A Study on the Children's Coping Strategies in the Aftermath of Tsunami: 2004[1]

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Abstract

Children are especially vulnerable to the effects of natural disasters as they are still developing an understanding of their social world and necessary coping mechanisms to withstand stress resulting from disasters. In the absence of effective coping, the meaning and impact of traumatic events may continue to play a role in the personality and psychological development of the child. The present study examined the children's efforts to cope with emotional distress 15 and 18 months after the 2004 tsunami. This study included a stratified random sample of 126 school children aged 9-12 years; 63 girls and 63 boys. Both qualitative and quantitative methods were used for data collection and analysis. The findings of the current study clearly offer insights into how children attempt to cope with traumatic experiences. The level of emotional distress varied significantly depending upon the type of coping strategy used. Around 83 per cent of the children reported using religious strategy most frequently, followed by 82 per cent using distraction strategy and 81 per cent using social support strategy. The least frequently used coping strategies were social withdrawal used by 20 per cent and blaming others used by 21 per cent. Children's coping choices indicated that at various stages of a child's emotional experience to a traumatic event, different methods of coping bring effective benefits. The findings indicate tremendous resilience in the majority of children to cope with extreme distress.

Keywords: Children - Distress - Natural Disaster - Tsunami

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Introduction

Natural disasters are an inevitable part of human life. There is no place on earth that is immune from natural disasters, and millions of people are affected by disasters each year. Natural disasters bring a multitude of loss including destruction to property, major economic losses for affected communities, serious injuries, and loss of life. A very devastating natural disaster occurred on the 26th of December 2004, when a tsunami hit Sri Lanka, causing deaths, flooding, and destruction of infrastructure. Tsunamis are a series of waves or "wave trains" usually caused by earthquakes. The tidal waves on the 26th of December were caused by a series of earthquakes, measuring 8.9 on the Richter scale that occurred in the sea around Sumatra, Indonesia. Following the tsunami in Sri Lanka, it is reported that nearly 40,000 people were killed, over 200,000 were displaced and about 1 million people have been affected in different ways (United Nations Children's Fund, 2004) (UNICEF).

The impact of the tsunami on children was reported to be substantial. It was estimated that at least thirty per cent of the survivors of the event were children (UNICEF, 2004).Thousands of children were killed, injured, made homeless, and lost their family members, friends, teachers, schools and property. In Sri Lanka, it is reported that 995 children lost both parents, 3,409 of children lost either a mother or a father in the tsunami (Department of Probation & Child Care, 2005) while some 770,000 children were affected in different ways (UNICEF, 2005). In Indonesia, about 2,242 children lost either one or both parents, and over 8,300 children were orphaned (UNICEF, 2005). In Tamil Nadu State in India around 480 children lost both parents, and in Thailand 92 children lost parents or guardians in the tsunami (UNICEF, 2005). The hallmark of disasters is that they immediately plunge the child and family into situations in which they are exposed to multiple acute and chronic stressors that may affect adjustment. Natural disasters take a heavy toll on the mental health of those affected and significantly increase the risk of distress, psychological problems and mental disorders.

The effects of the 2004 tsunami on mental health are likely to be quite traumatic as the victims of the tsunami have experienced multiple, intense stressors that have been found to predict adverse outcomes, such as bereavement, threat to life, injury, extensive pro-

perty damage, financial loss, and displacement. These stressors can generally induce traumatic effects on children including mild to severe post-traumatic stress reactions such as depression, anxiety and Post-Traumatic Stress Disorder (PTSD) in response to such disasters (Wilson & Raphael, 1993; Pefferbaum, 1997). Studies investigating the impact of natural disasters on children and adolescents have found negative emotional and behavioural consequences to varying degrees. For example, among the many child psychosocial implications that have emerged in the wake of the tsunami, eating and sleep disorders and fear of the sea have been the most pervasive and survivor guilt also remains problematic (Carballo & Horbaty, 2006). In Maldives, many children are reported to have become obsessed with feelings of guilt at what they see as their personal failure to hold younger siblings aloft in the water or to keep hold on them when the sea swept back (Carballo et al., 2004) and (Marzo, 2001). A study of 16,818 children in 38 villages in Kerala six to nine months after the tsunami found that overall, 33 children were suffering from severe psychological problems; 1,081 from moderate psychosocial problems; and 13,274 were having mild psychosocial problems (International Centre for Migration and Health 2006; India Info, 2005).

