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# Late Reminders Nine Years Post Disaster in Adults Who As Children or Adolescents Were Exposed to the 2004 Southeast Asian Tsunami

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## ABSTRACT

**Objective:** The main aim of this study was to determine if young adults, who as children and adolescents were heavily exposed to the 2004 tsunami in Southeast Asia, had late reminders of this disaster nine years post disaster and, if so, how they handled these late reminders.

**Method:** The subjects who had been exposed when they were between 10 and 15 years old were interviewed nine years post disaster when they had reached adulthood.

**Results:** All those interviewed stated that they had experienced different late reminders of the 2004 tsunami even nine years later. They said that they could plan in advance or deal with late reminders should they occur. Two types of reminders were identified, one type designated as external and the other as internal. The interview subjects described how they had handled these reminders by striving for balance by thinking, talking, letting feelings out, doing something else or by avoiding.



**Conclusions:** These young adults strived to find a balance between their function as adults in society and continued effects from the 2004 tsunami. A person, even if not affected functionally, can be affected in different ways in adulthood by the natural disaster they had experienced during childhood or adolescence. This is something important for anyone to think about when he or she meets persons who have been heavily exposed to a natural disaster many years earlier.


## KEYWORDS

Natural disaster; children; adolescents; trauma reminders; handle trauma reminders

## Objective

Natural disasters happen throughout the world, and children and adolescents who experience them are vulnerable. Many studies have shown the impact of experiences of natural disasters on exposed children and adolescents (Dyb, Jensen, & Nygaard, 2011; Furr,

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Comer, Edmunds, & Kendall, 2010; Self-Brown, Lai, Thompson, McGill, & Kelley, 2013; Wang, Chan, & Ho, 2013). After a natural disaster, there is a need for support to be given for many years to children and adolescents and for the parents to be aware of this need by providing the right kind of environment for their children (Hafstad, Haavind, & Jensen, 2012). After the hurricane Katrina disaster in New Orleans, USA, Olteanu et al. (2011) recommended that post-disaster mental health and case management services should remain available for many years post-event.

On 26 December 2004, a tsunami, a huge wave, hit Southeast Asia, and many children and adolescents underwent a life-threatening experience. For many people, the situation in areas struck by the tsunami changed very quickly from being a positive holiday experience to a chaotic and life-threatening situation. In total 543 Swedish citizens died in this disaster. The survivors, who had been there as tourists, were able to leave the disaster-struck areas and return to Sweden, far from the area where they had suddenly experienced the tsunami, a natural event that does not occur in Sweden.

In Norway, a country much like Sweden, many children and adolescents who had experienced the 2004 tsunami also returned home from Southeast Asia soon after, and Norwegian researchers have published several studies about these children and adolescents (Dyb et al., 2011; Jensen, Dyb, & Nygaard, 2009). Some of these studies describe how parents had supported their children and adolescents after the disaster (Hafstad et al. 2012) and report that the parent's strategies were to re-establish safety, resume normal routines and provide assistance in coping with post-disaster effects. They concluded that parents' awareness and abilities are an important part of the interventions given to children and adolescents after a disaster (Hafstad et al., 2012). In a Swedish study of adolescents between 16 and 19 years of age who had experienced the 2004 tsunami, it was found that disaster had a deep impact on the majority of the respondents, and several found it difficult to continue their lives as before (Uttervall, Hultman, Ekerwald, Lindam, & Lundin, 2014).

Researchers have found that experiencing reminders of natural disasters is common after a couple of years (Banks & Weems, 2014; Wang et al., 2013). However, we do not know if children and adolescents experience reminders of the disaster even later and, if so, how much later and how they handle these much later reminders. Few studies have been made of children and adolescents many years after, even when they have reached adulthood. Two studies that have approached this subject are those of McFarlane and Van Hooff (2009) and Galletly, Van Hoff, and McFarlane (2011) but they have not studied if young adults have late reminders of the disasters that they experienced in childhood or adolescence. We found it to be of interest to determine if children and adolescents exposed to the 2004 tsunami have late reminders nine years post disaster and how they handle these possible late reminders.

Many families from Sweden, with children and adolescents, between 10 and 15 years of age, were vacationing in Southeast Asia, most of them in Thailand, during the Christmas season in 2004. There is a lack of knowledge about late reminders of the disaster experienced by those young adults heavily exposed during this natural disaster nine years post disaster. Exposures during natural disasters are perceived individually and late reminders of the disaster can, therefore, be experienced individually too. Late reminders can be handled in a variety of ways and to describe them and the way they are handled is of great interest.

