatic reaction to their experiences, but as especially difficult to handle when children were yelling and noisy, or expressed their own will which can be very typical of this young age. Identifying the unique triggers for a parent can help to develop solutions for the most challenging situations within the interaction with the child. Therefore, treatment preferably encompasses a combined treatment of parent and child in which attention is given to the restoration of safety and (re-)

establishment of secure attachment relationships, even under unsafe conditions. In the case of asylum seeker and refugee parents the biggest challenge for the parent may be to create safe conditions for the child despite unsafe conditions for the parent. Under these conditions, the biggest challenge for the therapist may be to create safety within treatment as it is on the one hand the foundation for a trauma-focused therapy, but on the other hand the foundation for an attachment-focused therapy.

Within this dissertation some severely traumatized parents were assessed with very disturbed behavior while interacting with their child. It was clear that these dyads needed treatment, but it was also clear that improvement would take more than a couple of months. While the parent is in need of a thorough trauma-focused treatment, the child is in need of quick resumption of the parental role. These interests can collide and instead of cooperation between youth and adult departments of mental health institutions this often has led to confrontation. The review of articles on traumatized parents included in this dissertation suggested the importance of the presence or availability of a non-affected parent, family and peer relations. While studies of at-risk children noted the crucial influence of significant relationships with caring adults and mentors who supported, encouraged and believed in the potential of these children (Walsh, 1996). During treatment more attention needs to be given to a solid establishment of compensating relationships. Parents need to be enabled not to just tolerate compensating relationships for their children, but to grant their children these attachment opportunities. It can give parent, child, and therapists valuable time. Time needed for the parent to recover and to work on the relationship without an excessive burden for the child. From a treatment perspective it would be of interest to further study the impact of different contexts or systems on the wellbeing of the child and the effect of change of weights in these systems. For example, when in the environment compensating relationships are established for the child, in what manner does parental trauma still affect the child? How much network needs to be established to abstract the effect of parental trauma? What is it exactly that needs to be established in a network? A happy teacher when the mother is depressed, an adventurous scout when the father is anxious, or just someone to whom a child can securely attach?

Within the Netherlands it is not uncommon to postpone treatment of PTSD and co-morbid disorders among asylum seekers until current stress has diminished or asylum seekers have received a status. The rationale for these policies is that treatment, especially trauma-focused treatment, is almost

impossible and the margins of improvement are dependent on the asylum procedure as long as there is no security. Even though there are arguments to sustain this rationale it only takes the adult perspective into account. From the perspective of the child, having no status may further reduce the badly needed security offered by the parent. Further exploration needs to reveal how meso-, exo-, and macro-systems interact with parenting and child wellbeing. Policies regarding access to treatment or form of treatment should take adult, child and parent-child perspectives into account.

Finally, traumatized parents and their children are not just at risk, they also have valuable things to offer to each other. Parents have amazing lessons of resilience to teach their children, and children have lessons of hope and new opportunities to teach to their parents. One beauty of parenthood is that with children life can be discovered all over again, from a simple flower, snow and ice cream, to hope, trust and enduring relationships. These interactions can be a source of healing.

Conclusion

In this dissertation refugee and asylum seeker parents with traumatic experiences were assessed with their young non traumatized children to investigate the effect of posttraumatic stress on parenting and child development. The results lead to the conclusion that symptoms of posttraumatic stress can affect parenting behavior and child development. More symptoms of posttraumatic stress are related to less sensitive, less structuring, more hostile, and more intrusive parenting behavior. On a trend level these symptoms are even related to extremely insensitive parenting behavior. Mothers and fathers are equally affected. Parents who have limited access to secure attachment representations (reflected in secure base scripts) show more insensitive parenting behavior. This risk increases when these parents report symptoms of posttraumatic stress as well. Despite these noteworthy relations between posttraumatic stress and parenting, mainly a direct relation between posttraumatic stress and child development was established.

The young, non traumatized children of these symptomatic parents are observed to be less responsive to and less involved with their parents. As an explanation, a reduced regulation of arousal and affect has been proposed. The attachment of the children is more often insecure or even disorganized. Parents report more anxious and depressive behaviors of these children. No differences

were found in mental and motor development. Some dyads face extra challenges, for example, when the child's origin is connected to the traumatic experience, when the parent exhibits frightened, frightening or dissociative parenting behavior or when the family is in an asylum procedure.

Everyone is on a journey in life: there are many pathways along which a person might develop, and a variety of destinations at which the person might arrive. As people navigate through life, traumatic experiences may become part of their pathway and either keep or deviate them from routes previously established. A person may show resilience or may develop PTSD or other (co-morbid) disorders. When this person becomes a parent, early experiences in the family may shape the development of the children and which of many possible routes these children will travel. If the child is to function appropriately in a caregiving environment, the child needs to organize himself or calibrate to that environment. This adaptation is not without consequences, though, as it can reduce the ability to thrive in life. However, this is a probabilistic and not a deterministic relation. Children of traumatized parents can also travel a different pathway; the pathways described in this dissertation only explained part of the variance in the outcome of the children. Therefore, researchers and clinicians alike face the challenge to help those families that are not doing well to find a different pathway and deviate from malfunctioning.

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders DSM-V*. Washington, DC: Author.

Aspelmeier, J. E., Elliott, A. N., & Smith, C. H. (2007). Childhood sexual abuse, attachment, and trauma symptoms in college females: The moderating role of attachment. *Child Abuse & Neglect*, *31*, 549-566.

Bar-On, D., Eland, J., Kleber, R. J., Krell, R., Moore, Y., Sagi, A., …, & Van IJzendoorn, M. H. (1998). Multigenerational perspectives on coping with the Holocaust experience: An attachment perspective for understanding the developmental seqelae of trauma across generations. *International Journal of Behavioral Development*, *22*, 315-338.

