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I'll Be Working My Way Back: A Qualitative Synthesis on the Trauma Experience of Children

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Children who experience some kind of traumatic event, such as losing a sibling, witnessing war, or being the victim of abuse or an accident, all have the need to process this event. Few theories exist about the development of posttraumatic stress disorder, specifically in traumatized children. Therefore, a synthesis of qualitative research is conducted in which the available qualitative studies on the children's perspective on traumatic experiences are integrated. A total of 17 English-language peer-reviewed articles were selected and a thematic synthesis was carried out. The core themes in the findings pertain to three domains: the individual, the family, and the community. We found a qualitative synthesis beneficial for creating a complete picture of children dealing with trauma and for strengthening the emerging theory.

Many children are exposed to traumatic events during their lives, such as natural disasters, domestic violence, accidents, death, or war. These events are characterized by being sudden or unexpected, by their shocking nature- including death or threat to life or bodily integrity- and by the subjective feeling of intense terror, horror, or helplessness (American Psychiatric Association, 2000; Cohen, Mannarino, & Deblinger, 2006). It has been established that children can suffer from severe and long-term impairment caused by experiencing a traumatic event (Yule, 2001). When investigating children's reactions to traumatic events, most research focuses on posttraumatic stress or posttraumatic stress disorder (PTSD; American Psychiatric Association, 2000). PTSD involves overwhelming feelings of reexperiencing the traumatic event, avoidance of stimuli and emotions connected to the traumatic event and hyper-arousal (American Psychiatric Association, 2000). Research by Terr et al. (1983) showed that children, as well as adults, can suffer from PTSD.

Theory development about trauma and PTSD in children lags the research on adults and PTSD. Moreover, the resulting theories cannot automatically be transferred to children. Children are assumed to have different cognitive abilities for processing traumatic events than adults (Salmon & Bryant, 2002). They are in a different stage

developmentally, with fewer or different abilities to comprehend trauma. Not all children who are exposed to a traumatic event develop PTSD (Ozer, Best, Lipsey, & Weiss, 2003) and the risk and protective factors for developing PTSD are still not clear. Although a number of theories about children and PTSD have been proposed (e.g., La Greca, Silverman, Vernberg, & Prinstein, 1996; Pynoos, Steinberg, & Piacentini, 1999) this field of interest will benefit from further theory generation. Qualitative research has excellent properties for theory building and the methods involved in qualitative research are tailored to that aim. These methods are suited to discovering how children experience and process trauma. The explorative and sensitive nature of living through trauma requires the need of methods that offer children the possibility to recall and tell about their experiences in their own terms. In the current article, a qualitative synthesis is conducted, to obtain an overview of the qualitative studies conducted on the topic (Dixon-Woods, Agarwal, Jones, Young, & Sutton, 2005; Pope, Mays, & Popay, 2007). The review question is formulated as: How do children experience traumatic events, and what is perceived as supportive or hindering in their efforts to work their way back to normal life? The aim of this research is to integrate and interpret the findings of qualitative studies in which the focus was the children's perspective on trauma. Furthermore, we aim to contribute to conceptualizing the scientific field of children who have experienced trauma.

METHOD

This qualitative synthesis consists of five steps: (1) search for primary articles, (2) quality appraisal, (3) extraction of findings, (4) analysis of the findings, and (5) synthesis of the findings. In this section, each step is described in more detail.

Search for Primary Articles

The search for articles started with a general search for articles about the investigation of trauma using qualitative methods. The following electronic databases were searched: PsycINFO, PubMed, CINAHL, PILOTS, and EMBASE with keywords related to trauma (e.g., traumatic, PTSD, posttraumatic stress disorder) and qualitative research (e.g., semistructured interviews, grounded theory, phenomenological). In addition, an issue-by-issue search of seven relevant scientific journals ("Qualitative Research," "Journal of Mixed Methods Research," "Trauma, Violence and Abuse," "Traumatology," "Clinical Child Psychology and Psychiatry," "Transcultural Psychiatry," and the "Journal of Interpersonal Violence") was conducted, and hand searches through reference lists from published literature reviews were done. Only peer-reviewed English-language journal articles published between January 1, 1980 and September 1, 2009 were included in the search. The search was conducted in two steps. The first step involved a literature search for articles published from January 1, 1980 until November 1, 2008. This search yielded 1,856 articles, which were then examined for inclusion using the following rules: no duplicates (798 articles excluded), empirical studies only, use of nonquantitative methods, and articles should describe a traumatic event according to the DSM-IV definition (we applied the A1 criterion; American Psychological Association, 2000, p. 467; 639 articles excluded). In total, 419 publications were left for closer examination. We searched within these publications for articles dealing with children. Children were defined as being 18 years old or younger. We were interested in empirical research findings derived from children themselves concerning their

experiences with trauma. Articles in which parents or caregivers were interviewed about their children were also included. Articles in which adults were looking back at their childhood experiences were excluded. At the end of this step, we retrieved 41 articles meeting our search criteria. At this point, a secondary search was conducted for articles published from November 1, 2008 until September 1, 2009; this to ensure the inclusion of the most recent articles available. For this search the same keywords and criteria were applied but the search was immediately directed toward articles about children. The additional search resulted in 18 new articles.

After closer examination 6 articles were eliminated, leaving 12 remaining articles. This total sample of 53 articles was divided into articles using mixed methods ($n = 15$, on which we will report separately) and articles using solely qualitative methods ($n = 38$). All articles in the qualitative sample were read by the researchers to decide which articles should be included in the final sample of this synthesis. Articles were excluded when they were untraceable, when trauma was not the main topic, or when articles did not investigate the children's perspectives. The final sample consisted of 17 articles. Table 1 shows the characteristics of the included studies. Note that all included studies collected data from children and parents who looked back at their experiences (ranging from at least 2 to 36 months after trauma), instead of data collected shortly after the traumatic experience.

Quality Appraisal

The quality of the included articles was appraised using a checklist and an expert judgment. For a detailed description of this appraisal, see Boeije, Van Wesel, and Alisic (in press). This quality appraisal was not used for screening purposes and is therefore not reported here.

Extraction of the Findings

After coding the primary articles with regard to their used methods and samples, findings were extracted by carefully reading the articles and writing summaries of the findings. When extracting findings from the primary studies, we distinguished findings from (1) data, (2) references to findings from other studies, (3) descriptions of the analytical methods used to produce the findings, and (4) discussions of the relevance of the findings (Sandelowski & Barroso, 2003; Voils, Sandelowski, Barroso, & Hasselblad, 2008). A comparison of the summaries was made and revealed many similarities.