We believe it is of considerable interest to learn about the thoughts and behaviors of those affected by a natural disaster, a subject that has not yet been examined sufficiently or systematically (Pfefferbaum, Noffsinger, Wind, & Allen, 2014). Pfefferbaum and colleagues state that exposed children's attributions and thoughts about the disaster and their ability to cope require more attention than they have been given to date. Future research is needed to assess the effectiveness of various strategies for dealing with the effects of disaster. In making this study we wanted to extend our knowledge about how the subjects of our study, now young adults, perceive late reminders and how they now are handling them.

The main aim of this study was to determine if Swedish children and adolescents who experienced the 2004 tsunami had late reminders of this disaster as long as nine years post disaster, in young adulthood. The second aim was to determine how they handled these late reminders.

## **Ethical consent**

All respondents were informed in the printed information letter that participation was voluntary, that respondents would be anonymous, and that confidentiality was guaranteed. There were preparedness for the need of psychotherapy and some of the respondents were given information about psychotherapists near their homes.

The study was approved by the regional ethical review board in Stockholm, Sweden. (Dnr:2014/607-31).

## **Method**

### ***Participants***

A total of 627 children, aged 10–15 years, who lived in Stockholm County, were registered by the police upon their return to Sweden from countries in South East Asia. Of those 255 (42%) answered a questionnaire that was sent out in 2013, and 210 young adults who had been in an affected area were included in different studies. Those included were divided into four exposure groups in a previous study (Adebäck, Schulman, & Nilsson, 2018) based on the type of exposure they experienced. Those who were least exposed were placed in exposure group one: they had simply been present on the beach or had simply seen the wave.

The participants in the present study were from exposure groups three and four, all heavily exposed. Those placed in exposure group three had been on the beach and/or had seen the wave, and had felt a threat to their lives or to those close to them and also separation from their parents. The participants from exposure group four had similar experiences but had also experienced loss.

### ***Procedure***

The respondents had the possibility to allow contact for an interview in the questionnaire and of the total 183 respondents who agreed to this, 30 respondents from exposure groups 3 and 4 were randomly statistically selected. These ranged ages from 19 to 24 years and they were selected according to the size of female or males in the exposure group. In the end, 17

interviews were carried out, 10 with females and 7 with males. Eight participants came from exposure group three and nine participants came from exposure group four. The mean age of this group was 12 years in 2004 and 21 at the time of the interview in 2013.

Accordingly, an information letter was sent to 30 persons in groups 3 and 4. The letter included a telephone number where the participant could be reached or if not a telephone number was found to the participant, the information letter included a desire that they should contact us. This first letter asked the recipients if they were willing to consent to be a part of the study. In our first telephone contact with each individual, the time for an interview was agreed upon. Ten participants, whose telephone number were not found, did not contact us as desired. Two participants could not be reached at the time scheduled for the interview and one declined to be a part of the study.