Bornstein, M. H. (1995). Form and function: Implications for studies of culture and human development. *Culture & Psychology*, *1*, 123-137.

Bornstein, M. H., Tal, J., Rahn, C., Galperin, C. Z., Pecheux, M-G., Lamour, M., …, & Tamis-LeMonda, C. S. (1992). Functional Analysis of the Contents of Maternal Speech to Infants of 5 and 13 months in Four Cultures: Argentina, France, Japan, and the United States. *Developmental Psychology*, *28*, 4, 593-603

Bowlby, J. (1969). *Attachment: Attachment and loss*, Vol. 1. London: Hogarth.

Bowlby, J. (1951). Maternal care and mental health. *Bulletin of the World Health Organization*, *3*, 355-534.

Bronfenbrenner, U. (2005). The social ecology of human development: A retrospective conclusion. In U. Bronfenbrenner (Ed.), *Making Human Beings Human: Bioecological Perspectives on Human Development* (pp. 27-40). Thousand Oaks: Sage Publications.

Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist*, *34*, 844-850.

Bronfenbrenner, U. (1999). Environments in developmental perspective: Theoretical and operational models. In S. L. Friedman & T. D. Wachs (Eds.), *Measuring Environment Across the Life Span: Emerging Methods and Concepts* (pp. 3-28). Washington, DC: American Psychological Association Press.

Carlson, V., Cicchetti, D., Barnett, D., & Braunwald, K. (1989). Disorganized/disoriented attachment relationships in maltreated infants. *Developmental Psychology*, *25*, 525-531.

Carswell, K., Blackburn, P., & Barker, C. (2011). The relationship between trauma, post-migration problems and the psychological wellbeing of refugees and asylum seekers. *International Journal of Social Psychiatry*, *57*, 107-119.

Cyr, C., Euser, E. M., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (2010). Attachment security and disorganization in maltreating and high-risk families: A series of meta-analyses. *Development and Psychopathology*, *22*, 87-108.

Dallaire, D. H. & Weinraub, M. (2005). The stability of parenting behaviors over the first 6 years of life. *Early Childhood Research Quarterly*, *20*, 201-219.

Fraiberg, S., Adelson, E., & Shapiro, V. (1975). Ghosts in the nursery: A psychoanalytic approach to the problems of impaired infant-mother relationships. *Journal of the American Academy of Child Psychiatry*, *14*, 387-421.

Freedman, D.G. (1968). Personality development in infancy: A biological approach. In S. L. Washburn & P. C. Jay (Eds.), *Perspectives on human evolution*. New York: Holt, Rinehart & Winston.

Graafsma, T., & Tieken, J. (1987). Leven in een 'condición migrante'. In P.A.Q.M. Lamers (Ed.), *Hulpverlening aan migranten: De confrontatie van culturen in de geestelijke gezondheidszorg* (pp. 26-34). Alphen aan den Rijn/Brussel: Samson Stafleu.

Hesse, E. & Main, M. (1999). Second-generation effects of unresolved trauma in nonmaltreating parents: dissociated, frightened, and threatening parental behavior. *Psychoanalytic Inquiry*, *19*, 481-540.

Kafka, F. (1919). *Letter to father*. Finidr: Vitalis.

Kleber, R. J. (1995). Epilogue: Towards a broader perspective of traumatic stress. In R. J. Kleber, C. R. Figley, & B. P. R. Gersons (Eds.), *Beyond trauma: Cultural and societal dimensions* (pp. 299-306). New York: Plenum.

Kleber, R. J. (2007). *Weg van het trauma*. Utrecht: Universiteit Utrecht, oratie.

Kleber, R. J., Figley, C. R. & Gersons, B. P. R. (1995). Introduction. In R. J. Kleber, C. R. Figley, & B. P. R. Gersons (Eds.), *Beyond trauma: Cultural and societal dimensions* (pp. 1-16). New York: Plenum.

Knipscheer, J. W., & Kleber, R. J. (2007). Acculturation and mental health among Ghanaians in the Netherlands. *International Journal of Social Psychiatry*, *53*, 369-383.

Knipscheer, J. W., & Kleber, R. J. (2006). The relative contribution of posttraumatic and acculturative stress to subjective mental health among Bosnian refugees. *Journal of Clinical Psychology*, *62*, 339-353.

Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago/London: The University of Chicago Press.

Laban, C. J., Gernaat, H. B., Komproe, I. H., Van der Tweel, I., & De Jong, J. T. (2005). Postmigration living problems and common psychiatric disorders in Iraqi asylum seekers in the Netherlands. *The Journal of Nervous and Mental Disease*, *193*, 825-832.

Lyons-Ruth, K., Bronfman, E., & Parsons, E. (1999). Atypical attachment in infancy and early childhood among children at developmental risk. IV. Maternal frightened, frightening, or atypical behavior and disorganized infant attachment patterns. *Monographs of the Society for Research in Child Development*, *64*, 67-96; discussion 213.

Main, M., & Goldwyn, R. (1998). *Adult attachment scoring and classification system.* Unpublished manuscript.

Rilke, R. M. (1929). *Brieven aan een jonge dichter*. Amsterdam: Balans.

Rohner, R. P. (2004). The parental "Acceptance-Rejection Syndrome": Universal correlates of perceived rejection. *American Psychologist*, *59*, 830-840.

Rutter, M., & Quinton, D. (1984). Parental psychiatric disorder: Effects on children. *Psychological Medicine*, *14*, 853-880.