Not everyone, however, is equally affected by the stress of experiencing such an event. Reactions to trauma do not inevitably lead to psychopathology. Some children have an instinctive capacity to respond to disasters, cope with extreme distress, and quickly seek normalcy. Certain variables have been postulated as the possible mediators and moderators of the relationship between disaster and outcome. An important aspect that mitigates prolonged negative psychological consequences is 'effective coping'. Coping refers to cognitive and behavioral efforts to manage environmental and internal demands that are appraised as taxing or exceeding personal resources (Lazarus & Folkman, 1984). These efforts allow for the management and alteration of the person - environment relationship to reduce negative emotions or solve stress - related problems (Titchener, 1988). Effective coping is thought to act as a buffer against stress, reducing one's vulnerability to stress - related symptoms such as negative emotional and cognitive symptoms (Compas, Forsythe, & Wagner, 1988; Yule, 1994; La Greca et al., 1996). Indeed, in the absence of effective coping, the meaning and impact of traumatic events may continue to play a role in the personality and psychological development of the child (Huzziff & Ronan, 1999). For example, Asarnow et al. (1999) evaluated the children's coping following the Northridge Earthquake

using the coping responses inventory (Moss et al., 1988) and the following coping styles were identified: (a) active cognitive coping, (b) active behavioral coping, and (c) avoidance coping. Findings suggest that children with more PTSD symptoms tended to rely on cognitive and avoidance strategies to cope with intrusive images and thoughts about the earthquake. Spirito, Stark & Williams (1988) examined the relationship between children's coping styles and self - reported levels of depressive symptoms (Kovacs, 1981) following a major stressor in 257 third - to fifth - grade children, five months following a hurricane. The number of coping strategies employed was positively related to depression scores, whereas coping efficacy was negatively related to depression scores. Social withdrawal, self - blaming and emotional regulation were associated with more severe depressive symptoms. Lower levels of symptomatology were found among children who sought social support and engaged in cognitive restructuring.

It is important to examine coping after a natural disaster be-cause coping responses appear to influence the process of adapting to traumatic events (Terr, 1989). Knowledge about how stress impacts on children and what factors are associated with effective coping with increased stress is essential if long-term negative outcomes are to be prevented.Yet, while coping with trauma in adults has received much research, little is known about children in this area. In terms of perceived coping ability, adults have the advantage of incorporating skills attained through life experience and have more control over their external environment than children (Ryan-Wagner, 1992). As a consequence of these individual and ecological factors, children are often more limited than adults in the flexibility afforded them for coping with their environment. As coping responses appear to influence the process of adapting to traumatic events, understanding coping stra-tegies that have helped or delayed adjustment is critically important in direct intervention work with children. The important role of coping in mitigating prolonged negative psychological consequences was a key interest in the present study.

Method Design

A quantitative approach is concerned with questions about 'how much' 'how many' 'how often' but not with questions such as 'why' or 'how'. Hence, a quantitative approach was used to gain an overall description of the nature and magnitude of the stress reactions

in children in a systematic and comparable way. The survey research design was used to reach this objective as it is one of the best methodological approaches that can be followed to find out what people are thinking, feeling or doing. A quantitative approach alone does not do justice, methodologically or ethically, to a research study on an area as sensitive and personal as the tsunami disaster. Numbers and percentages alone do not capture the reality of experiences or meaning. Furthermore, attempting to understand the human impact of the tsunami on children through statistics alone is not only unacceptable but also ethically unjust. A qualitative approach is more concerned with finding the answers to questions which begin with 'why' 'how' 'in what way', but not with questions such as 'how much' or 'how many'. Hence, the qualitative approach was used to gain an in-depth and holistic understanding of the children's distressful experiences and efforts to cope in Sri Lankan cultural context by going beyond and the obvious. This approach explores their views and meanings they attach to them, and allows children to express their experiences in detail. Qualitative methods help the researcher uncover new areas or ideas that were not anticipated at the outset of the research.

Hence a combination of qualitative and quantitative approaches was adopted in the present study in order to make the study more meaningful and to capitalize on the strengths of the two approaches, and to compensate for the weaknesses of each approach.