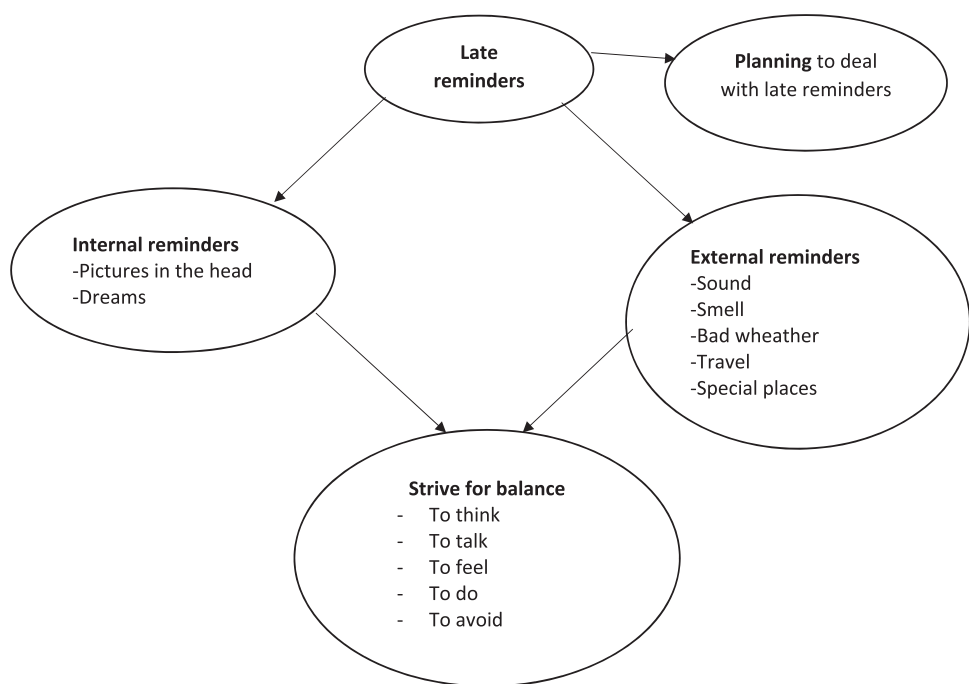
### **Interviews**

All of the semi structured interviews were done by telephone with the interviewer following an interview guide prepared for this study. The participants could have been interviewed face to face if they had preferred but nobody chose that alternative. The choice to be interviewed by telephone made it easier for the subjects to fit the interview into their own schedules, and they did not have to be in Sweden in order to be interviewed. The same psychologist performed all the interviews (PA).

The interviews lasted between 30 and 90 min. The interviewer knew nothing about the participants' previous questionnaire responses. The interview guide included questions about late reminders, concrete reactions and how the participant handled these late reminders. The interview started with a broad question and simple questions followed. These questions concerned memories, thoughts or feelings about the 2004 tsunami nine years later, and with the subject's mode of dealing with these reminders if any. The participants were also asked if there was anything offered to them that was not helpful.

### **Data analysis**

The interviews were analyzed according to thematic analysis (Braun & Clarke, 2006) a method for identifying, analyzing and reporting patterns or themes within data. Through the analytic process, the six phases were followed, starting with compiling the data and then putting it in useable form by transcribing the interviews verbatim. In the next step, data were disassembled into meaningful groups by coding, for example, placing in groups such as "handling of memories". In the reassembling process, each concept was mapped and the initial codes were identified, for example talking about what happened. In the interpreting step, themes or patterns within the data and the coding process were driven by a specific research question. In this case, if there were any late reminders and how the respondents handled these. During the coding process, an open mind was crucial and research questions evolved also from the interviews. The themes were discussed by the research group and reviewed, redefined and renamed so that they finally could be presented in a figure (Figure 1). A semantic approach was used, and the analytic process involved both descriptions and interpretations and an essential approach were applied were motivations, experiences and meanings were theorized. In the following step, this article has been produced.



**Figure 1.** Handling late reminders.

## Results

All respondents reported that they had experienced late reminders of the 2004 tsunami nine years post disaster. The respondents could plan in advance for late reminders to not occur. If the late reminders occurred, they could be divided into external and internal late reminders. Furthermore, the respondents described how they handled them by striving for balance through thinking, talking, letting feelings out, doing something else or avoidance (Figure 1). Some of the answers from the respondents are quoted.

### *Planning for situations in advance*

The participants described how they tried to control different situations that might happen to them as young adults. They could, for example, plan in advance to be placed in any situation that could resemble their past experience. To have control of situations in which they could expect to experience a late reminder was important. The respondents tried to avoid situations that they knew might be troublesome, by, finding a safe spot or by leaving any place where they felt uncomfortable. They could arrange not to be alone or not to sleep near water. At the same time, some of them said that they did not want to limit themselves in this way. Nevertheless, still, nine years after the 2004 tsunami some of them narrowed their life to avoid late reminders.

... I don't go in the water at all now, not in ponds or the ocean ... Right, I do not want to go in the water at all. If I am on the beach I want to be as far from the water as possible. (female)

### **External late reminders**

External reminders could be water, a special sound or smell, bad weather, traveling, films, music, media's reports, special places or hearing another person talking about the 2004 tsunami.

Water was a major external late reminder for these young adults. The feelings of water were apparent when they were near water or a pool, when they experienced waves and when they were under water or played in the water. To live by the water or to be at a beach was described as being distressing.

Special sounds or a special smell like one experienced during the tsunami were late reminders of the experience for some of the subjects. A high sound, a humming sound or scream from people could remind them of the disaster as could even people clapping or stamping. Bad weather, especially thunder or rain was also an external late reminder.

