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Parenting After a Natural Disaster: A Qualitative Study of Norwegian Families Surviving the 2004 Tsunami in Southeast Asia

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Abstract How do parents support their children after a high-impact disaster? To answer this question, face-to-face interviews were conducted with 51 Norwegian parents. These parents and children were all severely exposed to the trauma of the tsunami disaster. The analyses show how parents interpret their children's signs of distress, as well as their own strategies of support in the aftermath. The main strategies described by the parents were watchful waiting, careful monitoring of the children's reactions and a sensitive timing when providing support. Such monitoring, and interpretation of signs of distress, served as an aid for the parents in determining what needs their children had and what support they therefore needed to provide. A range of support strategies were employed, including re-establishing a sense of safety, resuming normal roles and routines, and talking to their children. Parents who were themselves severely impacted by the disaster reported a reduced ability to assess their children's reactions and thereby were unable to provide optimal care in the aftermath. Interestingly, the parents' support strategies mirror the early intervention recommendations put forward in the NICE guidelines and in the Psychological First Aid guidelines which is a well accepted and promising practice for helping children after disasters.

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have found children's immediate subjective responses to the event to be predictive of later reactions (Giannopoulou et al. 2006; Goenjian et al. 2001; Jensen et al. 2009). The study of pre-trauma conditions has been primarily focused on characteristics of the child such as age and gender, rendering inconclusive results (Fletcher 2003). Also, previous trauma has been found to affect outcome (Catani et al. 2010; Kronenberg et al. 2010). Although several researchers have emphasized the role that the post-disaster environment may play in the development of post-trauma symptoms, this subject has been far less studied (Jensen et al. 2009; Kronenberg et al. 2010; La Greca et al. 1996;

This article will examine one aspect of children's posttrauma recovery environment, namely parents' efforts to aid their children to cope with severe trauma. The child

Keywords Parenting · Children and adolescents · Natural disaster · Recovery from Trauma · Watchful waiting

Previous theories and research suggest that children's postdisaster stress reactions are determined by multiple and

complex processes. Most conceptual models include pre-

existing conditions, characteristics of the stressor, and the

child's post-disaster environment (La Greca et al. 1996; Pynoos et al. 1999; Vernberg et al. 1996). Out of these

factors the role of the stressor has been the most highly

examined. These studies suggest that the degree of actual threat in terms of children's proximity to the disaster,

physical injury, and witnessed experiences is proportional to their risk of developing Posttraumatic Stress Disorder

(PTSD) (Hardin et al. 1994). In addition, several studies

Introduction

Osofsky et al. 2007).



trauma field has had a main focus on identifying markers of risk. Markers of risk typically include preexisting conditions, demographic characteristics, etc. Although these aspects are significant, it is important to distinguish between passive risk markers and active operating processes that can contribute to the maintenance of post-trauma responses. Passive risk markers include little intrinsic information concerning what processes contribute to alleviating or aggravating the development of posttraumatic stress (Layne et al. 2006). The present study's focus on naturally occurring processes of parenting serves to bridge these bases of knowledge.

One aspect of the child's post-trauma environment that has been examined is the relationship between parents' post-trauma symptoms and those of the child. Research has consistently found a strong positive association between parental and child PTSD (Chemtob et al. 2010; Dyb et al. in press; Wickrama and Kaspar 2008). While parents' stress reactions may increase the risk of distress in their children, a supportive family environment, on the other hand, may contribute to a better adjustment in children. The buffering effect that parental support and positive family functioning have on children's reactions to trauma has also received empirical support (e.g. Gil-Rivas et al. 2004; Kronenberg et al. 2010; La Greca et al. 1996). Thus it is suggested in the literature that one of the mediating pathways by which disasters can harm children is via their effects on parents and the quality of parenting (Masten and Osofsky 2010).

There may be many ways in which parenting practices can be affected after a disaster. As mentioned, parents' own exposure and reactions to trauma may affect their parenting behaviors, and subsequently may impact the quality of care and support they provide (Gershoff et al. 2010). However, parents may vary in their abilities to provide children with sensitive and supportive parenting, whether they themselves have been directly exposed to trauma or not. Children's reactions after traumatic incidents may differ from what parents are accustomed to, and this change may lead to uncertainty regarding how their children can be helped. Cohen (2009) noted that children's unfamiliar reactions, as well as parents' fears of causing harm to the children by inappropriately reacting to their behavior, may influence the parents' capacities to provide the appropriate care.