Analysis of the Findings

After extracting the findings, the relevancy of these findings to our review question was discussed. The findings that were considered relevant were synthesized; this is sometimes referred to as a meta-data-analysis (Paterson, Thorne, Canam, & Jillings, 2001).

The method we used for the analysis is equivalent to what Thomas and Harden (2008) call "thematic synthesis." The summaries of the findings were open-coded (Strauss & Corbin, 1998) using computer software for qualitative analysis (Maxqda2007). Four summaries were open-coded by two of the authors (A and B). The codes that emerged from these summaries were compared and after careful consideration one code tree was agreed upon. The rest of the summaries were open-coded by the first author (A). After analyzing all articles, the first and second author (A and B) discussed all of them and decided upon which themes were present in each article. The few new codes that emerged in this step were also discussed.

Synthesis of Findings

After open-coding the summaries of the primary articles, the codes were grouped in relationship to one another in two ways.

The first was based on the frequency with which the themes appeared in the articles, resulting in a hierarchical structure. The second was based on the area that the themes pertained to, which we called the domains. Then, all findings of the separate articles were retrieved with the code that was assigned and the contents of the themes were described. The terms theme and concept will be used here as synonyms.

In addition to ranking the themes in a hierarchical manner, the relationships between the themes needed to be synthesized. To do so, a graphic representation of the relationships between the concepts was drawn for each domain. These graphic representations were then synthesized into one model, thus including the relationships between concepts within the domains as well as between the domains.

[TABLE 1]

Findings

Description of the studies reviewed.

Although the search included articles from 1980 until 2009, all of the selected articles were published in 2001 or later. Six articles described the experiences of trauma because of violence (with a total number of participants, $n_{total} = 180$), five articles concerned war-induced or terrorism-induced trauma ($n_{total} = 79$), three articles described cancer related trauma ($n_{total} = 82$), two involved trauma as a consequence of parental illness or death ($n_{total} = 96$), and one article described accident-related trauma experiences ($n_{total} = 67$).

The mean sample size per study was smallest for war-related trauma studies and largest for parental illness-related trauma studies.

The mean age of the participants in the cancer studies was the lowest (9.7), whereas the mean age of the participants in the war studies was the highest (13.5). Ten studies had only child participants, four studies had only parent participants and three studies had both kinds of participants. Parental reports appeared in all of the studies including younger children. The highest number of parental participants were found in violence trauma studies ($n_{parents} = 86$).

Most of the data were collected using interviews (12) or focus groups (4). Other data collection methods used were observation (3), story writing, narrative writing, and journal writing. In the articles, authors referred to several qualitative analysis techniques such as thematic analysis (4), constant comparative methods (3), grounded theory (2), and interpretive phenomenological analysis (2).

Findings on children and trauma.

Figure 1 shows the graphic representation of the hierarchical model that was built based on the findings of the primary studies. This model describes the hierarchical structure as well as the three domains in which the concepts play a part: the individual domain, the family domain, and the community domain. The most frequently found concepts (mentioned in 10–16 primary articles) are: Feelings, Coping, Trauma impact, Giving meaning, and Parenting; these are represented by the large, double-lined circles at the top of the figure.

The concepts Phases, Current outlook, Identity, Interpersonal relationships, and Support were mentioned in 7–9 primary articles and are represented by the single-lined circles in the middle of the figure. The concepts that were found least frequently (in 1–6 primary articles) are represented by the smallest, dashed-lined circles in the lower part of the figure: Negotiation, Normalcy, Growth, and Culture. Table 2 describes the concepts briefly and lists the primary articles in which the concepts were found. The domains and their concepts will be elaborated upon in the next subsections.

Individual domain.

All concepts in this domain are directly linked to the children themselves. The domain involves the children's cognitive abilities and their emotional reactions as well as their coping efforts and the way they give meaning to what has happened to them. These characteristics have been awarded the concepts Feelings, Trauma impact, Coping, and Giving meaning.

The domain also pertains to who they are and how they look at their future selves, as expressed in the concepts Identity, Current outlook, Growth, and Normalcy. Finally, we have included the themes that deal with the course of the trauma in the individual domain, captured in the themes Phases and Negotiation.

[FIGURE 1]

Trauma impact.

The concept of trauma impact refers to all the consequences that children suffer because of the (threat of a) traumatic event or a secondary trauma, as well as to the changes in the children's perspective and behavior. Trauma is what a child experiences as traumatic and is, as such, perceived as a broad phenomenon in the primary studies. Some children received therapy to help them process the consequences of the traumatic event.

Traumatized children experience a disruption of daily life. Disruption can originate in, for instance, illness accompanied by frequent hospital visits and absence from school (4) or in custody (12). Some children talk about the loss of daily routines and missing loved ones (1). Fear is an important disruptive factor (10).

Some children report social problems with peers at school as a consequence of being different (4, 5) or of becoming distrustful themselves (12). Some are cut off from their roots by not being able to return to their families or countries (7, 9).

Children had vivid and detailed memories of what happened to them (1, 9) and some or often had flashbacks (3, 12). Children are found to relive their traumatic experiences when having their blood drawn for medical tests, reenacting war, talking about weaponry, or playing war computer games (1). Children with cancer showed interest in medical subjects (4). In a study on domestic violence, mothers reported children copycatting the aggressive behavior of their mother's spouse and, at the same time, keeping a close watch on any new partners to protect their mothers (3). Children are physically affected and are seen as vulnerable (4, 10), tired (4), drooping (4), passive, and quiet (4). Children show mood swings (4, 13) and suffer from sleeplessness and loss of appetite (10). Children are observed to behave as adults (1, 4), to lose their childhood dreams (4), to show no signs of optimism, or to lose the capacity of enjoyment (1, 4, 10). A change of character is described (10), as

well as substance abuse, self-harm, and suicidal thoughts (5, 12). In contrast, children were glad to have survived (10), show independent behavior (4), are found to become friendlier persons, and to go through a general change for the better (4). A traumatic event can also induce reflections on how to live a different life (9, 12).

Feelings.

Nearly all of the articles in this synthesis report traumatized children experiencing an assortment of strong emotions that are directly linked to the trauma. One of the most frequently reported feelings was fear: fear of the unknown (13, 16), fear of repetitive violence (7, 8, 10, 11, 12), fear of death (1, 5, 15), fear of separation or loss (3), fear of the future (4, 8), and fear of being different (4). Helplessness was also reported in several articles. This feeling was often because of the children's idea that they had lost control over their lives (4, 14, 15) and also surfaced when faced with suffering, vulnerability, and death (9, 13). Other strong feelings such as loneliness (4, 5, 12, 14); guilt, humiliation, and shame (1, 13, 15); distrust (7); worrying (4, 15); despair and depression (5, 11); and anger (4, 10, 13, 15) were also mentioned by several primary articles.