Some special kind of smell, I know that sounds really sick. But that can really remind me of when we had been there in the tsunami. (female)

Other external late reminders were traveling to another country especially traveling to Southeast Asia or to countries known to have tornados or hurricanes. Being on vacation was also a late reminder as well as looking at films about natural disasters or about the 2004 tsunami. Media reporting from this event or other reports from disasters could also bring their experiences to life, for example, the yearly days of Christmas together with the attention 10 years after this natural disaster. If a new natural disaster took place somewhere in the world this could remind them of the experience and cause a late reminder.

To see pictures from 2004 tsunami or meeting persons from the disaster could awaken their feelings. Listening to music could also remind them of a special person or special place as late reminders, for example, graveyards or crowds of people.

Scars on their bodies also reminded them of their experiences of the 2004 tsunami. Other persons reminded them of their experiences by talking about this natural disaster or asking questions about this time. The present interview was described by some of them as a late reminder of the 2004 tsunami.

... I am still a little afraid of the water. I still find it uncomfortable to be underwater and I can't handle someone playing games with me. (male)

Yes it is true, even today I cannot go into a car wash, for example. Then I become, then I get flashbacks. Like all that ... that sound ... like the roaring and the foam and everything else. I can't look at that kind of foam, from boats for example ... and sometimes if I'm in a big hall or something like that and then everyone starts clapping and stomping, and in that way I can then also get flashbacks. (female)

### **Internal late reminders**

Internal reminders could be thoughts about the 2004 tsunami or pictures of the disaster in that they could see in their own thoughts. Dreams about the tsunami, sometimes nightmares could be late reminders. The respondents reported being watchful in different situations too and that they easily could come to think about the worst scenario. When some began thinking about bad things that could happen to them, they tried to convince

themselves that these were unrealistic thoughts and that the worst thing possible does not happen all the time.

A few young adults reported that they had thoughts of their experience every day nine years post disaster, but others said they had not thought so much about what had happened to them.

... but it may come a little bit, maybe once a month that I dream about ... the tsunami or some other crisis situation. (female)

I've become more aware that I can actually die at any time ... (female)

### ***Striving for balance***

Most of the interviewed said that they were feeling alright but that they had periods when they were sad and felt worse. They described that they functioned well in the society, that they were studying in higher education or had fulltime employment.

Several of the subjects said that they had learned how to live with the experience of this natural disaster, that they had processed it and accepted that it had happened. Many said that the exposures to 2004 tsunami were a horrible experience, and they had been involved in things that no one would want to experience. At the same time, others said that the exposures to this natural disaster did not influence their ordinary life any longer. Some of them thought that their experiences were always going to be a part of them and that they had learned something from these experiences. They also said that their experiences had become something they were used to, especially if they had to retell their story repeatedly and it had become something outside them, something they could repeat by heart but no longer including any feelings.

Most of the survivors still wanted to be given some attention from society in the form of follow-ups some felt uncertain about this, and still said they did not want help any longer either from society or professionals. A proposal from some participants was made that even after these nine years someone should ask about the wellbeing of the survivors. To get offers of help from society, even a long time after a disaster, was seen as important to many of the survivors. Some concluded that it was hard to get help from society if you did not actively seek it and others said that they did not want help any longer.

Many of them said that they wanted more knowledge of things happening to them or more information about what really had happened to them. Some of them said they could experience a feeling of unreality when thinking of the disaster and that they had transformed their experience. At the same time, some of them did not want to forget about this disaster.

Many respondents wanted to have an opportunity to talk with a professional, perhaps a psychologist, and that society could offer this without having to ask for it. Another follow-up suggested was that groups of exposed children or adolescent, now grownups would meet to discuss solutions to different problems and help each other under the supervision of a professional.

When late reminders were present, the subjects described how they, even today nine years after the disaster, could control their reaction at first, but after a while, they had to deal with this reaction in some additional way. The respondents described how important it was to allow yourself to do different things, just to allow yourself was an important theme.



... yes I have self confidence, I believe in myself, I am happy and I have nothing bad in my life, I have a good family, good friends, job, I am studying ... (female)

A terrible thing to have been a part of ... (female)

... to see the problem as it really is and to accept that it has happened and stuff like that ... (male)

## Strategies

The participants dealt with late reminders in many different ways and reported different strategies to handle the reactions that we could divided into five groups: to think, to talk, to let feelings out, to do something else, or to actively avoid having any feelings.