Participants

Participants were 126, 9 to 12 year old school children selected from four schools affected by the tsunami in the Galle district. Selection of the participants for the study consisted of two phases: selection of a sample for the survey and a sample for the interview. A total of 126 from among them, 20 children consisting of 10 boys and 10 girls were selected for the interview following the purposive sampling procedure; 63 boys ans 63 girls. The participants were of pre-adolescent age group ranging from 9 to 12 years. The pre - adolescent age group was chosen in the present study, because it is documented that at this age there is an increase of stress reactions compared to the other stages of development, therefore could be the age group who needs priority in support in adjustment. The participants were Sinhalese and from families at the lower socio-economic level.

Measures

Multi method research tools were constructed to examine stress reactions and coping resources in children in the present study. Three self-report measures containing a structured questionnaire, a semi-structured questionnaire and a semi - structured interview sche- dule were designed as the research instruments. All the measures used in the study were validated to meet the local cultural requirements.

First, the outline of the test was produced establishing the subject area, objectives, medium, administration, procedure, population and sample. After the definite and organized planning of the test, the test's preliminary try - out form was prepared. To prepare the preliminary try - out form, suitable items from other standardized and constructed tests were selected. Then, the collected items of the tests were sent to five specialists in the field of psychology. They were asked to review the clarity of the words, content appropriateness, age appropriateness, culture appropriateness, sufficiency of test material, ordering of the questions, the form of the test and the clarity of the instructions given for the tested. The specialists were asked to rate each question on these criteria by assigning each item a score ranging from 0, which indicates not appropriate at all; to 9 which indicates very appropriate. The views and criticisms of those who took the test were meticulously considered. According to their suggestions the language and format of a few items was changed. Next, to establish the content validity of the instruments, the measures were sent to six specialists in the sub- ject area of Psychology and they independently rated the measures along the criteria of content appropriateness, age appropriateness, culture appropriateness, and clarity of the words according to the above mentioned 0-9 scale. The specialist reviewers had never seen or been consulted about the instrument prior to independently rating the measure. The final test construction started after initially testing and evaluating the test at different levels. The final test included only those items, which were valid.

The Emotional Distress Questionnaire (EDQ)

A 24 - item self-report measure was designed for this study to assess the nature and magnitude of emotional distress.

The Child Coping Questionnaire (CCQ)

A 25 - item self-report measure was developed for this study to assess the frequency of the use of different coping strategies and the relative effectiveness of each strategy in dealing with disaster related emotional distress.

The Semi - Structured Interview Schedule

This was designed to gain an in-depth view of the nature of distressful experiences and how the children tried to cope with it.

Procedure

In the first phase of data collection, approximately 15 months after the tsunami of December, 2004, after obtaining informed parental consent and child consent as well, the researcher administered a series of self-report questionnaires to 126 child participants during school hours. All self-report measures were read to the students. The battery of measures was completed in approximately 40 - 45 minutes.

In the second phase of data collection, individual semi-structured interviews were carried out with twenty children in June 2006, 18 months after the tsunami disaster. The researcher herself conducted the interviews with each child separately, while a female research assistant took down notes. Each child was interviewed for one to one and a half hours continuously or with a break depending on the child's needs. Recognizing the possibility that children may feel upset as a result of taking part in the interview, especially since as they were going to discuss a particularly traumatic event in their lives, children were informed about the fact that they do not have to answer any particular question if they did not want to. Interviews were tape recorded with prior explanation of its purpose and with permission. Children also assumed that they could stop the interview or taping and withdraw from the interview at any point if they wished to. Care was taken not to be too direct, to avoid leading questions and to pick up the cues during interviews. It is essential that the interviewers do not leave children upset or sad following the session. It is imperative that non - intrusive, future - oriented, hopeful questions are asked so that the child goes away with a positive attitude. As closure was important, after speaking to a child about his / her traumatic experiences, it was especially attempted to comfort a child who appeared distressed. Indi-

vidual 'winding down' sessions also helped the children remember or discover her / his own working coping mechanisms. Effort was taken to leave the children in a positive mental state. The study recognises that whatever research methods one uses, there are inherent limitations and risks. In addition, conducting a study with children and those who have been affected by the tsunami make a study that much more difficult to carry out. Hence, especially when methodology was concerned, the study including the sampling remained flexible, giving children the priority so that they would not be unnecessarily affected emotionally, yet again.