Coping.

Another important concept we found was that of coping, that is, strategies used for dealing with the traumatic event.

In some articles the children's acts were simply described without referring to them specifically as coping strategies. The coping strategies mentioned in most articles were denial and avoidance (4, 6, 10, 12, 13, 15, 16). In addition to this strategy, making sense of it all (4, 8, 10, 15, 17), acting tough (1, 3, 4, 10, 12), and taking control (4, 15, 16) were mentioned as strategies in several articles.

Some studies mentioned that children openly expressed their emotions while others became quiet and wanted to forget (4, 10). Some children looked for protection by staying with their parents (1, 10), while others tried to protect their parents and helped others (3, 15).

Furthermore, a few articles mentioned that children distracted themselves (1, 15), accepted what happened (16), or turned to religion (1, 9) or magical thinking (15). Finally, hope is found to be an important mechanism in persevering and coping with the rough spots in life (17).

[TABLE 2]

Giving meaning.

Giving meaning refers to the children's attempts to grasp and understand what has happened to them. In some contexts, religion, ideological beliefs, and political engagement are specifically mentioned as methods used for giving meaning (1, 8, 9). Iraqi children described the traumatic events in terms of enemy attacks and fighting back. Adolescent Sudanese refugees talked in terms of religion and ancestral roots. Bosnian youth who were politically engaged were looking for meaning and wanted answers as to why the war in Bosnia-Herzegovina had started.

However, youth who were disengaged did not feel this need (8).

Giving meaning is related to existential questions such as: Why did it have to happen to me? How did I get it? Why am I not like others? (4, 5). For some, these questions

gave rise to anxiety and depression. In one study, existentialism is connected to holding on and keeping the spirit alive while dealing with cancer (17). Children who had a traffic accident spoke about fate and reflected on having (no) control over events (14). Informing children about parental cancer and death allows them to understand what is going on and to make sense of their own feelings and that of their parents (15). Enabling children to make sense of events can help them work through trauma, as in testimonial therapy with refugees (9).

Identity.

Several articles found that children were consciously working on various aspects of their identity after they had experienced something traumatic. With cancer, identity is influenced by the physical condition, mental impairments, and appearance (hair loss, loss of weight, and scars; 4, 5). Older children and girls seem to be more disturbed by the aspects of appearance. One element of identity is the feeling of being different than others (4).

The sense of self is described in the cancer experience as a response to the changing cancer trajectory, ranging from feeling least like oneself to feeling more like oneself (17). The girls who were recruited for the FARC built their female identity partly on wearing a uniform and on the fighters' admiration (6). Youths living through war in Bosnia-Herzegovina struggled with ethnic identities in relation to the political violence to which they had been exposed (8).

Some articles describe a loss of self-esteem as a consequence of the trauma (2, 5). Other articles report on the development of an improved sense of self, sometimes as a result of therapy or the end of treatment and illness (2, 4). The ability to reflect on past experiences and significant moments in their life histories, as well as becoming aware of their own strengths, is mentioned in the context of refugees and traffic accidents (9, 14).

Current outlook.

Seven articles reported on how children think about the future in the posttrauma world. Some Iraqi children who experienced war-related trauma (1) expected to die in a short time and did not express any future aspirations but were ideologically influenced to fight and die as martyrs. Children living through cancer reported worrying about not getting healthy again and about the illness coming back (4). Children who experienced a terrorist attack, although glad to have survived, also worried about not recovering and remaining physically weak and mentally upset (10). These children are afraid that life will never be normal again. They describe a world which has changed and is no longer safe but dangerous (16). Others, who experienced war, in particular those who found it hard to make sense of the war, wanted to move and worried about future wars (8).

Being aware of mortality is an important theme (4, 10, 14).

Having lived through a serious trauma, such as a road accident, can contribute to the appreciation of what the children had already achieved in their lives and to reflecting on their future ambitions.

Some reported living in a more relaxed manner, others that they "lived life to the max" and not postpone anything (14). Young offenders reflected on their former lives and wanted to be in control to create a different future for themselves (12). They cherished hopes for a better future.

Normalcy.

Five articles found that the experience of normalcy (or the lack thereof) is part of the trauma experience.

Normalcy refers to the children's lives before the trauma occurred and to what is considered to be a normal life for children. Normalcy refers to a state of familiarity and safety in everyday life (16). Their response to the trauma allows children to distinguish between normalcy and difference, where difference refers to a feeling of change, newness and, often, threat and danger (16). Life before the trauma refers to a broad array of experiences, such as being with loved ones now lost (1), physical strength (4), playing together (1), and living without fear (1, 4). After the trauma the world has changed and is no longer safe but dangerous (16).

Iraqi children (1) are found looking back at their lives before the war and missing their daily routines. For cancer patients, going back to school after being treated in the hospital for cancer is viewed as resuming normal life with friends after the abnormalities of hospitals, medication, and painful procedures (4). Some children do not want any special treatment as they long for normality (4). Survivors of accidents reflect on everyday life before the crash and how they adjust parts of their lives afterward, knowing that it could happen again and that they might not be so lucky then (14).

The concept of normalcy is closely related to the concept of negotiation (4, 16) which describes the interaction between normalcy and difference. This will be discussed more extensively in the section on Negotiation.

Growth.

Growth involves the positive outcomes of traumatic experiences and finding benefits as a result of the experience.

Growth is the core theme of article (14). In the other articles possible positive outcomes are only described and not labeled as growth. Growth refers to children who become more independent, thoughtful, wise, friendly, or mature (4, 5, 9). Some notice an overall change for the better (4). A trauma can show the child who and what is really important in their lives and can lead to a deeper appreciation of relationships and the self. Growth is more often observed in older children and can coexist with PTSD (14).

Phases.

In seven articles, the trauma experience of children is depicted as a process that unfolds in stages. Such a staged process is, for instance, linked to age and developmental level (4, 16), illness course, and treatment (4, 17). These articles examine whether younger children have different experiences than older ones, for instance with respect to the awareness of the seriousness of cancer, the reactions of peers, and the disruption of daily life (4).

Other articles describe the process of working through trauma itself in stages (9, 10, 16, 17). One article describes, for instance, that the need to talk about the terrorist attack diminishes and that now, after several years, most children in Beslan want to forget the event (10). As part of one method of data collection, adolescents were asked to draw a lifeline to explore their past and present psychological wellbeing (8).