### To think

To think about what happened when the 2004 tsunami came was one way to handle reactions, just to allow oneself to think about the experience, by themselves, alone for a while to process their thoughts, to see the problem and to accept what happened. They could even be sad about it. Some of them said that they tried to think positively about what happened while others explained how negative it could be to not think about the 2004 tsunami. One of the respondents said that not thinking about what had happened was a helpful way to handle the reactions in the beginning, but after getting panic attacks this person found that this way of handling reactions was not so helpful.

Some respondents talked about managing by themselves, how hard it could be for them to ask for help. They thought about it for a while and then wanted to talk with other persons after this.

Yes, like, I can mumble about everything from the tsunami like how it was down there ... It will be a strange, a strange conversation with myself. (male)

### To talk

A very common way to handle the respondent's reactions was to talk with persons near them, family and friends. To have others to talk to was important for the majority even after nine years. Most of the respondents thought the best thing they could do was to talk about what happened, to allow themselves to talk about the experience. They presented themselves as being accustomed to talking and that talking about what happened was the best way to handle the reactions. Being able to talk with just a few persons was enough and what they preferred. The respondents saw this as a way of getting their thoughts out and a way to find new ways of looking at things.

What was important was that others were always there to help and support them. Someone who listened without pressure, a person that they could talk with if they wanted to and who just listened. They also thought it was important that the person understand them, someone with empathy, someone who treated them with respect and let them be the person they were. Someone to laugh or cry together with, who could distract them.

There were some differences in the answers since some of the respondents wanted persons near them to be active by asking them about their wellbeing and by asking relevant questions. Some of the respondents did not want anyone to be exerting pressure on them,

not respecting them and not taking no for an answer. They talked about persons who wanted details and the story, like a film, for their own sake. They mentioned people who were curious and persons they had not chosen to talk with, and people who did not have the necessary understanding which made them troublesome to talk with. A few had difficulties talking with others and said they seldom did that. Some of them concluded that not all persons want to talk about their experience during this disaster.

... just listen to how I experienced it. So can you let it be my own experiences. (male)

... they volunteer to help ... they would go home to you if you just asked, if you asked them. I think it is very important to know that people really will come, if you want them to. (female)

... I don't want to, I don't want to talk about it with people I haven't chosen myself. (male)

They can be quite quick to chime in "yes but I understand, it must have been hard" and blah, blah blah ... (male)

### *To let feelings out*

The respondents described how they always or in certain situations let their feelings out, in both a positive and negative way. They could cry openly or get feelings of sadness, fearfulness or panic but some of them cried only when they were alone.

Some respondents described how they searched for moments when they could let their feelings out, by looking at a movie, listening to a special tune or looking at a picture. Some of them described feelings and reactions as one way of not to forget the experience. They described bedtime when going to sleep, as a time when feelings about the tsunami appeared. Some of them talked about people who could ignore them when they were sad or they felt sorry for them without reason. Others talked about how important it could be to confront their fears and to overcome them, not always with something fun to do. One way to do this was to go back to the place where it happened, for example going back to South East Asia.

I try to lighten the pressure a little now and then instead of waiting until it is too much. It's a little easier to handle it then as well. (female)

... Sometimes when I'm having trouble sleeping ... I get these kinds of feelings. (female)

### *To do something else*

One way to handle late reminders was to do something else such as to write thoughts down, to draw, to take a walk, watch television, watch a game or watch a movie. Other ways of meeting thoughts about the 2004 tsunami could be to engage in a routine activity, to do exercise or to listen to music. They described how this helped them to feel better when the reactions were present. One way of doing something else was also to go from being alone to being with somebody else.

... you don't want to think about, then you kind of have to put on a movie or something like that to watch something fun or to find something fun or something so that you don't have to dig down so much. (female)

I've written a lot about my thoughts, written down my thoughts so I get them out. (male)

### ***To avoid feelings***

Some of the respondents described how they tried to forget the experiences from the disaster, to leave what happened behind them, and avoid reactions when present in situations that would awaken the reactions. They described how they actively tried to oppose thoughts or how they tried to control feelings, especially together with other people. However, they talked about how negative it could be for them to keep the feelings inside of them, and they sometimes were aware of avoidance as a behavior was not so helpful. Some of them talked about how avoidance of feelings, in the long run, could give them problems, in some cases panic attacks, anxiety about death, hypochondria or other fears. Avoidance was also described as being helpful in certain situations, for example, when with people they did not want to know their real feelings.