Parents can assist their children in coping with their experiences after a disaster in numerous ways. They may facilitate their children's adjustment by providing them with suggestions for how to cope with what happened (Gil-Rivas et al. 2007; Prinstein et al. 1996), and by listening to their fears and concerns (Gil-Rivas et al. 2007). Recently, a set of evidence-informed recommendations have been put forward, suggesting how parents should care for their

children after surviving high-impact disasters (e.g. "Parent guidelines for helping children cope after earthquakes" and "Parent guidelines for helping children cope after wildfires"). These recommendations include a number of suggested parenting strategies, for example, helping children feel safe, helping them talk about the distressing experience, soothing children by serving as role models, avoid further exposure, and try to maintain a family life as normal as possible (National Child Traumatic Stress Network 2008). The amount and type of coping advice parents provide for their children may depend on the severity of their children's symptoms (Phillips et al. 2004), which suggests that parents may help their children by being sensitive to their specific needs following their exposure to trauma. However, one study conducted after the 2001 terrorist attack on New York City showed that the coping assistance mothers provided was more closely connected to the mothers' own traumatic experiences rather than to what their children had experienced in the attacks (Gershoff et al. 2010). Also, parents' views on what constitutes good parenting practices may change after exposure to a traumatic event. Another study of parents living close to ground zero in New York following the 2001 terrorist attacks demonstrated that parents had changed perspectives as to what they perceived as important in their roles as parents. They became more focused on bonding with their children, as well as loving, protecting, and providing for them (Mowder et al. 2006).

Despite an abundance of literature claiming that parental responsiveness is important in post-trauma coping in children few studies have actually focused on parenting practices in the aftermath of trauma. Given the hypothesized role of these relationships in post trauma functioning, and an increasing body of research on the impact of traumatic events on children, the lack of studies is surprising. Hence, the focus of the present study is to fill in gaps in the literature by addressing the nature of post-trauma parenting: How do parents understand the needs of their children and what do they do to help their children cope in the aftermath of trauma? The answers to these questions are important. First of all, insight into these processes may enhance our understanding of how to assist parents in helping to facilitate their children's recovery after exposure to disasters. Secondly, the answers can help us to further develop models for early intervention.

We cannot prevent disasters from happening, but understanding more of what we can do to prevent the development of severe post-trauma reactions is of great importance. Increasing our knowledge of children's post-trauma functioning through analyzing children's naturally existing coping resources is a perspective that has been long-awaited to be studied (Layne et al. 2006).



Method

Participants

This study reports on interview data collected during the second phase of a longitudinal study of Norwegian families exposed to the 2004 tsunami in Southeast Asia. All parents and children in the study had been in the disaster-affected areas and thus were all directly exposed to the disaster. However, they were all able to leave the disaster area within a couple of days, and therefore, the secondary adversities normally experienced by survivors of disasters such as loss of homes, schools and employment, were not part of these families' post-disaster environments.

The adults were initially identified through police lists of survivors who arrived at the Norwegian national airport following the disaster. These adults were asked to complete a survey 6 months after the disaster, and parents who were travelling with their children were then asked to participate in the subsequent interview study a few months later. Of the 210 eligible parents, 89 parents with children ages 6-18 years agreed to participate in the interview study. Since the objective was to investigate parenting after exposure to traumatic incidents, only high impact families were included. Parents reported on an eight-item scale of potentially traumatizing events that the children may have experienced during the tsunami. Four items were agreed upon as constituting particularly high degrees of exposure or distress, i.e. physical danger caused by the wave, being caught by the wave, bodily injuries, or being separated from caregiver during the disaster. Parents who reported that their children had experienced one or more of these tsunami-related events were included in the sample. This resulted in a final sample consisting of 51 parents (40 mothers and 11 fathers), ages 33–53 years (M = 43.1, SD = 5.2). One parent from each family was interviewed. Sixty-nine percent (as compared to 25.9% in the general population) of the parents had earned degrees from a college or university (Statistics Norway, June 30, 2009). Eighty-one percent of the parent participants were married or co-habitating. The parents travelled with a total of 80 children ages 6–18 years (M = 12.2, SD = 3.5), for whom they provided daily care in the aftermath of the disaster. The children were equally represented by gender (40 girls, 40 boys), and the ages were as follows: 6–9 years (26.5%, n = 21), 10–12 years (18.75%, n = 15), 13–15 years (35%, n = 28), and 16–18 years (20%, n = 16). Despite the fact that these children were highly exposed to the disaster only two children had scores consistent with a diagnosis of PTSD (according to the criteria listed in the DSM-IV) at 10 months, although there was a wide range in sub-clinical symptoms reported by the children. This most likely reflects that the children's post-trauma recovery environment was favorable (see Jensen et al. 2009, for a discussion of these results).