Negotiation.

Phases are discussed from the angle of the interchange between normalcy and difference (4, 16, 17). Stages of cancer are characterized by several aspects of normalcy and the disruption of daily life. One study (16) explicitly points to the negotiation between normalcy and difference which is found to develop in five stages: (1) normalcy, (2) interruption, (3) traumatic event, (4) end of traumatic event, and (5) current outlook. The negotiation becomes clear when the abnormal (for instance the presence of symptoms and treatment of leukemia) needs to be integrated into normal life (4) and when it is observed that life is never the same because of having gone through the cancer trajectory.

Adjusting to the illness and the regimen is and remains an ongoing process.

Family domain.

Concepts pertaining to the domain of the family are Parenting and Interpersonal relationships. Both concepts refer to the interactions of the traumatized children with significant persons (their parents or caregivers and their peers).

This domain also includes how relationships can change because of a traumatic event in which either the child or the entire family is involved. This domain extends the effects of trauma to the interpersonal realm.

Parenting.

Eleven of the 17 articles describe the role of parents and how they raise their traumatized child. They describe children who, as a way of coping, want to stay close to their parents (clinging) and show separation anxiety symptoms (1, 3, 4, 13).

Closeness to a parent reduces fear and provides these children with comfort and security. If parents are absent, either physically or emotionally, children are left alone, sad, and distressed and they become particularly vulnerable (9).

Parents try to help children to express their feelings and experiences (1), they want to be a confidant (7), and they try to help them process the event (10). When a child is confronted with a traumatic event, such as getting cancer, this is experienced as a traumatic event for the entire family (17). When parents are involved themselves, for example, in a terrorist attack, they find it difficult to reassure their children, not knowing themselves whether they are secure (10). When a partner has died, the partner left behind finds it difficult to hide his or her emotions (13).

Children are reported to pick up on facial expressions and the behavior of their parents (15). Children report having internalized their parents' love and taking their advice to heart (9).

Children worry about their parents. For instance, battered mothers were trying to shield their children from violence and, simultaneously, wanted to explain what was going on to their children because lying and hiding were observed to be very alarming for their children (3). Hiding and disclosure play a role when one of the parents is dying of cancer (13, 15). The roles of children and parents sometimes seem to be reversed when children are worried about death threatening their parents (7) and when they want to prevent their parents from mourning (10). They show empathy with their parents (15). Battered mothers experienced loss of their parental authority and role status as a result of the protectiveness of their children toward them (3).

Raising a traumatized child as if it were normal can be difficult because of the assumed vulnerability of the child (10) and because of the emotionally charged

history of disciplining, as in domestic violence and terrorist attacks (3, 10). Children with cancer confront their parents with stubborn or angry behavior (4), with anxiety, depression and suicidal behavior (5), but also with existential questions about being mortal (4, 5). Parents are perplexed about how to proceed (5, 13) but also report that dealing with these issues intensifies the bond with the child (5).

Interpersonal relationships.

The concept of Interpersonal relationships describes how the children interact with inner-circle family members such as siblings, grandparents, uncles and aunts, and with peers, in particular at school. The need to be with others and to feel connected counteracts the feeling of being abandoned and alone in the world (17).

Traumatized children sometimes lack friends because of having trouble getting back to school and thereby losing peers of the same age. This, in turn, leads to loneliness (4, 5). Bullying is a theme repeated in several articles. For children with cancer this has often to do with neuro-cognitive impairments. Appearance, such as hair loss, affects girls more than boys (4, 5). It also has to do with being different from peers and worrying about what others might think of you (4). This is mostly described in terms of social problems or being people-phobic (4). Youth with cancer simply wish to be treated like any other and to be “normal” again. These processes have a larger impact on older children (5 to 14 years old) than on younger children (0 to 4 years old) (4).

The finding of the diminishing of relationships is in contrast with the finding that relationships can improve through trauma (14). In a study of survivors of road accidents youths report being more popular with peers and of being more open and appreciative of relationships than before the accident. This stems from feelings of vulnerability and wanting to be nice to others (14). Some survivors experience more attached and close relationships with the (other) ones involved in the accident and other survivors experience worsened relationships with them. Children sharing stories with others who have had the same experience is an occurrence found in survivors of road accidents and in Iraqi children living through war (1, 14). Contact with children who have had the same experience can compensate for the loss of existing social contacts, for instance for children with cancer for whom visiting the clinic is a social event (4). Some children managed to make new friends despite adversity (5, 17).

When children are exposed to community violence, it is found that relationships are saturated with feelings of distrust and unsafe, even among friends, family members, and acquaintances (7, 12).

In these environments not even school is experienced as a safe haven because many students carry weapons (7). Not only is the amount of contact with others influenced by the environment (e.g., girls not being able to leave the house), but the nature of the contact is influenced as well: girls talk about fighting and boys have to defend their place in the streets (7).

Community domain.

The third domain describes features that are of importance for the trauma experience but occur outside the direct environment of the children themselves or their core families. The theme that is most frequently dealt with in this domain is social

Support, sometimes referred to as emotional or family support. The other theme in this domain is Culture.

Support.

All articles that deal with social support find that the amount and type of the support influences the trauma experience.

Children are thought to be able to accept help only if they still experience normalcy after trauma (16). Social support is found to influence the strategies of parents and children to get through all the rough spots that childhood cancer is causing for them (17).

When support is perceived as pleasant and good, it has a positive effect on getting through the trauma experience. Attention and gifts contribute to a positive experience in young children diagnosed with cancer (4).

In contrast, a lack of support is reported to have a negative effect on processing trauma. Deprived environments already lack support resources (12). Negative experiences and distrust toward outside helpers, such as the police and caregivers, hinder acceptance of the present social support and of interventions in violent communities (7, 12). Child survivors of road traffic accidents reported contradictory experiences. They discovered who their real friends were and on whom they could rely for support, but at the same time they were disappointed because they had expected more support and care (14).

Culture.

Culture as a theme involves two aspects of the community: cohesion and openness. With respect to cohesion, Columbian girls were found to join the tightly ruled guerrillas to escape their poor family environments that lacked support and included abuse and abandonment (6). Although the girls met traumatizing events in the guerrilla, they also experienced strict rules and in some ways a more supportive environment. For refugees, being connected with their cultural roots and maintaining the habits from home are found to soften painful memories and to help them cope (9). A different cultural aspect of the community is its openness and the way it deals with sensitive information. In a Danish context (15), openness and knowledge about parental cancer was examined in relation to children's coping and appeared to have a positive effect.