Sameroff, A. (2009). *The transactional model.* Washington, DC: American Psychological Association.

Sameroff, A. J., & Chandler, M. J. (1975). Reproductive risk and the continuum of caretaking casualty. *Review of Child Development Research*, *4*, 187-244.

Sleijpen, M., Heide, J. J. ter, Boeije, H., Mooren, G. T. M & Kleber, R. J. (2013). The future of resilience research: Bouncing forward of young refugees. *European Journal of Psychotraumatology*, *4*, 20124.

Ter Heide, J. J., Mooren, T. M., Kleijn, W., De Jongh, A., & Kleber, R. J. (2011). EMDR versus stabilisation in traumatised asylum seekers and refugees: Results of a pilot study. *European Journal of Psychotraumatology*, *2*, 5881.

Terr, L. (1990). *Too scared to cry*. New York: Basic Books.

Van IJzendoorn, M. H., & Sagi-Schwartz, A. (2008). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (*2nd ed.*) (pp. 880-905). New York: Guilford Press.

Walsh, F. (2003). Family resilience: A framework for clinical practice. *Family Process*, *42*, 1-18.

Walsh, F. (1996). The concept of family resilience: Crisis and challenge. *Family Process*, *35*, 261-281.

Epilogue

A defining feature of my journey in this PhD project was becoming a mother myself. Suddenly the object of my research became tangible within the nursery of our home, and as I was growing into motherhood, I could see myself through the camera's eye. It was a time filled with delight, innocence, great expectations for the newborn and myself. It was also a time filled with insecurities, challenges, and a reaching out for the best I had to offer to this completely dependent child. It was a transition that brought a joy in my life, but also a change in my life that I could not have fathomed.

While juggling all these emotions and struggling with sleep deprivation, I felt on the edge of my abilities. Waking up in the middle of the night (again) because of a hungry baby (again), I felt for the mothers who had so much more to struggle with: trauma, depression, anxiety, survival. They tried to care, with flaws, but they tried. And that's worth recommending in itself. I could understand their flaws . In the midst of this, I felt my own flaws. As much as I tried to be the perfect mother, at times I stumbled. And where I used to judge parents as less sensitive as soon as they made a mistake I underwent how perfect sensitivity is an inhuman demand. Theory had taught me that a mother should be reading and responding to the child's signals all the time to create a safe environment for the child. My own child taught me that perfect mothers do not exist but that sensed love is essential to reciprocity and safety. Part and parcel of the mother-child relationship is repair.

So where on one hand my heart softened for these traumatized parents, on the other hand I became more judgmental. When holding a newborn, the dependency and vulnerability are omnipresent. There is nothing the child can do but to surrender to the caregiver. And even though I could understand the agitation or the despair of traumatized parents, I could not understand the crossing of boundaries. One look at this tiny baby and I forgot about myself to immerse myself instead in someone else's needs . And it should be like that. How intensely frightening it must be if you are this dependent and vulnerable and the caregiver violates your needs.

During this PhD project, I navigated through trauma and attachment theory and sometimes wondered where behind the concepts and terminology basic ideas of love, hurt and humanness remained. Theory and research results can be abstract, but they tell a story, and in this case they are a reflection of people and their lives – people who have experienced intense pain, and people who can experience intense love. My own child reminded me of the intensity of parenthood and the people behind the data. Most importantly, my own child convinced me of the hope that is born with every new generation.

Samenvatting

(Summary in Dutch)

Er was eens een spook in de kinderkamer. Om een oplossing voor dit probleem te zoeken kwamen tovenaars van over de hele wereld met hun wijze boeken gevuld met moeilijke woorden. Zij openbaarden aan iedereen die wilde luisteren dat het niet nodig was om bang te zijn, want het spook bestond eenvoudigweg niet. Alle volwassenen, en vooral de ouders, waren opgelucht omdat het spook uit de kinderkamer verdreven was. Echter, het kleine kind dat moest slapen in de kinderkamer was nog steeds bang ... maar niemand luisterde naar hem.

Fraiberg, Adelson en Shapiro (1975) introduceerden het concept van "spoken in de kinderkamer" om de bezoekers uit het verleden van een ouder te beschrijven. Deze indringers uit het verleden vertegenwoordigen traumatische jeugdervaringen, meestal ten gevolge van misstappen door hechtingsfiguren. Dit soort traumatisering kan schadelijk zijn voor de band tussen een ouder en zijn of haar kind. Hoewel dit concept werd geïntroduceerd in 1975 is het een punt van discussie gebleven of kinderen kunnen worden beïnvloed door de traumatisering van hun ouders.

Dit proefschrift probeert een bijdrage te leveren aan het begrip van het effect van ouderlijke traumatisering op hun kinderen door een unieke combinatie van enerzijds nauwkeurige observaties van ouder-kindinteracties en hechtingsrelaties bij asielzoeker- en vluchtelingouders en hun jonge kinderen (geboren in Nederland), en anderzijds rapportage door deze ouders. Centraal in deze poging om de complexe dynamiek te begrijpen stonden de volgende twee onderzoeksvragen:

- Hoe raakt de traumatisering van de asielzoeker- of vluchtelingouder zijn of haar niet-getraumatiseerde kind?
- Is hechting een sleutel in het begrijpen van de relationele patronen tussen de getraumatiseerde asielzoeker- of vluchtelingouder en zijn of haar niet-getraumatiseerde kind?