Procedure

The study was approved by the National Committee for Research Ethics in the Social Sciences and in the Humanities in Norway. The parents were asked to sign a consent form prior to participation, and informed that they could withdraw from the study at any time. Face-to-face interviews with the parents were conducted approximately 10 months after the tsunami, in the participants' homes, by experienced psychologists and psychiatrists, who had received training in the use of the interview protocol. The training entailed a particular focus on techniques for facilitating the telling of trauma narratives without leading or interfering in the story. In addition critical aspects related to interviewing potentially traumatized individuals were emphasized during the training. Audio-taped interviews were transcribed verbatim, including minimal phrases, pauses and emotional expressions.

Interviews

The interviews were semi-structured. To capture the specific experiences of the families, the parents were asked to provide a trauma narrative describing their experiences during the tsunami. All participants were presented with the following introduction: "I know that you and your family were in Thailand at Christmas. While you were there something happened. Please tell me about that." Emphasis was put on having the participants narrate as freely as possible. However, a number of prompts were also provided in order to help the participants elaborate on events that seemed significant in the narrative. Subsequently, the following open-ended questions were asked: (1) "How would you describe your child's (children's) reactions after the disaster?", (2) "What did you think your child(ren) needed during the time following the disaster?", and (3) "How did you adapt to your child's (children's) needs?".

Analyses

The analysis was inspired by the Consensual Qualitative Research framework (CQR: Hill et al. 1997). This method emphasizes cooperation among researchers in order to strengthen the credibility of the analyses, ensure multiple perspectives, and reduce subjective bias. First all interviews were read and reread by the researchers to establish domains, which are topics used to cluster or group the data. Two domains were established: the parental process of



interpretation and parents' support strategies. The parental process of interpretation refers to how the parents go about identifying and interpreting signs of distress in their children. Parenting support strategies refers to what the parents do to aid their child in the recovery process. The interviews were then reread and blocks of data were assigned to the domains. In the next step of the analysis core ideas were established within each domain and each individual case. Through this process we sought to capture the main essence of what each parent had expressed within the theme of each domain. The core ideas reflected the parent's perspective and meaning with minimal interpretation. In the third and last step in the analysis we created categories across cases. The categories were based on the core ideas through cross analysis, where the core ideas that could be grouped together were transformed into broader categories. This step brought the analysis to a higher abstraction level, with a search for similarities and differences across cases. These are the presented results. If any coding diverged throughout this process, the codes were discussed with reference to the text excerpts until a consensus could be reached. Finally, the first author read all interviews again to make sure the original information was actually represented in the final categories created.

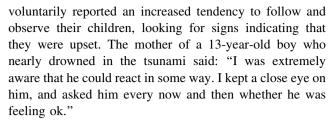
Results

The parents in this study provided long and rich descriptions in response to the question about how they perceived their children's needs and how they proceeded to provide support. Two main themes emerged from the analyses which described their efforts to observe and interpret possible signs of discomfort in their children. These were (a) a heightened awareness towards their children's reactions, and, (b) their efforts to interpret children's behavioral changes. The second part of the analyses, where we examined parental strategies to provide support, revealed two main categories: preventing symptoms and reducing symptoms, which again were comprised of three subcategories, namely reestablishing safety, resuming normal routines, and coping assistance. The findings are presented in further detail below and illustrated with quotes from the interviews.

Parental Process of Interpretation

Heightened Awareness: Looking for Signs

A general tendency in this sample was, with very few exceptions, that parents told about a heightened awareness that their children could display negative reactions due to their experiences. That is, the vast majority of the parents



In trying to manage the balance between not inducing distressing emotions on the one hand, and not doing enough to support their children on the other, these parents monitored their children closely and waited to see what would happen. One father said about his 11-year-old son:

I didn't want to nag him the first few weeks.... I just tried to observe him, make sure he wasn't just sitting there being depressed ... and I made sure he was still going out with his friends and that kind of thing. I guess I was just observing him for a while, maybe for a month or so after returning home.

Yet another father focused on following his 15-year-old daughter's own pace of adjustment: "We let her handle it in her own way ... so we kept an eye on her just to make sure she was coping alright." In this way the parents observed their children and monitored the progression of reactions or symptoms. Their hesitation to intervene should not be confused with a reluctance to provide support or the idea that certain reactions would cease more easily if they are not brought up or mentioned; rather, it seems to represent the idea that the children's emotional reactions to a stressful event will eventually cease if care is given in the usual way.

Interpreting Signs of Discomfort

When parents observed and paid attention to some specific reactions from their child, they then had to interpret the meaning of these reactions and try to understand the underlying cause. Through this process of interpretation, they made assessments both according to the existing cultural norms and expectations of child behavior after disasters, and according to their own knowledge about their child's personal characteristics and developmental progress. For instance one mother focused on her children's different reactions, and understood this discrepancy as being a function of age:

So, I have actually realized that there are some important differences in an eight-year-old and a tenyear-old when it comes to simply realizing the consequences of what happened. John seems to have grasped the gravity of such an event. Roger doesn't seem to have grasped that at all.