Culture also refers to the roles of religion, political ideals and ideologies (1, 9, 10) that are found to influence how trauma is experienced and coped with. Children with strong religious beliefs clung to the cross as a symbol of their religious identity (10) and prayed to God as a way of dealing with trauma (1). They also experienced gratefulness to God for surviving (9). Sudanese refugees (9) and Iraqi children who lived through war (1) drew on their cultural and religious beliefs to make sense of their experiences.

Iraqi children's anti-American ideology colored their current outlook; they wanted to fight the occupying army and they dreamed of dying as a martyr (1). Thinking about Palestinian youths throwing stones, it made them feel proud to do the same, as it represented control and mastery over the war situation in their country.

The cultural context defined tough bravado and the hiding of vulnerability as good responses.

Synthesis of the Findings

We have integrated the described findings into a theoretical model (see Figure 2). This model consists of the three domains (see Figure 1) represented by the three spheres. The innermost sphere corresponds to the Individual domain, the middle sphere to the Family domain, and the outer sphere to the Community domain. The core process of the inner sphere is the impact of trauma as a disruption of daily life. This disruption is all-encompassing and affects different aspects of the children's lives. Children's way of behaving is said to change because of the traumatic event (some are haunted by flashbacks and physical vulnerability), although it is sometimes found that children feel they have changed for the better. Identity deals with who the children were before the traumatic event, who they are now, and who they are going to be in the future. The children's current outlook is influenced by many factors such as cultural elements (religion, politics, and ideology) or the remission of a disease, and their adjustment to what has happened to them. Within this sphere the processing of trauma is represented by the dashed arrow. This is viewed as a staged process related to age, developmental phase, illness course, or treatment. The processing of trauma is also conceptualized in stages that are linked to the negotiation between normalcy and difference. Each stage is represented by a set of curved arrows between normalcy and difference. The figure shows three hypothetical stages.

The elements in the middle sphere influence the processes described in the inner sphere, represented by the wavy arrows.

First, children having gone through trauma need their parents to feel close to other people. When parents are either physically or emotionally absent the children withdraw back into themselves.

Second, relationships with peers and family members are influenced in different ways depending on the type of trauma. In situations of community violence the nature and number of relationships with others are met with unsafe feelings and distrust. In personal trauma such as illness or accidents, there seems to be a two-faced coin: feeling vulnerable can increase appreciation of others and deepen relationships, but missing days at school, impairments, and looking and feeling different are found to lead to loss of relationships with peers and sometimes to being bullied.

The outer sphere shows the indications of cultural-specific aspects of the trauma experience. In particular, Giving meaning, Coping, and Current outlook are influenced by religious, political and ideological views, represented by the wavy arrow. This sphere also contains support and its influence on the other spheres, represented by the wavy arrow. Support is thought to be beneficial for processing trauma, but relationships and the mechanisms of how support works are not explicitly stated. Trust and developing a feeling of normalcy despite having experienced trauma are necessary ingredients for children to be able to observe that help is offered and to accept it. Positive and negative experiences with social support can occur simultaneously. The sheer amount and type of social support is thought to influence coping strategies.

[FIGURE 2]

DISCUSSION

The added value of the qualitative synthesis is that all of the studies together cover many disciplinary angles, topics, and target groups in relation to our focus on children and trauma, much more than a single study alone can cover. The concepts that were deduced from the 17 primary articles were categorized in the domains of the individual, the family, and the community. For the individual domain, the core finding is that children are in a constant process of negotiating normalcy and difference. This pertains to the other elements in this realm, such as identity, feelings, giving meaning, and current outlook. The process of negotiating difference and normalcy influences the processing of trauma and determines its staged course. The family domain and the community domain influence this basic psychological process.

This is represented in a theoretical model (see Figure 2).

Several articles described trauma as a broad phenomenon. Although we selected articles based on the fulfillment of the “objective” criterion (A1) of the DSM–IV (American Psychiatric Association, 2000), some articles defined trauma as what a child experiences as traumatic. The finding of the theme of “Trauma impact” indicates that with regard to children, trauma should be seen as a broad and complex phenomenon driven by experiences influencing emotions as well as behavior. Moreover, children’s posttraumatic reactions are found to be broader than the PTSD symptoms defined by the DSM–IV, a finding which is in line with Kaminer, Seedat, and Stein (2005).

There are several parallels between the findings of the qualitative studies and Bronfenbrenner’s ecological theory (Bronfenbrenner, 1979). He distinguished a microsystem, a mesosystem, an exosystem, a macrosystem, and a chronosystem. The microsystem is the direct environment of the child (family, friends, and school). The mesosystem represents the interaction between several microsystems (e.g., the interaction between parents and teachers). The exosystem consists of the extended environment, such as parents’ work, which can exert an indirect influence on the child. The macrosystem contains the norms and values of the society and culture the child lives in. The chronosystem indicates that these systems change over time, especially with life events (e.g., divorce of parents). The qualitative findings regarding the family domain would fit in the microsystem, while the community domain resembles the macrosystem. Time aspects have also been described in the studies in this synthesis endeavor.

The role of parents appears to be of special importance for children’s recovery from stressful experiences. Parents in the studies are seen seeking guidance on how to support their children but are also sometimes seen to be unavailable to their children. The huge importance of the influence of parents’ own well-being on children’s reactions is described in the Relational PTSD model of Scheeringa and Zeanah (2001) for young children. The authors describe three pathological patterns of parent– child interaction in which the symptoms of the parent exacerbate the symptoms in the child; these include unavailable, frightening, and overprotective. The present study suggests that these interaction patterns do not only apply to young children, but are also of interest for older age groups and should be studied further.

The studies examined also found that the bond between parent and child could grow stronger.

More knowledge is needed with regard to when and where bonding or pathological reactions occur. In addition, the mesosystem and the exosystem as described by Bronfenbrenner did not appear as prominent spheres in the present findings. This suggests that future qualitative research on children and trauma may want to examine the interactions between the agents as well as the social settings in more detail.

Although the aim of the present study was to contribute to conceptualizing the scientific field of children who have experienced trauma in a broad sense, we were able to identify some specific patterns. For instance, we found evidence that refugees and children who have experienced war, lean more on religious beliefs and ideologies than children who have gone through different types of trauma.

Furthermore, we found evidence that children suffering from cancer have other problems concerning their identity, appearances, and peers than children who have gone through different types of trauma.