Findings of Quantitative Data

Around 50 per cent of the total sample was in the score range of 31 to 50 indicating a moderate level of emotional distress. Around 7 per cent experienced lower levels of emotional distress, being in the score range of 17 to 30. About 43 per cent of the sample was in the score range of 51 to 70, indicating a higher level of emotional distress compared to the other children in the sample. However, no children were in the score range of 71 to 85, which indicated a very high level of emotional distress as shown in the graph below.

Figure 1: Degree of Emotional Distress in Children
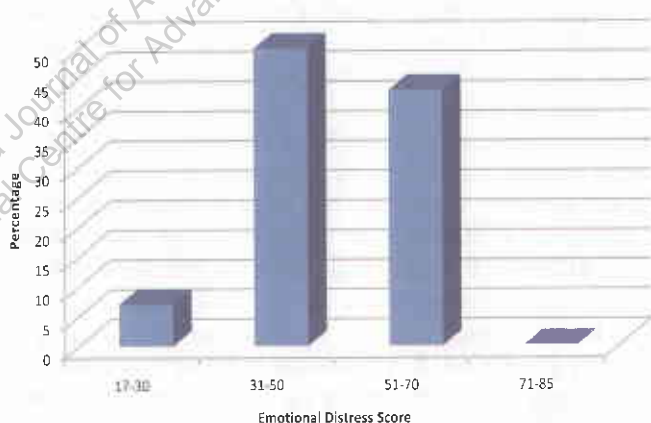
Source : Compiled by the Author

Participating children reported using religious strategy most frequently, followed by distraction, social support, active problem solving and emotional regulation coping strategies.

In terms of religious coping 83 per cent reported that they engaged in religious rituals to deal with the distress caused by the tsunami. More girls 44 per cent than boys 39 per cent reported using this coping strategy. Also 64 per cent of older children in the age group of 11 to 12 reported engaging in religious rituals to deal with emotional distress, where as 19 per cent of the children in the 9 to10 age group reported using this strategy. The mean score 3.90 fell between "sometimes" and "often" points on the five-point Likert scale. 82 per cent reported using distraction coping where they tried to forget about the problem, and the mean score for distraction 3.78 also fell between "sometimes" and "often" points. 43 per cent girls and 39 per cent boys reported using distraction as a coping strategy, where as 65 per cent of older children of 11 to 12 age group and 17 per cent of younger children of 9 to 10 age group reported using distraction.

In response to social support coping 81 per cent of the total sample reported that they tried to feel better by spending time with family, friends or neighbours $M=3.84$. More girls 42 per cent than boys 39 per cent were found to be mobilising social support as a coping strategy. In terms of age, 62 per cent of children in the 11 to 12 age group and 19 per cent of 9 to10 age group reported using this coping strategy. In terms of problem solving coping 76 per cent reported that they tried to sort out the problem by doing something about it $M=3.48$. 40 per cent of girls and 36 per cent of boys reported using active problem solving when confronted with a distressful situation. In response to the use of emotion regulation coping 76 per cent of the total sample reported that they tried to calm themselves down $M=3.70$. More girls 43 per cent than boys 33 per cent reported trying to control their emotions.

The least frequently used coping strategies were social w drawal and blaming others followed by ventilation of emotions through crying, screaming or getting angry, and humour. Only 20 per cent of the total sample of children reported using social withdrawal coping while 21 per cent reported using blaming others as a coping strategy. More boys 15 per cent than girls 6 per cent reported using blaming others as a coping strategy. The mean scores for both of these coping strategies fell between "not at all" and "rarely". In terms of ventilation of emotions

31 per cent reported that they shout, scream, cry or get angry when reminded of the tsunami. 34 per cent of children reported that they use humour as a coping strategy. More boys 20 per cent reported using humour as a coping strategy then girls 14 per cent. The mean scores for emotional expression and humour coping strategies fell between "rarely" and "sometimes" points. No statistically significant differences could be observed in coping preferences between girls and boys.