In these interpretations the child's age is referred to as an explanation for their differing behavior, Another common



attribution was based on the children's personal characteristics as explained by this mother:

I think our 16-year-old has more vivid fantasy than his older brother, and I think he has been dreaming more as well. He tends to create a little drama because he is quite a dramatic person. The other one doesn't make much fuss about it.

Thus, this boy's dramatic reactions were considered normal, and did not warrant concern. Attributing his reactions to his dramatic nature seemed to function as an aid for the parents understanding of their child's behavior. These ways of interpreting behavioral signs helped the parents to inquire into what caused them, and helped them understand the extent to which a particular behavior ought to cause concern and subsequently require more intervention on their part.

Within this frame of cultural and personal attributions two categories of behavioral signs emerged and were labeled: analogue signs and contingent signs. Analogue signs were comprised of reactions or behavioral changes that were attributed to the disaster because of their thematic resemblance to the tsunami-related exposure. Such reactions were activated by reminders of trauma, or they bore a clear resemblance to what the child had experienced during the disaster or in its immediate aftermath. Typical reactions that parents had observed in their children were being afraid of water or having nightmares where the content was closely related to experiences of death or fear of losing parents or siblings. One father said: "She dreams about death. And she has these compulsive thoughts about funerals. Her thoughts circle around death and funerals." His daughter, who was eight at the time of the tsunami, was evacuated during the disaster and was accidentally taken into a church where the bodies of deceased children were being kept.

Contingent signs referred to reactions that were more general, and the interpretation of such behavioral signs relied more on situational cues. The contingent signs included diverse behaviors, mood states or symptoms indicating that things were awry, but where the connection to the traumatic incident is more unclear. When the parents had attributed these signs to the tsunami it was because they occurred shortly afterward. The most frequently mentioned contingent signs were sleep difficulties, moodiness, irritability, separation anxiety, and social withdrawal. Despite the nonspecific nature of these reactions, parents generally tended to relate these to the disaster, mostly because of their temporal closeness/proximity to the tsunami. Both the analogue and contingent signs were thus interpreted as being post-trauma reactions and were viewed as normal and understandable.

Taken together the findings suggest that a vast majority of the parents could give nuanced and detailed descriptions of their interpretational efforts. Attributing the child's reactions to understandable post-trauma reactions and therefore as something to be expected, reduced the alarming impact of the observed signs. Because these reactions made sense, they thereby had the potential to reduce parents' worry and concern. The findings also suggest that the parents adjusted their expectations and practices according to several factors, and thus exhibited flexible expectations of their children's behaviors.

Parental Support Strategies

The parents mentioned a range of actions taken with the intention to support their children's post-trauma coping. In general, these made up three main categories. The first two, re-establishing safety and resuming normal routines, represent parental efforts to adjust and prevent distress and the development of symptoms in their children, while the third, coping assistance, describes how the parents in different ways made active efforts to help children cope with symptoms. The parents often reported more than one supportive strategy, and some of them described using all the different types of support. Below follows a description of the support strategies.

Re-Establishing a Sense of Safety

Twenty-nine of the parents said that they put an extra effort into making their children feel safe and secure after returning home. This involved spending more time with their children, not leaving them home alone, and generally creating a family atmosphere in which their children could feel safe. A frequently mentioned change in routines was a reduction of their own workload and working hours, or a shift in their work schedule in order to be able to stay home with their children. Many parents also spent less time engaging in their own leisure activities for a certain period in order to be able to spend more time at home. They put a considerable amount of focus on being available if their children needed someone to talk to:

We spent a lot of time together...and made sure that one adult was always home in the morning. And that there was at least one of us at home in the afternoon ... that kind of things. So, we had, like, a careful transition, in order to get back to normal life.

The mother of two teenage girls said: "We all slept in the same bed for at least a week after returning home. And then, after a few days, we rearranged this and let the girls share a bedroom. I actually think this was very important at that point."

Parents also put considerable effort into protecting their children from stimuli that could induce distress. Many



parents tried to hide their negative emotions in the presence of their children. They also tried to protect their children from people continually asking about the disaster, as they thought this type of exposure could serve as a trauma reminder. Even though parents emphasized the importance of protecting their children, some of them retrospectively expressed concern that they might have been overprotective.

Resume Normal Roles and Routines

Thirty-five of the parents provided statements that in various ways reflected efforts to follow daily routines (having dinner as usual, doing homework, etc.) and getting back to normal family life as soon as possible. In particular, parents focused on re-gaining normal family functioning and helping their children continue with their normal activities. One family provided increased support for a period of time, in order to let their children, aged nine and eleven, focus on their daily routines and activities:

We put a high priority on helping the kids with their homework. They needed a little extra at home.... It was nice being able to provide a little extra help, and in that way enable them to go on with their other routines and activities as usual.