### ***Recommendations to children and adolescents in coming disasters***

The respondents exposed to the 2004 tsunami made recommendations that might be made to children and adolescents in coming disasters in line with what they had previously said. As young adults, they had recommendations from their position as they had grown older, what 10–15-year-old children need to handle in the best way.

They recommended strongly to have the courage to talk about the experience with other persons, to talk and talk about it. To let other persons in and allow yourself to ask for help and do not think that you can manage by yourself. Try to find a person that you trust, who supports you and who will push you if necessary, a person who in some cases might be a professional.

They recommended that children and adolescents should not keep their feelings inside when the feelings always come up in some way. Other recommendations were to take the time you need, to realize that the memories are not that nice, to be prepared for how it may feel, that it is important to overcome your fears and travel back when you are ready for this. It is also important to realize that you are not alone with your experience.

### **Conclusions**

The main findings of this study were that the respondents who were heavily exposed during 2004 tsunami at childhood or adolescent nine years earlier were experiencing late reminders of the disaster. The Norwegian researchers found that in Norway, after the terror attack on Utoya, many experienced reminders 2,5 years post disaster (Glad, Hafstad, Jensen, & Dyb, 2017). Those results are in line with what we found in this study, but the results show that late reminders are common even nine years after a natural disaster. The late reminders could be external or internal and could be handled by striving for balance in thinking, talking, let feelings out, doing something else or through avoidance.

The ways of handling late reminders could vary from person to person but mostly for the same person in different situations. This is in line with the results from a study by Zhang, Liu, Jiang, Wu, and Tian (2014) that followed adolescents for 17 months after an earthquake. They found that handling this should be seen as a process and that individuals chose a style depending on the situation with which they were confronted. The meaning of the experience an individual gives each situation has important consequences

for the way she/he behaves and reacts emotionally during or following the situation, this is also in line with what were described by Braun-Lewensohn (2015).

Despite the fact that most of the respondents described their psychological health as good, and their function in the society as also being good, most of them were fulltime students or employees who described both external and internal late reminders. In conclusion, you cannot judge how they are dealing with the natural disaster just by looking at these external factors. According to this study, they struggled inside with the balance and they perceived reminders and handled them according to even if this could not be seen from their outward functioning. This is something important to remember and an important result from this study.

Another way of handling late reminders was to allow oneself to think about the 2004 tsunami. This is what had been found from earlier studies that examined thinking as a way to deal with the disaster. Braun-Lewensohn (2015) states that thinking is one way of dealing with the situation and thus addressing the cognitive dimension. Symptoms after natural disasters also include involuntary responses to stress, such as intrusive thoughts and rumination and emotional numbing according to Pfefferbaum et al. (2016).

The respondents showed how important it was for them to have family and friends that they could talk with. To take care of the experience after exposure to disasters can often be explored together with social support (Braun-Lewensohn, 2015). The respondents in this study showed the importance of talking with your caregiver about your experiences during the natural disaster, as was also found by Hendrickson, Abel, Vernberg, McDonald, and Lochman (2019). They (Hendrickson et al., 2019) found that parent's possibility to understand their youngster predicted youth symptoms post disaster, showing us the importance of the quality of the talk. The respondents said that they did not want to talk with persons who did not respect them and with persons who did not see, to understand them.

In this study, we increased our knowledge about the importance of letting your feelings out, something also found by Hendrickson et al. (2019). They said that symptoms of the trauma were more common for those who focused more on the negative personal impacts during their recollections, three to four years after the disaster. One conclusion from the present study was that the experience had an impact on all those interviewed but maybe the participants impacted the most were those who focused on negative feelings.

To do other things, to use distraction as a way of handling the reactions was shown to be one way to take care. Using distraction was one way of dealing with the 2004 tsunami for children in the immediate phase according to Jensen, Ellestad, and Dyb (2013). Something important to realize also from this study that even after these nine years the now young adults are using this strategy to calm themselves.

Some of the respondents used avoidance as one way of handling the reaction to late reminders. Avoidance is a way of coping described as a negative way of coping in earlier studies (Lengua, Long, & Meltzoff, 2006) and something to follow-up. Lengua et al. (2006) found that avoidance of trauma related stimuli is a symptom reported by child disaster victims, but coping interventions might aim to promote active coping with event-related threats. Zhang et al. (2014) think that more attention should be paid to adolescents that are prone to adapt passive coping strategies such as avoidance. They continued that responding to a traumatic event through passive coping strategies together with an external locus of control should be a target for disaster intervention and health promotion support. Maybe this was the case for respondents in our study.