Om deze vragen te beantwoorden werden asielzoeker- of vluchtelingouders met traumatische ervaringen en verschillende niveaus van posttraumatische stress, met hun niet getraumatiseerd kind in de leeftijd van 18 tot 42 maanden onderzocht. De samenhang tussen niveaus van posttraumatische stress, de wijze van interactie met het kind en de ontwikkeling van het kind werd geanalyseerd. Tevens werden factoren als perceptie van de relatie, zorgverdeling en hechtingsrepresentaties bestudeerd. Hieronder worden de bevindingen uit dit onderzoek weergegeven, geïntegreerd rondom een drietal meer specifieke vragen:

1. Wat zijn de ontwikkelingsmoeilijkheden van jonge niet-getraumatiseerde kinderen van getraumatiseerde asielzoekers en vluchtelingen?

2. Op welke wijze hebben symptomen van posttraumatische stress invloed op de kwaliteit van de ouder-kind interactie?

3. Welke mechanismen verklaren de associatie tussen symptomen van posttraumatische stress van asielzoeker- en vluchtelingouders en het welzijn van hun kinderen?

Samenvatting

Wat zijn de ontwikkelingsmoeilijkheden van jonge niet-getraumatiseerde kinderen van getraumatiseerde asielzoekers en vluchtelingen?

Om traumatisering van ouders als mogelijke risicofactor voor het functioneren van het kind te bestuderen werden de relaties tussen de posttraumatische stress-symptomen van moeders en zowel het psychosociaal functioneren als de ontwikkeling van kinderen geanalyseerd bij 49 asielzoeker- en vluchtelingenmoeders en hun kinderen. In deze groepen rapporteerden moeders met meer ernstige symptomen van posttraumatische stress ernstiger internaliserend gedrag (angstig en depressief gedrag) bij hun kinderen, maar niet ernstiger externaliserend gedrag (aandachtsproblemen en agressief gedrag). De ernst van de posttraumatische stress-symptomen van de moeders was niet gerelateerd aan de mentale en psychomotorische ontwikkeling van hun kinderen. Uit de observaties bleek dat deze kinderen minder responsief of ontvankelijk waren naar, en minder betrokken waren op hun moeder (hoofdstuk 3).

Vervolgens werden de onderlinge relaties tussen posttraumatische stress van ouders en de hechting met hun kind bij 69 asielzoeker- en vluchtelingouders geanalyseerd. Symptomen van posttraumatische stress van zowel moeders als vaders bleken direct gerelateerd aan een onveilige of gedesorganiseerde hechting van hun kinderen. Ouderlijk gedrag onthecht van de realiteit, waarvan wordt verondersteld dat dit een weerspiegeling van dissociatie is, was ook gerelateerd aan een gedesorganiseerde hechtingsorganisatie van het kind (hoofdstuk 9). In het specifieke geval van kinderen geboren uit verkrachting, een groep waarin de gevolgen van de traumatisering kunnen worden vergroot als gevolg van de verbinding tussen het kind en de traumatische ervaring, werden hechtingsstoornissen, of meer specifiek gedesorganiseerde hechtingsrelaties,

geïdentificeerd als een risicofactor (hoofdstuk 6 en 7).

De combinatie van observationele maten en rapportage door ouders bevestigt resultaten van studies in andere populaties (hoofdstuk 2), en voegt objectiviteit toe aan deze resultaten. De ontwikkelingsmoeilijkheden van kinderen van getraumatiseerde ouders kunnen niet worden toegeschreven aan de, wellicht gekleurde, perceptie van de ouder of therapeut, want ze werden bevestigd door de systematische observaties van het gedrag van kinderen in reactie op hun ouders. Deze resultaten suggereren dat, hoewel veel ouders goed herstellen na extreme gebeurtenissen in het leven en veel kinderen veerkracht tonen ondanks dat zij bij getroffen ouders opgroeien, traumatisering beperkingen in het ouderschap kan veroorzaken, en dat deze beperkingen de ontwikkeling van het jonge kind kunnen verstoren.

Op welke wijze hebben symptomen van posttraumatische stress invloed op de kwaliteit van de ouder-kindinteractie?

Om deze beperkingen in het ouderschap verder te exploreren werd een relationeel perspectief genomen (hoofdstuk 2). De invloed van posttraumatische stress op de kwaliteit van de ouder-kind interactie werd bij 80 asielzoekers en vluchtelingen en hun kinderen beoordeeld. Ouders met veel posttraumatische stress-symptomen waren minder sensitief en structurerend, en meer vijandig tegenover hun kinderen (hoofdstuk 3, 4).

Naar wij weten werd de interactie van getraumatiseerde vaders met hun kinderen voor het eerst geobserveerd. Daarbij werden geen sekseverschillen gevonden: moeders en vaders lijken in hun ouderschap in gelijke mate te worden beïnvloed door posttraumatische stress-symptomen. In kwalitatieve interviews gaven veel vaders aan dat hun eigen problemen een negatief effect hadden op de relatie met hun kind. Slechts enkele vaders erkenden dat hun eigen geestelijke gezondheid een voorwaarde was voor een goede relatie met het kind.

Desalniettemin was de perceptie van bijna alle vaders dat de relatie met hun kind goed was en beschreven zij hun kind als zeer belangrijk voor hen (hoofdstuk 4).

De perceptie van de relatie van moeders met een kind geboren uit een verkrachting werd gekleurd doordat het kind gezien werd als een levende herinnering aan de traumatische ervaring. Deze perceptie kan leiden tot extreme ambivalentie en onthechting van de moeder, wat kan leiden tot misbruik en verwaarlozing (hoofdstuk 6 en 7). In een set van 69 asielzoeker-

en vluchtelingouders waren symptomen van posttraumatische stress op een trendniveau gerelateerd aan meer extreem insensitief opvoedingsgedrag. Vermijding en intrusies in het bijzonder zijn gerelateerd aan dit insensitieve opvoedingsgedrag (hoofdstuk 9). Ouder-kind interactie functioneerde niet als een mediator tussen traumasymptomen van moeders en psychosociaal functioneren van kinderen, maar was wel, op trendniveau, gerelateerd aan de hechting van het kind (hoofdstuk 3 en 9).