Hardly any of the parents in this sample expressed a concern that the special adjustments made in the aftermath of the tsunami would imply a permanent change in routines. They seemed to accept that certain routines could not be followed as strictly as they would be under normal circumstances.

Coping Assistance

Thirty-nine of the parents also tried to help their children cope with the trauma by engaging in supportive actions toward them. Such action was often initiated when the parents noticed specific psychological reactions in their children. There was a wide variety in the strategies parents used to facilitate their children's recovery. For instance, some children developed a fear of water after the tsunami, and many of the parents said they had taken their children to the swimming pool in order to help them overcome this fear. Other children struggled with nightmares and had difficulties falling asleep at night. In these cases, parents adopted different routines in an attempt to enhance their children's sleep.

The importance of dialogues and supportive talk was mentioned by more than half of the parents in this sample, in particular talking to their children about what had happened. The parents mentioned that helping their children talk about their experiences and feelings was one of most important strategies they employed to help their children cope. In most of the cases, parents themselves found opportunities to facilitate conversations about the event, either by initiating such dialogues or by encouraging the child to ask or tell when he or she felt like discussing it. One mother emphasized the importance of retelling the trauma narrative, and gave her seven-year-old daughter a task that was intended to help.

After returning home I gave her the task of retelling her story three times every day, and one of the times she was supposed to tell the story to a new person.... We had a lot of people coming by to see us.... And after 12 days she said, "Mommy, I'm done telling the story now".

Some parents also adopted a psycho-educative approach to talking, in this way teaching their children about normal psychological reactions after a traumatic experience and how to cope with distressing thoughts. One mother said:

So I have talked to them and told them that, that if they feel bad or scared or whatever, it may not always be easy to know why they feel that way, but it could...I mean, it could of course have to do with what they experienced down there. And then I have explained them a little about "flash-backs" and that kinds of things...and that it is normal to have these reactions.

A few parents also emphasized the positive aspects of the situation with their children. Typical themes were talking about positive memories of the vacation before the disaster occurred, and suggesting that they had been lucky to survive the disaster and been given a new chance in life. Such reframing might serve to foster positive thinking in a family setting. Furthermore, parents tried to explain to their children that the world is still mostly safe despite the fact that disasters do happen. Hence, supportive talk seemed to serve the function of communicating about and addressing confusion, fears and anxieties, helping the children process the traumatic event, and correct misconceptions.

However, a small subsample (6) expressed concerns about their ability to provide adequate care. Their capacity to assess their child's reactions seemed to be closely connected with their own well-being. The few parents who stressed this issue had themselves been severely affected by the disaster, through loss, serious physical injury, or severe posttraumatic reactions after returning home. Thus, the impact of secondary stressors may have been of particular importance for these families. In spite of this the parents could explain how they tried to compensate for their own shortcomings by involving their social network in the child's post-trauma environment. For instance, one of the fathers who expressed a concern that he had not



sufficiently tended to his ten- year-old daughter's problems, had been dealing with a long process of grief after the loss of close family members. In the interview, he emphasized that he had taken compensatory precautions by bringing other key persons (e.g., relatives) into the household.

So, I have used others as support ... so that Siri could also be able to use others, and not just me. Just to ensure she got what she needed. Because I have not been able to give her 100% of my attention. But I made sure that others could give her what I couldn't. Made sure there was always someone there for her.

This suggests that their increased psychological vulnerability made parts of their parenting more difficult than they would have been the case in a normal situation.

Discussion

Although the importance of supportive parenting is acknowledged in the field no studies have actually asked parents what they do in order to support their children. This paper has addressed this important gap in the literature by focusing on the naturally occurring parenting practices as they are perceived by the parents themselves. We thereby shift the focus of attention from the passive markers of risk that have been typically studied in the literature on children and disasters to a focus on the process of recovery and how parents try to assist in providing an optimal post-trauma recovery environment. There are two results in particular we wish to draw attention to. The first is related to the parental process of interpretation and the second is related to parents' actual coping assistance.