With regard to coverage, some themes were covered by many studies (Coping and Parenting), others were covered by fewer studies (Growth and Culture). Generally, broader coverage permits a richer description of the particular theme. However, one cannot conclude, on the basis of the coverage alone, that a more broadly covered theme has more weight than less covered themes. There can be several explanations for high coverage: for example, research trends or the dominance of a discipline—that is, psychology researchers examining coping and psychiatry researchers examining giving meaning. To our knowledge, studies that offered an interpretive explanation (in this case, most frequently the grounded theories) provided theoretical insights that evolved into the backbone concepts in the synthesis of the findings, such as the concepts of Negotiation and Normalcy and daily disruption (Urman et al., 2001). These concepts were often quite idiosyncratic although they could be determined as more peripheral concepts in other studies as well. It is important to keep in mind that the included studies all investigated the traumatic experiences some time after the trauma occurred. As a consequence, the found concepts represent a retrospective.

When coverage and research discipline are combined, gaps in the theoretical development on children and trauma can be identified.

We found that studies conducted from the field of psychiatry covered all concepts found, but that studies with a social-work background covered only half of the concepts found. What we know about parental relationships is based mainly on the studies of two types of trauma: violence and cancer. Knowledge about social support is based on heterogeneous studies, whereas knowledge about culture and trauma experience stems mostly from studies of refugees, war, and terrorist attacks. The influence of Western culture itself on a trauma experience is scarcely examined and appears to be a gap in our existing knowledge on children and trauma. The same holds for the relationship between developmental processes and trauma outcomes; only one study used a longitudinal design (Earle & Eiser, 2007), investigating this relationship.

Gaps such as these need to be investigated further in future studies.

The thematic synthesis we used was an adequate method for dealing with different types of studies as it focuses on the themes or concepts dealt within the studies.

Although some of the retrieved studies touched on almost all of the concepts in our

model and some studies only touched upon a few concepts, both could be analyzed with this thematic approach. A problem arose concerning the studies that evaluated interventions. The thematic synthesis was found to be insufficient to capture these studies' findings.

Thematic synthesis is also less adequate for examining relationships between the concepts because it focuses on the separate themes. For this reason, we recommend that thematic synthesis be complemented by a different method such as "the line of argumentation" proposed by Noblit and Hare (1988). Whether this will be useful also depends on the type of studies being produced in a specific field. Interpretative studies require more analysis of relationships between the themes contributing to building scientific theory than do studies that only describe themes.

The findings of this synthesis lead to recommendations in the field of children and trauma. The results suggest that professionals working with traumatized children need to keep several additional concepts in mind besides the usual PTSD symptoms. For example, professionals who work with traumatized children from a different culture than their own should carefully explore the influence of this difference, especially with concern to support and the level of cohesiveness of the different culture. As fear emerged as the most predominant feeling following trauma, interventions should explicitly address this issue with children. In addition, finding meaning in the child's experiences is very important. The Trauma Systems Therapy Approach (Saxe, Ellis, & Kaplow, 2007) pays special attention to this topic for children. It would be valuable to study the effectiveness of this approach. Furthermore, the findings suggest the value of providing interventions for both children and parents. Finally, as bullying was found to be a repetitive theme, mental health care professionals need to cooperate with teachers to diminish children's chances of becoming the victim of bullies after trauma.

REFERENCES

References marked with an asterisk indicate studies included in the qualitative synthesis.

- *Al-Mashat, K., Amundson, N. E., Buchanan, M., & Westwood, M. (2006). Iraqi children's war experiences: The psychological impact of "Operation Iraqi Freedom." *International Journal for the Advancement of Counselling*, 28, 195–211. doi:10.1007/s10447-006-9016-3
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision). Washington, DC: Author.
- Boeije, H., Wesel, F. van, & Alisic, E. (2011). Making a difference: Towards a method for weighing the evidence in qualitative synthesis. *Journal of Evaluation in Clinical Practice*. doi: 10.1111/j.1365- 2753.2011.01674.x
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2006). *Treating trauma and traumatic grief in children and adolescents*. New York, NY: Guilford Press.
- *Coholic, D., Loughheed, S., & Cadell, S. (2009). Exploring the helpfulness of arts-based methods with children living in foster care. *Traumatology*. Retrieved from <http://tmt.sagepub.com/cgi/content/abstract/1534765609341590v>
- *DeVoe, E. R., & Smith, E. L. (2002). The impact of domestic violence on urban preschool children: Battered mothers' perspectives. *Journal of Interpersonal Violence*, 17, 1075–1100. doi:10.1177/088626002236661
- Dixon-Woods, M., Agarwal, S., Jones, D. R., Young, B., & Sutton, A. J. (2005). Synthesising qualitative and quantitative evidence: A review of methods. *Journal of Health Services Research and Policy*, 10, 45–53. doi:10.1258/1355819052801804