Vanuit een klinisch perspectief suggereren deze resultaten de noodzaak tot herstel van afstemming tussen ouder en kind. Voor zowel moeders als vaders is het van belang dat er bij beiden behoefte aan interventie is (hoofdstuk 4 en 5). Cliënten noemen regelmatig de ervaring van hoop als een belangrijke uitkomst van de gezinsgerichte behandeling. Deze ervaring bevordert intimiteit en groei, op zowel het individuele als relationele niveau (hoofdstuk 5). Vanuit een onderzoeksperspectief benadrukken deze resultaten het belang van een verdere verkenning van de gevolgen van traumatisering op familierelaties, ingebed in de trauma- en hechtingstheorie.

Welke mechanismen verklaren de associatie tussen symptomen van posttraumatische stress van asielzoeker- en vluchtelingouders en het welzijn van hun kinderen?

In dit proefschrift worden verschillende mechanismen voorgesteld die een deel van de relatie verklaren tussen symptomen van posttraumatische stress van de ouders en het welzijn van hun kinderen. Als eerste onderliggend mechanisme voor de associatie tussen ouderlijke traumatisering en de ontwikkeling van het kind is de invloed van de posttraumatische stress van ouders op de regulering van het affect en de arousal van het kind voorgesteld (hoofdstuk 3). Eerdere auteurs hebben het vermogen van een ouder om sensitief te reageren op de behoeften van het kind voorgesteld als een springplank voor het vermogen van het kind om zichzelf te reguleren. In onze studie vertoonden niet-getraumatiseerde kinderen van getraumatiseerde moeders negatieve aanpassingen in de regulatie van hun affect en arousal, suggestief voor een verband tussen posttraumatische stress van moeders en de regulering van het kind. Deze negatieve aanpassingen waren geassocieerd met de sensitiviteit en posttraumatische stress van de moeders. Op een trendniveau was posttraumatische stress van ouders geassocieerd met extreem insensitief ouderschap. Lyons-Ruth, Bronfman, en Parson (1990) suggereerden dat een gedesorganiseerde hechting ook het resultaat van een uiterst insensitieve ouder kan zijn die er niet in slaagt om het kind te kalmeren en te troosten en er daardoor niet in slaagt om het kind te reguleren. Extreem

insensitief ouderlijk gedrag wordt in hoofdstuk 9 op een trendniveau geassocieerd met een gedesorganiseerde hechting van kinderen. Verder onderzoek moet duidelijk maken of deze negatieve aanpassing van kinderen in reactie is op de onbeschikbaarheid van ouders.

Een tweede mechanisme dat in de literatuur is voorgesteld is beangstigend, bedreigend en dissociatief opvoedingsgedrag, onthecht van de realiteit (hoofdstuk 9). Dissociatieve verschijnselen zijn eerder voorgesteld om het verband tussen traumatisering van ouders, ouderlijk gedrag onthecht van de realiteit en vervolgens gedesorganiseerde hechting van de kinderen te verklaren. Onze resultaten suggereren dat het pad tussen posttraumatische stress-symptomen en gedesorganiseerde hechting anders verloopt dan voorheen is voorgesteld. In onze studie werd een sterke associatie tussen opvoedingsgedrag onthecht van de realiteit en een gedesorganiseerde hechting van het kind bevestigd. Tussen posttraumatische stress-symptomen en onthecht opvoedingsgedrag werd geen associatie vastgesteld. Niet zozeer onthecht, maar mogelijk extreem insensitief ouderschap lijkt posttraumatische stress van ouders te verbinden aan een gedesorganiseerde hechting van het kind. Symptomen van intrusie en vermijding waren van bijzonder belang. Een verklaring kan zijn dat ouders met posttraumatische stress-symptomen soms in beslag genomen worden door hun eigen ervaringen waardoor zij zich terug kunnen trekken van het kind en bijvoorbeeld verwaarlozend, ruw of agressief opvoedingsgedrag laten zien, terwijl ze op andere momenten het interne vermogen kunnen vinden om af te stemmen op de behoeften van hun kind. De gedragsoscillatie creëert een inherent onvoorspelbaar en daardoor onveilige omgeving voor het kind.

Een derde mechanisme om het verband tussen posttraumatische stress van de ouders en het welzijn van kinderen te verklaren is de gehechtheidsrepresentatie van de ouders (hoofdstuk 8). Traumatische ervaringen en posttraumatische stress kunnen gehechtheidsrepresentaties negatief beïnvloeden. In het algemeen geeft een gevoel van veiligheid een ouder ruimte om minder aandacht te hebben voor zijn of haar eigen behoeften en de aandacht te verschuiven naar de behoeften van het kind. In onze steekproef bleken zowel symptomen van posttraumatische stress als van minder veilige hechtingsrepresentaties geassocieerd met een verminderde sensitiviteit van de ouder voor het kind. Een interactie tussen gehechtheidsrepresentaties, posttraumatische stress-symptomen en ouderlijke sensitiviteit was aanwezig. Wanneer ouders last hebben van traumatische ervaringen en/of posttraumatische stress-symptomen versterkt dit het risico op insensitief ouderschap wanneer veilige hechtingsrepresentaties ontbreken.

Deze bevindingen suggereren dat de sensitiviteit van een ouder niet alleen wordt beïnvloed door posttraumatische stress-symptomen, maar ook door een samenspel van risicofactoren zoals traumatische gebeurtenissen, posttraumatische stress-symptomen en onveilige hechtingsrepresentaties.