The findings highlight the ways in which the parents' sensitivity to their children's levels of post-traumatic stress enables them to adjust their parenting strategies to encompass their child's needs and thus contribute to a favorable post-trauma recovery environment. The parents' support strategies are closely connected to interpretations of child behavior and situational characteristics after a traumatic event. When considering how parents perceived and interpreted the post-trauma behavior of their children, it is essential to take into account what kind of trauma they were exposed to. Totally unprepared, these families found themselves in a life threatening situation in a foreign country. This experience was, however dangerous and painful, shared among the surviving members in the family. The fact that this was an experience shared by family members seems to have been an important prerequisite allowing the parents to create a nuanced and well grounded understanding of their children's needs. Having access to and knowledge about the children's actual experiences may have facilitated the parents' capability to make probable associations between observations and attribution, and thereby contribute to their understanding of their children's needs. Other studies have found that when parents are unaware of the trauma their children were exposed to, the process of interpretation becomes much more difficult. Parents then make use of a wide repertoire of possible interpretations, where more culturally accepted interpretations are preferred (Jensen 2005). The consequence in such instances is that the parents' efforts to help their child to cope with the trauma may fail.

The second finding we wish to underline is related to the parents' attempts to help their children to cope. The parents emphasized re-establishing a sense of safety and emotional support, and sought a return to normality as soon as possible, including resuming their usual roles and routines. Reluctant to interfere with their children's own ways of coping, the parents adjusted their support to let the children use their own strategies as much as possible. This parental strategy may be referred to as "scaffolding", or, raising a metaphorical scaffold around the children in order to support their development (Wood et al. 1976). Inspired by Vygotsky's descriptions of the "zone of proximal development," scaffolding has been described as an interactional process by which parents adjust or modify the amount and type of support they offer to the child that is best suited to his or her level of development.

These parents' ways of providing care after the tsunami mirrors parenting practices that in previous studies have been associated with better outcomes in children (e.g. Prinstein et al. 1996; Punamäki et al. 1997) as well as findings on how parents' focus on parenting has changed after their children's trauma exposure (Mowder et al. 2006). These studies have documented that warm, supportive and loving parenting is associated with better outcomes after disasters. Moreover the way parents observed and monitored their children's actions and reactions, along with their focus on being available and supportive could be referred to as "watchful waiting". This concept refers to a way of monitoring the progression of potential reactions over a period, in order to determine whether the child needs extra care or treatment. This way of "keeping an eye" on their child while at the same time providing a feeling of safety are quite intuitive strategies that they had not necessarily learned.

Interestingly, this way of caring, closely resembles the care strategies outlined in the recently developed guidelines for parents after terror and disasters (National Child Traumatic Stress Network (NCTSN) and National Center for PTSD (NCPTSD)). In this protocol the focus is on promoting a sense of safety; calming procedures; promoting a sense of self efficacy and connectedness; and lastly promoting hope. This striking similarity between the



recommended care, and what parents described doing in order to best help their children to cope following the tsunami, could be interpreted in at least two ways. First, given the character of this particular event, as outlined above, it may have left the parents in the present sample particularly fit and suited to care for their children in the best possible way. That is, the shared experience and their safe surrounding upon returning home may have expanded their ability to provide the warm and sensitive support that has been associated with positive child adjustment in several studies (e.g. Valentino et al. 2010). It is worth noticing that these children reported fewer symptoms of PTSD compared to children in other disaster studies (Jensen et al. 2009). However, whether low levels of symptoms in the children eased the parenting, or whether the support from the parents reduced the level of symptoms in these children could not be determined within the frames of this paper. Second, it might be that these findings simply reflect how ordinary parenting strategies may apply to more extreme situations as well. The basic argument that we would like to pursue is that what parents do to support their children, will be based on their observations and subsequent interpretations of the child's conduct when ordinary and exceptional conditions are compared. Parents will accumulate specific knowledge about their children from just sharing the events of everyday life with them. The finely tuned interpretation of the child's state of mind makes a difference for what strategies to apply in each case (Haavind 1987).

Some limitations need mentioning. First, the analyses were exclusively based on interviews with parents, and the children's perspectives are not represented. Interviews with the children may have added important perspectives on the quality of care, particularly the extent to which they perceived that the care provided and attention given was appropriate and sufficient. Also, examining how these parenting practices relate to children's post-trauma adjustment and well-being could have added useful information, but was beyond the scope of this article. Yet, as previously noted, these children had, despite their trauma exposure, low levels of posttraumatic stress symptoms. Moreover, we only have information from one parent in each family, most of whom were mothers. Interviewing both parents may have provided us with a richer understanding of how discrepancies between parenting practices within families, as well as spousal support might influence post-trauma caretaking. It also bears mentioning that, on average, the families in this sample were privileged with regard to socioeconomic status and education (e.g. Catani et al. 2010). This may also have assisted the families in reestablishing a safe and secure everyday life more than what might have been the case in other samples. The families were also removed from the location of the disaster, as opposed to families examined in comparable studies (e.g. Catani et al. 2010; Kronenberg et al. 2010), a fact that could compromise the generalizability of some of the findings to populations living in areas severely affected by disaster. On the other hand this makes the findings unique for studying the role parents may play in children's post-trauma recovery since there were few secondary stressors that could play a role in maintaining posttrauma symptoms.