Multiple Regression Analyses

Coping made a beta contribution of 1.23 towards emotional distress, indicating that higher levels of coping efforts are associated with higher levels of emotional distress. However the effect of overall coping effort on emotional distress was not significant. A second multiple regression analysis was run in an attempt to examine the effect of each individual coping strategy on emotional distress. The overall regression model predicting the development of emotional distress from the individual coping strategies was rather a poor fit, but explained a significant amount of variability in emotional distress Adj. R^2 = .264, $F(1,11) = 4.42$, $p = .0001$. The full model accounted for 34 per cent of the variance in emotional distress. These findings are summarized in Table 1.

Distraction, which means that the respondent tries to forget the calamity, made a significant contribution of beta = .21($p < .05$), indicating that increases in the use of distraction coping strategy was associated in increases in the level of emotional distress. Cognitive restructuring also indicated that increases in mobilizing cognitive restructuring coping strategy was associated in increases in the level of emotional distress β =.23, $p < .05$. Increases in avoidance also was associated with increases in emotional distress (beta = .18, $p < .05$). The other coping strategies namely problem focused coping, emotional regulation, wishful thinking, seeking advice, and religious coping were associated with non significant increases in emotional distress. No significant relationship was found between age and the emotional distress or age and coping.

The quantitative findings have provided an overall picture of the magnitude and nature of emotional distress prevalent among children and what coping strategies have been utilized to manage emotional distress. In the next section the findings of qualitative data will be presented providing a more in-depth and a holistic perspective of the nature of children's emotional distress and efforts to cope.

Table 1: Simultaneous Multiple Regression for Variance in Emotional Distress Explained by Coping Strategy Items (N =125)

Predictors	B	SE	β	P
Distraction (a)	1.772	0.725	0.214	0.016
Cognitive Restructuring	1.891	0.759	0.231	0.014
Obtaining information	0.147	0.840	0.018	0.861
Active Problem Solving	0.424	0.966	0.048	0.662
Ventilation of Emotions	0.518	0.806	0.056	0.522
Emotional Regulation	0.351	0.794	0.044	0.659
Wishful Thinking (a)	0.719	0.694	0.099	0.302
Wishful Thinking (b)	0.747	0.748	0.100	0.320
Seeking Advice	0.581	0.762	0.067	0.448
Avoidance (a)	-0.161	0.752	-0.021	0.830
Avoidance (b)	1.412	0.714	0.183	0.050
Religious Coping (a)	0.094	0.728	0.012	0.898
Religious Coping (a)	0.485	0.844	0.053	0.567

Note: Dependent Variable: Emotional Distress Total Scale Score
Adj. R^2 = .264, F (1, 11) = 4.42, p = .0001
Source : Complied by the Author

Findings of Qualitative Data

The overall analytical approach adopted in the data analysis process was the thematic analysis.[2] Thematic analysis was performed following the conventions of template analysis[3].

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2 Thematic analysis is a search for themes that emerge as being important to the description of the phenomenon. The process involves the identification of themes through careful reading and re-reading of the data. It is a form of pattern recognition within the data, where emerging themes become the categories for analysis (see Daly, Kellehear & Gliksman, 1997).

3 The term "Template Analysis" refers to a particular way of thematically analysing qualitative data, where the researcher produces a list of codes (template) representing themes identified in the textual data (see King, 1998).This approach involves looking at a small section of the data set and identifying the themes that are emerging from the data. These themes are then organised in a meaningful way forming a 'template' or a code book. The template is then used to analyse the whole data set.

Children who were directly exposed to the event, perceived higher threat to life, experienced loss of loved ones and had to stay in welfare camps experienced greater levels of distress than other children. In addition, children who were experiencing other personal problems, not directly related to the event, before the disaster and aftermath the disaster also were reporting higher levels of emotional distress. A strong social support network appears to reduce the levels of emotional distress experienced by these children. Despite the distressful experiences they encountered, the results show that most of the children were adjusting well to the normal life. Most of the children used coping strategies to overcome the distressful experiences they encountered.