In het specifieke geval van kinderen geboren uit verkrachting werd de rol van betekenisverlening onderzocht. Wanneer de betekenis die aan het kind wordt toegeschreven 'een voortdurende traumatische ervaring' of 'object van schaamte en vernedering' luidt, wordt het moeilijk om het kind als een onschuldig, geliefd kind of een getroffen individu te conceptualiseren. De perceptie van de gemeenschap, waarin het kind vaak als een kind van de vijand en dus als een gevaar wordt beschouwd, leidt tot discriminatie en stigmatisering. Het proces van betekenisverlening creëert de mogelijkheid voor de gevolgen van trauma's om voort te leven over generaties (hoofdstuk 6 en 7).

Tot slot is een beschermend mechanisme onder vaders geëxploreerd (hoofdstuk 4). Het is in de literatuur geopperd dat vaders, wanneer zij geconfronteerd worden met bijzondere uitdagingen voor het gezin, hun interactiestijl aanpassen en zich meer richten op de behoeften van hun kinderen. Door hun interactiestijl aan te passen of door meer energie te investeren in de interactie zouden getraumatiseerde vaders kunnen proberen te compenseren voor de problemen die hun kinderen ervaren. In de huidige studie werd geopperd dat doordat deze getraumatiseerde vaders niet zo veel tijd doorbrachten met hun kinderen als de moeders, ze bovendien meer mogelijkheden hebben om zich terug te trekken wanneer de symptomen van stress verergeren. Dit zou ze in staat stellen een stijl van interactie te bereiken die kwalitatief vergelijkbaar is met die van de moeders. Mogelijk als gevolg hiervan verschilden de emotionele beschikbaarheid van vaders en moeders niet.

Algemene discussie

De onderzoeksgroep bestond uit asielzoeker- en vluchtelingengezinnen waarvan de ouders gemiddeld genomen 12 traumatische ervaringen en klinische niveaus van posttraumatische stress rapporteerden. Onder deze omstandigheden kan het überhaupt verzorgen van een kind, ook met beperkte kwaliteit, als veerkrachtig worden aangemerkt. Tegelijkertijd neemt de traumatisering niet de ouderlijke verantwoordelijkheid weg. Het belang van het kind vereist het opnemen van ouderlijke verantwoordelijkheid ondanks de traumatisering. In de context van de vermogens van deze ouders betekent de invulling van de ouderlijke

verantwoordelijkheid mogelijk meer dat de ouder veiligheidsmechanismen inbouwt en het kind compenserende hechtingsrelaties gunt. De ouder is echter niet de enige vertegenwoordiger in het systeem. Een probleem is nooit volledig toe te schrijven aan de ouder of aan het kind, maar is altijd gevestigd in hun relatie (Sameroff, 2009). Daarnaast zijn er interacties met verschillende niveaus van het ecologisch systeem waaraan betekenis wordt verleend (Bronfenbrenner, 2005); zeker in het leven van asielzoeker- en vluchtelingengezinnen spelen bijvoorbeeld culturele ideeën, de context van wonen, verblijfsstatus en het politieke klimaat een rol.

In deze studie werden ouders vergeleken met verschillende culturele achtergronden, met hun eigen uitgesproken geschiedenis en traumatische ervaringen, op de wijze waarop zij omgingen met hun kind. De activiteiten en mate van sensitiviteit binnen de ouder-kind interactie kunnen variëren tussen culturen, maar het onderliggende patroon van sensitiviteit als een fundamenteel onderdeel voor een gezonde ouder-kind interactie die gunstig is voor de ontwikkeling van het kind is universeel (Rohner, 2004; Van IJzendoorn & Sagi-Schwarz, 2008). Waar enerzijds kinderen uit alle culturen profiteren van sensitief ouderschap, is het anderzijds de vraag of er niet meer culturele overeenkomsten dan verschillen waren binnen onze steekproef. De 'condición migrante' (Graafsma & Tieken, 1987), de combinatie van verschillende post-migratie factoren verbonden met het leven van migranten, zoals ervaringen van verlies van familierelaties, sociale ondersteuning en identiteit, kan op vergelijkbare wijze van toepassing zijn op asielzoekers en vluchtelingen, maar verder gecompliceerd worden door een gebrek aan controle en door onzekerheid over de nabije toekomst. Het is onder deze omstandigheden van onzekerheid en een leven tussen wal en schip dat de kinderen van deze ouders worden grootgebracht. In een dergelijke omgeving is mogelijk een hechtingsorganisatie die de afhankelijkheid van het kind benadrukt en de aandacht trekt naar de relatie met de ouder, of juist een hechtingsorganisatie die de onafhankelijkheid van de ouder benadrukt passender dan een veilige hechtingsorganisatie. Waar op de lange termijn een veilige hechting de meest wenselijke strategie is, kan op de korte termijn een onveilige hechting bijdragen aan overleven in een onveilige omgeving.

De belangrijkste conclusie van dit proefschrift is dat traumatisering beperkingen in het ouderschap kan veroorzaken en dat deze beperkingen de ontwikkeling van jonge kinderen kan verstoren. Misschien verloopt het effect van de posttraumatische stress-stoornis en van andere ouderlijke psychische stoornissen op de ontwikkeling van het kind niet direct via de daaruit

voortvloeiende klachten, maar via een verstoring van de emotionele interactie tussen ouder en kind. De klachten 'geven af' op kinderen, omdat de chronische fundamentele emoties van angst, verdriet en woede het kind omringen en doordringen. Kinderen hebben behoefte aan een 'liefdevolle relatie': een warme, intieme en continue relatie met de ouder waarin zij beiden voldoening en plezier vinden (Bowlby, 1951). Het is in het algemeen niet zo dat ouders met psychische stoornissen niet houden van hun kinderen, maar hun klachten zitten het uiten van hun liefde in de weg. Wanneer angst, verdriet en woede 'afgeven' op kinderen, in plaats van liefde en geluk, wordt de ontwikkeling van het kind beïnvloed.