The now grown up described the exposure to this natural disaster as involving experiences of disturbing, frightening or grotesque sights sounds, feelings smells. Other memories, described as intrusive thoughts, nightmares, and flashbacks were common as was avoidance of stimuli related to the trauma. Together this can lead to negative changes in cognition and/or mood and hyperarousal are in line with the description by Pfefferbaum, Jacobs, Jones, Reyes, and Wyche (2017). They said that this way to handle the reactions may contribute to secondary problems in interpersonal relationships, cognitive and academic functioning and coping.

The handling of late reminders was near the concept of coping, a concept described and examined in earlier studies and divided into adaptive, linked to fewer negative symptoms, and non-adaptive linked to more negative outcomes and strategies. Coping can be defined as an interactional process of an individual with his/her environment which can be defined as the effort one makes to deal with demands from the environment in order to make it more tolerable and to reduce stress (Braun-Lewensohn, 2015).

Some of the respondents wanted some offers from professionals or from society today. Many of them wanted the opportunity to talk with somebody professional or groups of survivors to discuss solutions to different problems and under the supervision of a professional help each other. Not all young adults wanted something from society today, which shows that there are different needs and that the help given must be individual. Being young adults, and from that point of life, they recommend that children and adolescents in coming disasters talk about their experience, ask for help and not to keep their feelings for themselves. Something important for the family, friends and professionals to know in case of not reaching children and adolescents between ten and fifteen years of age after natural disasters. Maybe the best way is for them to talk about their experiences even if they just then do not want to talk about it.

We found both positive and negative handling of reminders of the 2004 tsunami and this may contribute to the understanding of how children and adolescents manage many years post disaster. Braun-Lewensohn (2015) conclude that most research published has related to factors that could protect individuals from negative outcomes of the disaster. Studying positive outcomes may enable researchers to find coping strategies that can be used following mass trauma, thus broadening our understanding of the process children and adolescents experienced during or following these situations (Braun-Lewensohn, 2015). In this study, the result shows us both forms, positive and negative ways of handling with reactions and the result contributes in that manner to the knowledge of this process.

One of the limitations of this qualitative study was the fact that all picked out to be interviewed could not be reached for various reasons, among them not having a telephone number, not reaching them on the first call, or that they did not respond at the time booked for the interview. A second limitation was the possibility that the most affected children or adolescents may have chosen not to answer the questionnaire and therefore was not a part of the interview. Another limitation was that the results refer to this group only and they cannot be generalized.

One strength was the opportunity to reach children and adolescents exposed to the 2004 tsunami through the police registration after they had returned to Sweden. Another strength was the age of the interviewed when they experienced the 2004 tsunami, 10–15 years, a developmental stage when children and adolescents can understand, manage, think and talk about their experience and develop abilities to experience

and cope with diverse situations (Braun-Lewensohn, 2015). The interviewed were also very interested and they talked a lot. During the natural disaster, they experienced a great deal, they remembered much of what had happened to them and the disaster had a great impact on them. Another strength was that they only had to answer questions about the present time, this reduced the opportunity to recall bias.

For the future a suggestion is that more research of handling reminders after a natural disaster should be carried out, something also suggested by Braun-Lewensohn (2015), that although a variety of research has been done and knowledge has increased, there are still areas that need elaboration and there are areas in this field that lack well-founded knowledge. The respondents in this study did not indicate that their function nor their relationships were influenced. Maybe a deeper interview would find this and show a result more in line with what Pfefferbaum et al. (2017) found.

The descriptions showed that nine years post disaster young adults heavily exposed to the 2004 tsunami in childhood or adolescence had late reminders of this natural disaster, external and internal late reminders. The young adults handled the late reminders in different ways; planning for the situation or when the reactions were present they were striving for balance. Through thinking of the disaster, talking about it with trusted persons, by letting their feelings out, doing something else to distract themselves or by avoiding feelings that reminded of the 2004 tsunami. The interviewed strived for balance between their function in the society and the experience from the 2004 tsunami. A person, even if not affected functionally, affected in other ways by the natural disaster they experienced in childhood or adolescence. Something to think about when you meet persons who had been heavily exposed to a natural disaster many years earlier.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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