None of the children liked to get distracted while studying. Almost all the children have tried to block the distracting thoughts by using a variety of coping strategies. Most of the children reported avoiding thinking about the distracting phenomenon and getting back to studies. A few have used ventilation of emotions such as crying or, distraction such as stop studying and engage in something else or mental disengagement like to block distraction. Even though most of the children could successfully deal with the problem of distraction during studies, a few children were not successful in utilizing effective coping strategies to overcome this problem as was the case with Shalini:

> *I remember what happened in the tsunami. I keep on thinking of that. However much I try to listen to the teacher, I end up remembering about the tsunami*

When asked about their responses when they see or listen to a programme on the tsunami being telecast, the majority said that they go away from that place and attend to something else such as playing, sleeping or doing school work. But some children liked to watch or listen to programmes on the tsunami as long as these programmes did not contain any distress arousing information. Ravi commented on how he watched these programmes:

> *I watch programs on tsunami. But when they show a scene which I don't like, I go away and do something else such as home work.*

The role social support played in children's lives is presented here. The majority of children have sought support of others when they were confronted with a problem:

> *I tell my problems to somebody. I can't keep it to myself as I keep on worrying about it. [Kamila]*

Almost all children tried to cope with their distress caused by intrusive thoughts, images and dreams. Some sought the solace of religion when they had a frightening dream by chanting *Ithipiso* gatha while some others sought the support of others to alleviate the distress. A few have distracted their minds from distressing thoughts and images by engaging in an activity such as reading a book till they got sleepy again. Notably, every child actively tried to cope with the distress without being passive victims of intrusive images, dreams and thoughts.

Discussion

Most of the people usually believe that their personal worlds are predictable, benevolent, and meaningful. They assume they can trust in themselves and in other people and that they can cope with adversity. Disaster destroys these beliefs. They become aware of their vulnerability as they feel helpless and hopeless in their inability to make decisions and to act in ways that would have control over what is happening in the environment. This is especially true with children as they have less control over environmental contingencies found helpful for reducing stress compared to adults. Hence, it is understandable why disasters bring a wide variety of emotional disturbances to its survivor children.

All of the children in this cohort were exposed to the disaster, and almost all were still experiencing mild-to-severe emotional distress15 months after the tsunami. It is not unusual to find a significant proportion of children experiencing emotional distress after a very devastating disaster. Although distressing for all, children might have been particularly affected by the loss of their familiar environment such as home, school and peers, as children feel safe and secure when they have consistent and predictable routines in life. The findings of the present study reveal clearly the types of coping strategies children use in the face of disaster and how these methods are related to reduce emotional distress.

Religious coping strategies were the most frequently reported followed by distraction. Religo-cultural beliefs that turning to religion would assist in coping with adversity might have led the majority of children to rely on religious coping strategies. A significant relationship exists between coping and emotional distress indicating that higher efforts in coping were associated with higher levels of emotional distress. Information provided by the regression analyses also revealed that coping efforts contributed uniquely to the variance in emotional distress captured 15 months post tsunami taking each of the other variables into account. The explanation behind the strong relationship between coping efforts and emotional distress seems to lie in the fact that the children who are highly distressed have put more effort in coping than the children experiencing a lesser amount of distress. These results also suggest that high levels of distress following a disaster which causes multiple disruptions in the child's life, may initially elicit a variety of coping strategies, both positive and negative. This result supports previous findings which show that the more stressful a problem is, the greater the use of coping strategies, which can result in a spurious correlation between coping and distress. This result also substantiates previous findings that have shown more coping is not necessarily better coping (Coyne, Aldwin & Lazarus, 1981).

There was a significant difference in the level of emotional distress depending upon the type of coping strategy used. Regression analyses showed that distraction, cognitive restructuring and avoidance contributed significant portions to the variance captured in emotional distress where as the other coping strategies showed no unique contribution to emotional distress. Hence, the use of these three coping strategies could be identified as contributing to increase the level of emotional distress. Aside from distraction, cognitive restructuring and avoidance coping strategies, active problem solving, seeking advice, emotional regulation, obtaining information, ventilation of emotions, wishful thinking, and religious coping strategies represent strategies strongly associated with emotional distress. These strategies may represent a struggle to deal with a traumatic situation such as accepting the death of a family member that is unresolved and may have developed as a result of the trauma. If the latter is true, then early intervention promoting adaptive coping strategies is critically important. It may also be that these strategies are a part of a child's normal coping pattern and were exposed, and perhaps exacerbated, by the trauma. It is also possible that the presence of higher levels of emotional distress led the children to use coping strategies to get control over the level

of distress. As these coping strategies were the most popular among children, the majority of the children including the highly distressed children have preffered to use these coping strategies to aviod building up furthur distress. Their attempts to deal with higher levels of distress might have resulted in greater use of these coping strategies which has ended up with a strong positive correlation between coping and distress.