De resultaten van dit proefschrift leiden ook tot de conclusie dat, om ouderschap na extreme ervaringen te begrijpen, de perspectieven van trauma en hechting gecombineerd moeten worden. Ouders beïnvloeden kinderen door hen te voorzien van een veilige of een onveilige uitvalsbasis waar vanuit zij toekomstige tegenslagen moeten weerstaan. Trauma beïnvloedt ouderschap door het verminderen van de beschikbaarheid van de ouder. Ouderlijk trauma beïnvloedt kinderen door het verminderen van de veiligheid in hun uitvalsbasis. In het combineren van perspectieven zijn er echter barrières op de gebieden van theorie, methodologie, terminologie en logica te slechten. Desondanks geeft de combinatie van trauma en hechting een veelbelovend perspectief, want het biedt nieuwe mogelijkheden om de complexe wisselwerking tussen getraumatiseerde ouders en hun kinderen te begrijpen. Misschien hadden de tovenaars gelijk door te zeggen dat de spoken in de kinderkamer niet bestaan. Maar het lijkt belangrijk om naar het kind te luisteren om erachter te komen wat het nu is dat hem bang maakt.

Conclusie

In dit proefschrift werden vluchtelingen en asielzoekers ouders met traumatische ervaringen met hun jonge niet-getraumatiseerde kinderen bestudeerd om het effect van posttraumatische stress op het ouderschap en ontwikkeling van kinderen te onderzoeken. Sterkere symptomen van posttraumatische stress blijken gerelateerd aan minder sensitief, minder structurerend, meer vijandig, en meer opdringerig opvoedingsgedrag. Op een trendniveau zijn deze symptomen zelfs gerelateerd aan extreem insensitief opvoedingsgedrag. Moeders en vaders worden in gelijke mate in hun ouderschap beïnvloed door symptomatische posttraumatische stress. Ouders die een beperkte beschikbaarheid hebben van veilige gehechtheidsrepresentatie tonen meer insensitief opvoedingsgedrag. Dit risico neemt toe wanneer deze ouders ook symptomen van posttraumatische

stress of trauma-ervaringen rapporteren.

Er blijkt een directe relatie tussen posttraumatische stress en de ontwikkeling van het kind te bestaan. Uit observaties blijkt dat jonge niet-getraumatiseerde kinderen van deze symptomatische ouders minder responsief naar en minder betrokken op hun ouders waren. Als verklaring werd een verminderde regulatie van opwinding en affect voorgesteld. De hechting van de kinderen is vaker onzeker of zelfs gedesorganiseerd. Ouders rapporteren meer angstig en depressief gedrag van deze kinderen. Er werden geen verschillen gevonden in de mentale en motorische ontwikkeling. Sommige dyades staan voor extra uitdagingen, bijvoorbeeld wanneer de oorsprong van het kind is verbonden met de traumatische ervaring, wanneer de ouder angstig, beangstigend of dissociatief gedrag vertoont of wanneer het gezin zich in een asielprocedure bevindt.

Iedereen is op een reis in het leven: er zijn vele paden waarlangs een persoon zich zou kunnen ontwikkelen, en een verscheidenheid van bestemmingen waar de persoon uit zou kunnen komen. Terwijl mensen navigeren door het leven, kunnen traumatische ervaringen een deel van hun traject uitmaken, waardoor zij of hun richting behouden of afwijken van eerder vastgestelde routes. Een persoon kan veerkracht tonen of kan een posttraumatische stress-stoornis of andere (comorbide) stoornissen ontwikkelen. Wanneer deze persoon een ouder wordt, kunnen vroege ervaringen in het gezin de ontwikkeling van deze kinderen vorm geven en welke van de vele mogelijke routes deze kinderen zullen reizen. Wil het kind adequaat functioneren in de opvoedingsomgeving, dan heeft het het nodig om zich te organiseren of te kalibreren rondom die omgeving. Deze aanpassing is niet zonder gevolgen, aangezien deze de mogelijkheden om te gedijen in het leven kan verminderen. Dit is echter een probabilistische en niet een deterministische relatie. Kinderen van getraumatiseerde ouders kunnen ook een andere weg bereizen, de in dit proefschrift beschreven trajecten verklaarden alleen een deel van de variantie in de uitkomst van de kinderen. Daarom staan zowel onderzoekers als clinici voor de uitdaging om die gezinnen die het niet goed doen te helpen een andere weg te vinden en af te wijken van verstoringen.

Referenties

Bowlby, J. (1951). Maternal care and mental health. *Bulletin of the World Health Organization*, *3*, 355-534.

Bronfenbrenner, U. (2005). The social ecology of human development: A retrospective conclusion. In U. Bronfenbrenner (Ed.), *Making Human Beings Human: Bioecological Perspectives on Human Development* (pp 27-40). Thousand Oaks: Sage Publications.

Fraiberg, S., Adelson, E., & Shapiro, V. (1975). Ghosts in the nursery: A psychoanalytic approach to the problems of impaired infant-mother relationships. *Journal of the American Academy of Child Psychiatry*, *14*(3), 387-421.