The aim of this study was to understand more of the pathways for children's trauma recovery and how parents can contribute to the recovery. Models of post traumatic stress emphasize pre-, peri- and post-trauma conditions as important contributors to our understanding of the development and maintenance of post-traumatic stress reactions. Although these processes are highly complex and intertwined, this study contributes to the field by highlighting one certain aspect of children's post-trauma environment. By studying how parents naturally adjust their parenting skills to encompass new challenges that emerge after serious traumas we may be able to understand why many children actually do cope well despite experiencing high impact traumatic incidents. In the literature much emphasis has been put on understanding passive markers of risk in the development of post-trauma reactions (Layne et al. 2006). This study contributes to the field by studying ongoing processes of parenting as they naturally occur after a serious disaster. The results highlight the importance parents can serve in creating a post-trauma environment aimed at alleviating post-trauma reactions in their children. Inferences must however be made with caution. This study's design does not allow us to conclude that the parents' post-trauma parenting practices actually contributed to less post-trauma stress in their children even though such a connection may seem warranted. In any case, the parents themselves make this connection and their strategies had this specific aim. The strength in this study rests first of all in its design. The in-depth and open interviews allowed the parents to elaborate and reflect on their efforts to help their children to cope. The large number of interviews allowed us to discover patterns of post-trauma parenting. In the analysis we were struck not so much by the differences in parenting practices, but by the similarities.

The results lend support to the already established guidelines for early intervention and, at the same time, pave the way for a more careful and individualized monitoring of the clinical work that is conducted with children after trauma. First, the parents' awareness and ability to make use of their usual parenting practices represent valuable resources for assessing and interpreting distress in a child. Early intervention may initially focus on supporting some parents' existing developmental supportive strategies when handling mild and expected symptoms in their children. Second, being able to understand and



support one's children seems to be connected to the extent to which the parent has been impaired by the trauma. Hence, severely traumatized parents may need extra support to give optimal care to their children. This could include psychological help for their own distress, or temporary support outside of the family in order to optimize their child's post trauma recovery environment.

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References

- Catani, C., Gewirtz, A. H., Wieling, E., Schauer, E., Elbert, T., & Neuner, F. (2010). Tsunami, war, and cumulative risk in the lives of Sri Lankan schoolchildren. *Child Development*, 81, 1176–1191.
- Chemtob, C. M., Nomura, Y., Rajendran, K., Yehuda, R., Schwarz, D., & Abramovitz, R. (2010). Impact of maternal posttraumatic stress disorder and depression following exposure to the September 11 attacks on preschool children's behaviour. *Child Development*, 81, 1129–1141.
- Cohen, E. (2009). Parenting in the throes of a traumatic event: Risks and protection. In D. Broom, R. Pat-Horenczyk, & J. D. Ford (Eds.), Treating traumatized children. Risk resilience and recovery. London, New York: Routledge.
- Dyb, G., Jensen, T. K., & Nygaard, E. (in press). Posttraumatic stress reactions in children and adolescents after the Tsunami in Southeast Asia. Clinical Child Psychology and Psychiatry.
- Fiese, B. H., & Spagnola, M. (2007). The interior life of the family: Looking from the inside out and the outside in. In A. S. Masten (Ed.), *Multilevel dynamics in developmental psychopathology: Pathways to the future* (pp. 119–150). New York: Taylor & Francis/Lawrence Erlbaum.
- Fletcher, K. E. (2003). Childhood posttraumatic stress disorder. In E. J. Mash & R. A. Barkley (Eds.), *Child psychopathology* (pp. 330–371). New York: The Guilford Press.
- Gershoff, E. T., Aber, J. L., Ware, A., & Kotler, J. A. (2010). Exposure to 9/11 among youth and their mothers in New York City: Enduring associations with mental health and sociopolitical attitudes. *Child Development*, 81, 1142–1160.
- Giannopoulou, I., Strouthos, M., Smith, P., Dikaiakou, A., Galanopoulou, V., & Yule, W. (2006). Post-traumatic stress reactions of children and adolescents exposed to the Athens 1999 earthquake. *European Psychiatry*, 21, 160–166.
- Gil-Rivas, V., Holman, E. A., & Silver, R. C. (2004). Adolescent vulnerability following the September 11th terrorist attacks: A study of parents and their children. *Applied Developmental Science*, 8, 130–142.
- Gil-Rivas, V., Silver, R. C., Holman, E. A., McIntosh, D. N., & Poulin, M. (2007). Parental response and adolescent adjustment to the September 11, 2001 terrorist attacks. *Journal of Traumatic Stress*, 20, 1063–1068.
- Goenjian, A. K., Molina, L., Steinberg, A. M., Fairbanks, L. A., Alvarez, M. L., Goenjian, H. A., et al. (2001). Posttraumatic stress and depressive reactions among nicaraguan adolescents after hurricane mitch. *American Journal of Psychiatry*, 158, 788–794.
- Haavind, H. (1987). Liten og stor. Mødres omsorg og barns utviklingsmuligheter. [The small and the big one. Maternal care