- *Earle, E. A., & Eiser, C. (2007). Children's behaviour following diagnosis of acute lymphoblastic leukaemia: A qualitative longitudinal study. *Clinical Child Psychology and Psychiatry*, 12, 281–293. doi:10.1177/ 1359104507075935
- *Forinder, U., & Norberg, A. L. (2009). "Now we have to cope with the rest of our lives." Existential issues related to parenting a child surviving a brain tumor. *Supportive Care in Cancer*. retrieved from [http:// www.springerlink.com/content/eq8w4l2870826722/](http://www.springerlink.com/content/eq8w4l2870826722/)
- *Hernandez, P., & Romero, A. (2003). Adolescent girls in Colombia's guerrilla: An exploration into gender and trauma dynamics. *Journal of Prevention & Intervention in the Community*, 26, 21–38. doi:10.1300/ J005v26n01_03
- *Horowitz, K., McKay, M., & Marshall, R. (2005). Community violence and urban families: Experiences, effects, and directions for intervention. *American Journal of Orthopsychiatry*, 75, 356–368. doi:10.1037/0002- 9432.75.3.356
- *Jones, L. (2002). Adolescent understandings of political violence and psychological well-being: A qualitative study from Bosnia Herzegovina. *Social Science & Medicine*, 55, 1351–1371. doi:10.1016/S0277- 9536(01)00275-1
- Kaminer, D., Seedat, S., & Stein, D. J. (2005). Post-traumatic stress disorder in children. *World Psychiatry*, 4, 121–125.
- La Greca, A., 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. doi:10.1037/0022-006X.64.4.712
- *Lustig, S. L., Weine, S. M., Saxe, G. N., & Beardslee, W. R. (2004). Testimonial psychotherapy for adolescent refugees: A case series. *Transcultural Psychiatry*, 41, 31–45. doi:10.1177/1363461504041352
- *Moscardino, U., Axia, G., Scrimin, S., & Capello, F. (2007). Narratives from caregivers of children surviving the terrorist attack in Beslan: Issues of health, culture, and resilience. *Social Science & Medicine*, 64, 1776–1787. doi:10.1016/j.socscimed.2006.11.024
- Noblit, G. W., & Hare, R. D. (1988). *Meta-ethnography: Synthesizing qualitative studies*. London: Sage.
- *Okundaye, J. N. (2004). Drug trafficking and urban African American youth: Risk factors for PTSD. *Child & Adolescent Social Work Journal*, 21, 285–302. doi:10.1023/B:CASW.0000028456.32329.ea
- Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: A meta-analysis. *Psychological Bulletin*, 129, 52–73. doi:10.1037/0033-2909.129.1.52
- Paterson, B. L., Thorne, S. E., Canam, C., & Jillings, C. (2001). *Meta-study of qualitative health research: A practical guide to meta-analysis and meta-synthesis*. Thousand Oaks, CA: Sage.
- *Paton, J., Crouch, W., & Camic, P. (2009). Young offenders' experiences of traumatic life events: A qualitative investigation. *Clinical Child Psychology and Psychiatry*, 14, 43–62. doi:10.1177/1359104508100135
- Pope, C., Mays, N., & Popay, J. (2007). *Synthesizing qualitative and quantitative health research: A guide to methods*. Maidenhead, United Kingdom: Open University Press.
- Pynoos, R. S., Steinberg, A. M., & Piacentini, J. C. (1999). A developmental psychopathology model of childhood traumatic stress and intersection with anxiety disorders. *Biological Psychiatry*, 46, 1542–1554. doi:10.1016/S0006-3223(99)00262-0
- *Saldinger, A., Cain, A., & Porterfield, K. (2003). Managing traumatic stress in children anticipating parental death. *Psychiatry: Interpersonal and Biological Processes*, 66, 168 – 181. doi:10.1521/ psyc.66.2.168.20613
- Salmon, K., & Bryant, R. A. (2002). Posttraumatic stress disorder in children. The influence of developmental factors. *Clinical Psychology Review*, 22, 163–188. doi:10.1016/S0272-7358(01)00086-1
- *Salter, E., & Stallard, P. (2004). Posttraumatic growth in child survivors of a road traffic accident. *Journal of Traumatic Stress*, 17, 335–340. doi:10.1023/B:JOTS.0000038482.53911.01
- Sandelowski, M., & Barroso, J. (2003). Classifying the findings in qualitative studies. *Qualitative Health Research*, 13, 905–923. doi:10.1177/ 1049732303253488
- Saxe, G. N., Ellis, B. H., & Kaplow, J. B. (2007). *Collaborative treatment of traumatized children and teens. The trauma systems therapy approach*. New York, NY: Guilford Press.

- Scheeringa, M. S., & Zeanah, C. H. (2001). A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress*, 14, 799–815. doi:10.1023/A:1013002507972
- Strauss, A. L., & Corbin, J. (1998). *Basics of qualitative research. Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.
- Terr, L. C. (1983). Chowchilla revisited: The effects of psychic trauma four years after a school-bus kidnapping. *American Journal of Psychiatry*, 140, 1543–1550.
- *Thastum, M., Johansen, M. B., Gubba, L., Olesen, L. B., & Romer, G. (2008). Coping, social relations, and communication: A qualitative exploratory study of children of parents with cancer. *Clinical Child Psychology and Psychiatry*, 13, 123–138. doi:10.1177/1359104507086345
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *Medical Research Methodology*, 8, 45–54. doi:10.1186/1471-2288-8-45
- *Urman, M. L., Funk, J. B., & Elliott, R. (2001). Children's experiences of traumatic events: The negotiation of normalcy and difference. *Clinical Child Psychology and Psychiatry*, 6, 403–424. doi:10.1177/1359104501006003009
- Voils, C., Sandelowski, M., Barroso, J., & Hasselblad, V. (2008). Making sense of qualitative and quantitative findings in mixed research synthesis studies. *Field Methods*, 20, 9–25. doi:10.1177/1525822X07307463
- *Woodgate, R. L., & Degner, L. F. (2003). A substantive theory of keeping the spirit alive: The spirit within children with cancer and their families. *Journal of Pediatric Oncology Nursing*, 20, 103–119. doi:10.1053/jpon.2003.75
- Yule, W. (2001). Posttraumatic stress disorder in the general population and in children. *Journal of Clinical Psychiatry*, 62(Suppl), 23–28.

TABLES AND FIGURES

Table 1
Articles Included in the Qualitative Synthesis

No.	Reference	Type of trauma	Sample	Method
1	Al-Mashat et al. (2006)	War	12 children Age: 9-13	Data: Focus groups, drawings Analysis: Focus groups
2	Coholic et al. (2009)	Chronic trauma	38 children 20 foster parents Age: 8-15	Data: Group session, interviews Analysis: Constant comparison
3	DeVoe and Smith (2002)	Domestic violence	43 mothers Age: 2-6	Data: Focus groups Analysis: Modification of coding system
4	Earle and Eiser (2007)	Diagnosis of acute lymphoblastic leukaemia	32 mothers Age: 1-14	Data: Semi-structured interviews Analysis: Thematic analysis
5	Forinder and Lindahl Norberg (2009)	Brain tumor	11 parents Age: 7-14	Data: Open-ended interviews Analysis: Inductive thematic method
6	Hernandez and Romero (2003)	Combat exposure in guerrilla	7 children Age: 13-17	Data: Semi-structured interviews Analysis: Constant comparison
7	Horowitz et al. (2005)	Community violence	28 children 23 parents Age: 8-17	Data: Focus groups Analysis: Thematic coding
8	Jones (2002)	War	40 children Age: 13-15	Data: Interviews, story-writing, participant observation Analysis: Grounded theory
9	Lustig et al. (2004)	War refugees	3 children Age: 17-18	Data: Narratives Analysis: Unclear
10	Moscardino et al. (2007)	Terrorism	17 caregivers Age: 6-14	Data: Participant observation, semi-structured interviews Analysis: Thematic content analysis, Code development
11	Okundaye (2004)	Community violence	20 children Age: 11-17	Data: Semi-structured interviews Analysis: Topical and keyword recording
12	Paton et al. (2009)	Traumatic life events (violence)	8 children Age: 15-17	Data: Semi-structured interviews Analysis: Interpretive phenomenological analysis
13	Saldinger et al. (2003)	Anticipated parental death	58 children 17 parents Age: 6-16	Data: Semi-structured interviews Analysis: Unclear
14	Salter and Stallard (2004)	Road traffic accidents	67 children Age: 7-18	Data: Interview notes Analysis: Framework technique
15	Thastum et al. (2008)	Parental cancer	21 children Age: 8-15	Data: Semi-structured interviews Analysis: Descriptive phenomenological method
16	Urman et al. (2001)	Traumatic experiences	6 children Age: 9-13	Data: Semi-structured interviews Analysis: Grounded theory
17	Woodgate and Degner (2003)	Childhood cancer	39 children Age: 4-18	Data: Focus groups, interviews, reflexive journals, participant observation Analysis: Constant comparison, illness narrative inquiry