Graafsma, T., & Tieken, J. (1987). Leven in een 'condición migrante'. In P.A.Q.M. Lamers (Ed.), *Hulpverlening aan migranten: De confrontatie van culturen in de geestelijke gezondheidszorg* (pp. 26-34). Alphen aan den Rijn/Brussel: Samson Stafleu.

Lyons-Ruth, K., Bronfman, E., & Parsons, E. (1999). Atypical attachment in infancy and early childhood among children at developmental risk. IV. maternal frightened, frightening, or atypical behavior and disorganized infant attachment patterns. *Monographs of the Society for Research in Child Development*, *64*(3), 67-96; discussion 213.

Rohner, R. P. (2004). The parental "Acceptance-Rejection Syndrome": Universal correlates of perceived rejection. *American Psychologist*, *59*, 830-840

Sameroff, A. (2009). *The transactional model.* Washington, DC: American Psychological Association.

Van IJzendoorn, M. H., & Sagi-Schwartz, A. (2008). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (*2nd ed.*) (pp. 880-905). New York: Guilford Press.

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This journey has ended; it is time to change trains…

About the author

Curriculum Vitae

"Sapere aude" or "dare to know" is a motto that both intrigued and challenged Elisa van Ee (1976) to reach beyond what was known to her. She studied both Psychology and Special Education at Leiden University and graduated Cum Laude. As a Fulbright fellow and Humanity in Action fellow, she specialized in trauma and law at the International Trauma Studies Program at New York University and the International Tribunal for the former Yugoslavia in the Hague. She continued her specialization at Foundation Centrum '45, the Dutch national institute for specialist diagnostics and treatment of psychotrauma resulting from persecution, war and violence. There she was trained to become a licensed clinical psychologist and psychotherapist. As a clinical psychologist she has worked with various groups of traumatized people, but her main focus has been traumatized asylum seekers and refugee families. In her work she is devoted to the improvement of the well being of asylum seekers and refugee families and uses a holistic approach. Among other things, she participated in the development of policies on the treatment of children within Centrum '45 and the development of day treatment and in-patient treatment programs for asylum seekers and refugee families with young children. In her spare time she studied Law at Leiden University and majored in philosophy of law (Cum Laude). On a freelance basis she has worked as a psycho-social expert for the International Criminal Court.

Together with the research team, Elisa van Ee initiated her PhD project by writing a research proposal. She readily received funding from ZonMW to carry out her studies. Based on the results of her PhD project, guidelines will be presented to health care workers in the field. She regularly presents her work on children and families of asylum seekers and refugees at national and international conferences and meetings. In the future she hopes to expand her research endeavors with an in-depth study on children born of sexual violence.

Elisa van Ee is married to René van Ee and has two children, Tifara and Isandro.

List of publications

2013

Van Ee, E. (2013). Agressieve vaders? De kwaliteit van de ouder-kind interactie in asielzoeker- en vluchtelingengezinnen. *Proces*, *tijdschrift voor strafrechtpleging*, *4*(92), 254-265.

Van Ee, E., & Kleber, R. J. (2013). Growing up under a shadow, Key issues in research on and treatment of children born of rape. *Child Abuse Review*. doi: 10.1002/car.2270

Van Ee, E., & Mooren, T. M., & Kleber, R. J. (in press). Broken Mirrors: Shattered relationships in refugee families. In R. Pat-Horenczyk, D. Brom, C. Chemtob & J. Vogel (Eds). *Helping children cope with trauma: Individual*, *family and community perspectives*. New York/Oxford: Routledge.

Van Ee, E., Sleijpen, M., Kleber, R. J., & Jongmans, M. J. (2013). Father involvement in a refugee sample, Relations between posttraumatic stress and caregiving. *Family Process*. doi: 10.1111/famp.12043

2012

Van Ee, E. (2012). Klinische diagnostiek van kinderen. In: E. Vermetten, R. J. Kleber & O. van der Hart (red.) *Handboek Posttraumatische stressstoornis* (pp. 383-394). Utrecht: de Tijdstroom.

Van Ee, E., & Kleber, R. J. (2012). Child in the shadowlands. *The Lancet*, *380*(9842), 642-643. doi:10.1016/S0140-6736(12)61360-9

Van Ee, E., Kleber, R. J., & Mooren, T. M. (2012). War trauma lingers on… Associations between maternal PTSD, parent-child interaction and child development. *Infant Mental Health Journal*, *33*(5), 459-468. doi: 10.1002/imhj.21324

2011

Ter Heide, J. J., & Van Ee, E. (2011). Internationale summerschool over forced migration. Cogiscope, 3, p. 31-32.

Van Ee, E. (2011). Getraumatiseerde ouders en de relatie met hun jonge kinderen in historisch en cultureel perspectief. *Psychologie en Gezondheid*, *39*(3), 163-168.

Van Ee, E., Rijnders, R. J. P., & Rinne, M. A. W. (2011). Alleenstaande Minderjarige Vreemdelingen. In: N. Duits (red.) *Jeugdpsychiatrie en Recht* (pp. 81-86). Assen: Van Gorcum.

2008

Van Ee, E. (2008). Traumatized parents and their relationship with their young children. Cogiscope, *4*, p. 29-30.

Submitted manuscripts:

Van Ee, E., Kleber, R. J., & Jongmans, M. J. (submitted). Relational patterns of traumatized parents and their children, a review.

Van Ee, E., Jongmans, M. J., Van der Aa, N., & Kleber, R. J. (submitted). Parental attachment representations and sensitivity towards children of refugees: The moderating role of parental trauma.

Van Ee, E., Kleber, R. J., Van de Schoot, R., Mooren, T. M., Out, D. & Jongmans, M. J. (submitted). Parental PTSD, child attachment and extremely insensitive and disconnected parenting behavior.