- and the developmental possibilities for children] Universtitetsforlaget: Oslo.
- Hardin, S. B., Weinrich, M., Weinrich, S., Hardin, T. M., & Garrison, C. G. (1994). Psychological distress of adolescents exposed to Hurricane Hugo. *Journal of Traumatic Stress*, 7, 427–440.
- Hill, C. E., Thompson, B. J., & Williams, E. N. (1997). A guide to conducting consensual qualitative research. *Counseling Psychologist*, 4, 517–572.
- Jensen, T. K. (2005). The interpretation of signs of child sexual abuse. *Culture & Psychology*, 11, 469–498.
- Jensen, T. K., Dyb, G., & Nygaard, E. (2009). A longitudinal study of posttraumatic stress reactions in Norwegian children and adolescents exposed to the 2004 Tsunami. Archives of Pediatrics and Adolescent Medicine, 163, 856–861.
- Kronenberg, M. E., Hansel, T. C., Brennan, A. M., Osofsky, H. J., Osofsky, J. D., & Lawrason, B. (2010). Children of Katrina: Lessons learned about post-disaster symptoms and recovery patterns. *Child Development*, 81, 1241–1259.
- La Greca, A. M., Silverman, W. K., Vernberg, E. M., & Prinstein, M. J. (1996). Symptoms of posttraumatic stress in children after Hurricane Andrew: A prospective study. *Journal of Consulting and Clinical Psychology*, 64, 712–723.
- Layne, C. M., Warren, J. S., Saltzman, W. R., Fulton, J. B., Steinberg, A. M., & Pynoos, R. S. (2006). Contextual influences on posttraumatic adjustment: Retraumatization and the roles of revictimization, posttraumatic adversities, and distressing reminders. In L. A. Schein, P. R. Muskin, & H. I. Spitz (Eds.), Psychological effects of catastrophic disasters: Group approaches to treatment (pp. 235–286). New York: Haworth.
- Masten, A. S., & Osofsky, J. D. (2010). Disasters and their impact on child development: Introduction to the special section. *Child Development*, 81, 1029–1039.
- Mowder, B. A., Guttman, M., Rubinson, F., & Sossin, K. M. (2006).
 Parents, children, and trauma: Parent role perceptions and behaviors related to the 9/11 tragedy. *Journal of Child and Family Studies*, 15, 733–743.
- National Child Traumatic Stress Network and National Center for PTSD (2008) *Psychological first aid: Field operations guide*, 2nd Edn. July, 2006. Retrieved August 25, 2010 from: www.nctsn.org.
- Osofsky, J. D., Osofsky, H., & Harris, W. (2007). Katrina's children: Social policy considerations for children in disasters. *Social Policy Report*, 21, 3–18.
- Phillips, D., Prince, S., & Schiebelhut, L. (2004). Elementary school children's responses 3 months after the September 11 terrorist attacks: A study in Washington, DC. American Journal of Orthopsychiatry, 74, 509–528.
- Prinstein, M. J., La Greca, A. M., Vernberg, E. M., & Silverman, W. K. (1996). Children's coping assistance: How parents, teachers and friends help children cope after a natural disaster. *Journal of Clinical Child Psychology*, 25, 463–475.
- Punamäki, R. L., Quota, S., & El Sarraj, E. (1997). Models of traumatic experiences and children's psychological adjustment: The roles of perceived parenting and the children's own resources and activities. *Child Development*, 64, 718–728.
- Pynoos, R. S., Steinberg, A. M., & Piacentini, J. (1999). A developmental psychopathology model of childhood traumatic stress and intersection with anxiety disorders. *Biological Psychiatry*, 46, 1542–1554.
- Valentino, K., Berkowitz, S., & Stover, C. S. (2010). Parenting behaviours and posttraumatic symptoms in relation to children's symptomatology following a traumatic event. *Journal of Traumatic Stress*, 23, 403–407.
- Vernberg, E. M., LaGreca, A. M., Silverman, W. K., & Prinstein, M. J. (1996). Prediction of posttraumatic stress symptoms in children after Hurricane Andrew. *Journal of Abnormal Psychology*, 105, 237–248.



Wickrama, K. A. S., & Kaspar, V. (2008). Family context of mental health risk in tsunami-exposed adolescents: Findings from a pilot study in Sri Lanka. *Social Science & Medicine*, 64, 713–723.

Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry and Allied Diciplines*, 17, 89–100.