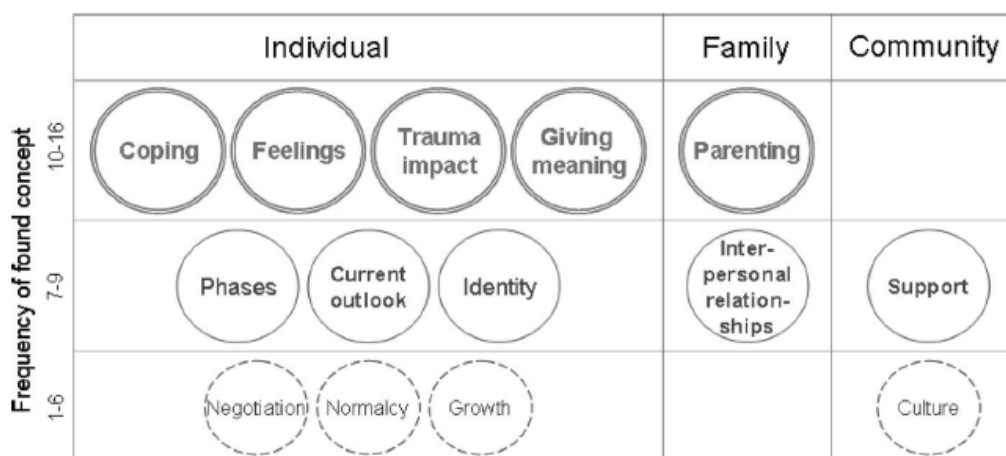


Figure 1. Hierarchical theoretical model describing the frequency of the found aspects per domain, based on the synthesis of the findings of the primary studies.

Table 2
Descriptions of Concepts Arranged by Domain and Frequency and the Articles in Which the Themes Appeared

Concept	Description	Article no.
Individual domain		
Feelings	Emotions that are directly linked to the traumatic event such as fear, anxiety, helplessness, loneliness and guilt.	1, 2, 3, 4, 5, 7, 8, 10, 11, 12, 13, 14, 15, 17
Trauma impact	Secondary trauma and all consequences of the disruption of daily life such as the perceived sense of uncertain threat, behavior resulting directly from the trauma, copy-cat behavior and taking refuge.	1, 3, 4, 5, 6, 7, 9, 10, 12, 13, 16, 17
Coping	Strategies used for dealing with trauma such as denial, acting tough and taking control.	1, 2, 4, 8, 10, 12, 13, 15, 16, 17
Giving meaning	The process of reflecting upon what happened, including how the trauma is given a place in life.	1, 4, 5, 7, 8, 9, 12, 14, 15, 17
Identity	How children see themselves, how they think and feel about themselves, their sense of self, self-esteem, self-awareness and knowing themselves.	2, 4, 5, 6, 8, 9, 14, 16, 17
Current outlook	Traumatized children's views on the post-trauma-world and, in particular on their future development.	1, 4, 8, 10, 12, 14, 16
Phases	Several phenomena that develop in stages, for instance: aging of children, children's level of development, and the processing of trauma through time.	4, 7, 8, 9, 10, 16, 17
Normalcy	What used to be self-evident in daily life, includes looking normal, being like peers and normal child behavior.	1, 4, 6, 14, 16
Growth	Positive outcomes of a trauma experience such as the development of cognitive and emotional skills and maturation.	4, 5, 9, 14
Negotiation	The process of constant interchange between normalcy and difference because of the traumatic event happening.	4, 16
Family domain		
Parenting	The parents' observations of the child and their interference with the child, their relationship with the child and their efforts in the raising of a child with trauma (such as taking away their worries, disciplining, listening, protecting and answering questions).	1, 3, 4, 5, 7, 9, 10, 12, 13, 15, 17
Interpersonal relationships	Interaction of traumatized children with others, such as peers and acquaintances.	1, 4, 5, 6, 7, 12, 14, 15, 17
Community domain		
Support	All kinds of help given by family, friends, school and the community in general.	4, 7, 9, 12, 14, 16, 17
Culture	The nature of the community in terms of cohesion and openness, as well as religious beliefs, and political and ideological views.	1, 6, 9, 10, 15

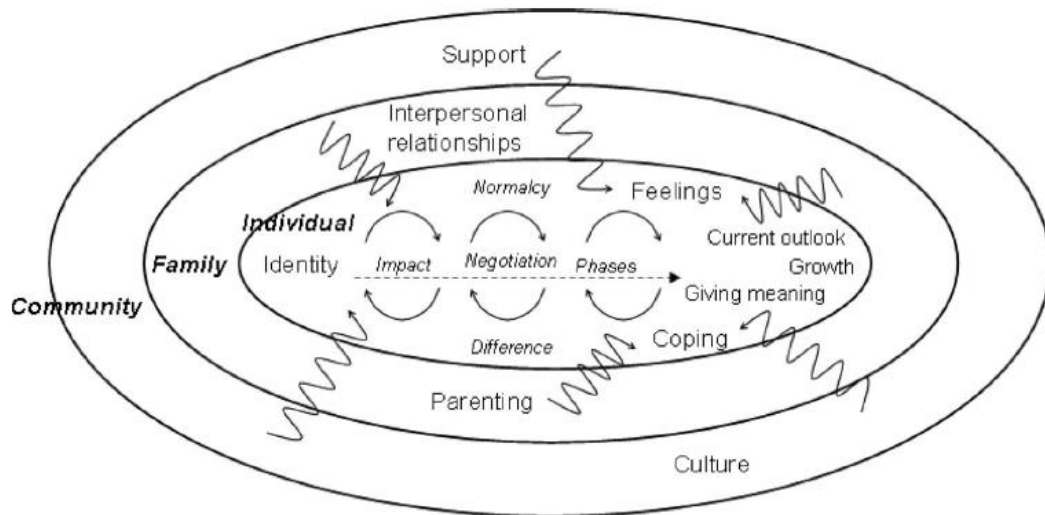


Figure 2. Theoretical model describing the relations between found concepts, based on the synthesis of the findings of the primary studies.