As stated earlier, children were not passive recipients of adversity, but active survivors. To deal with emotional distress, they used diverse coping strategies depending on the context. The findings of the qualitative data study indicate that not the same coping strategy had been effective in managing different distressful experiences. For example, religious coping had been effective in coping with accepting the deaths of loved ones and also when experiencing bad dreams, whereas it had not been considered as effective in dealing with distraction during studies or when experiencing difficulties with getting along with others. Active problem solving and mental disengagement had been effective in dealing with distraction during studies, while distraction had been helpful in coping with intrusive thoughts and images of the event. Avoidance also had been successful in dealing with the reminders of the event which caused distress when encountered. On the other hand when the child experienced distressful feelings such as sadness and fear, and bad dreams, seeking social support through expressing one's feelings to a familiar person had been effective in overcoming the distressful experiences. It might seem contradictory that both attempts at avoiding talking about the distress causing topics, and also expressing distressful feelings had been effective in dealing with emotional distress for the children in the current sample. The explanation seems to lie in the fact that by using avoidance children had tried to refrain from encountering distress evoking situations, thereby minimising the chances of experiencing distressful feelings. But, when they were subjected to distressful experiences, sharing it with someone dependable and considerate, and getting their support had been effective to overcome the distressful situations. Hence, avoidance had worked effectively at certain situations where as social support at other instances.

These findings are contradictory with the quantitative findings which show that many coping strategies such as religious coping, problem solving, ventilation of emotions and seeking advice were strongly associated with the increases in the overall score of emotional distress.

The explanation seems to lie in the fact that every coping strategy is not effective in dealing with overall emotional distress, only with different distressful experiences. In the quantitative part of the study, it was mainly attempted to identify the coping strategies effective in dealing with the overall emotional distress. However, with the qualitative findings it is apparent that utilising different strategies according to the nature of the situation had been effective, but not in dealing with overall level of emotional distress. Hence, it is possible that the strong correlation between higher levels of emotional distress and certain coping strategies such as religious coping, problem solving, ventilation of emotions and seeking advice had occurred not because they were ineffective in dealing with emotional distress altogether, but because they were effective in dealing only with certain distressful experiences and not with overall distress. This speculation is consistent with the process-oriented perspectives of stress and coping which assert that particular types of coping may be more effective in managing certain types of stressful situations, but ineffective in managing other types of situations. According to these findings, it may be unwise to characterise any coping strategy as universally or cross-situationally adaptive or maladaptive especially in the absence of empirical evidence (Lazarus, & Folkman, 1984). They have noted that "the goodness of a strategy is determined only by its effects in a given encounter and its effects in the long term". This finding also highlights the importance of employing a multi-method approach in research, in order to get a more revealing and detailed perspective on the issues raised.

Children's coping choices indicate that most of them were sensitive to the nature of the different situations and were capable of selecting and mobilising a coping strategy that is effective in dealing with a particular distressful experience. These children's flexibility and capacity in mobilising different coping strategies depending on nature of the distressful situation might have helped them to cope more effectively. But findings show that some children were not competent in choosing the coping strategies that were effective in dealing with distressful situations. Psychosocial intervention providers might be able to help these children to develop more effective coping skills in dealing with distressful situations.

Conclusion

It is important to mention that most the children in the current sample reported their efforts to cope with the distressful experiences

showing their capacity to strive against adversity. These findings also indicate that the children are not passive victims of adversity, but active survivors. But not all children are equally effective in choosing the coping strategies which would effectively deal with distress. Hence, some children would need guidance in selecting the appropriate strategy for the appropriate situation. Ideally, intervention programs that decrease the negative strategies and increase positive strategies should be used to reduce the levels of emotional distress in children after natural disasters. However, psychosocial intervention providers must be careful when promoting coping strategies in these children as not every coping strategy will work effectively with every child or every situation. Children's individual characteristics as well as the nature of the distressful experience have to be taken in to account before promoting coping skills in children. In planning intervention programmes, it is important to consider the fact that both individuals and communities have natural healing processes. The central task of psychosocial intervention should be to elicit, facilitate, and support these healing processes and to remove the obstacles to their operation, in order to prevent lasting dysfunction and distress.

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