

# Psychological Impact of Disaster and Rehabilitation of Children in Orphanages

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## Abstract

*Human-made disasters have a different impact on adults and children where young children are most vulnerable to the negative effects of disaster owing to their lack of awareness of preventive measures and inability to cope with post-disaster stress and recovery process. This study was aimed at exploring the psychological and behavioral impact of disaster on children and the role of caregivers in the children's rehabilitation in orphanages. The sample size consisted of 18 children (9 boys and 9 girls) and 9 primary caregivers (mother-maids) taken via purposive convenience sampling from Pakistan Bait-ul-Mal's Sweet Homes Orphanages. A semi-structured interview in Urdu was conducted to obtain desired data. The results showed that disasters have a negative effect on the psycho-social state of the children in terms of increased dependency, sleep disturbances/bad dreams, sadness/emotion regulation, social withdrawal and need for social support from elders and peers. The traditional gender role socialization contributes to the risk of problems after disaster. There were gender differences in expression of emotions where girls were more expressive than boys about their traumatic experience. The girls preferred to share feelings with their peers whereas the boys were more comfortable sharing with the mother-maids than with the other children. Both the girls and boys were non-cooperative initially but the boys also showed aggressive attitude. According to the caregivers' reports, over time, the children showed an improvement in their emotional and behavioral disturbances. Thus it seems likely that the smooth rehabilitation process and healthy social relations with peers and caregivers may minimize the negative effects of disaster. It is suggested that psycho-social therapeutic interventions like catharsis, play and art therapy are needed which help the children cope with the effects of disaster. Training of caregivers can help to screen out children who need professional medical help.*

## Introduction

Disasters are crisis situations which are immediate but with long term effects. There have been many definitions suggested for 'disaster' but the World Health Organization/Emergency and Humanitarian Action Department defines disasters as, "Any occurrence that causes damage, ecological disruption, loss of human life or deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside the affected community area." Disasters are not only caused by the disturbances in the natural environment. There are two types of disasters, natural and manmade (non-natural). Natural disasters include earthquakes, floods, drought, landslides etc whereas wars, terrorist attacks and bomb blasts some under human-made or technological disasters. There have been many researches that are conducted on the issue of disaster management and gender dimension. It has been found that there is variance in the negative impact of disaster on men and women which may be due to the biological differences or disparity in social roles.

There are some major stages in the disaster process like perception of risk, awareness of precautionary measures, exposure to disaster, physical, psychological and social impact and eventually the rehabilitation and recovery. All of these levels are equally important and can

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contribute to either mitigating or increasing the negative impact of the disaster. "Young children are less well equipped to deal with deprivation and stress due to their particular physical, social and psychological characteristics" (Bartlett, 2008). It is for this reason that the children are vulnerable and are most affected from the disaster owing to their invisibility in disaster preparation stage or neglect during the recovery process. "These (disasters) events can often cause short-term disruptions within the family or they can be long-term and change the lives of family members dramatically. There is often a sense of lost reliability, cohesion, and predictability that can be distressing to children and youth" (Borden, 2004)

There has been a lot of research on the impact of disaster; however, information about the effects of disaster on children is a recent development. In some regards, the characteristics of stress in young children are similar to those of older children and adults; in other ways, their reactions are unique (Sullivan, 1998). American Academy of Pediatrics Work Group on Disasters (1995) suggests that there are five primary responses seen in children resulting from loss, exposure to trauma, and disruption of routine, increased dependency on parents or guardians, nightmares, regression in developmental achievements, specific fears about reminders of the disasters, demonstration of the disaster via posttraumatic play and reenactments.

A study by Yule and Bulut in 2000 attempted to analyze the responses of the children after disaster and realign the DSM 4 criteria. These dimensions appear to be: (1) blocking/vigilance, (2) affective/adjustment difficulties, (3) re-experiencing/ intrusion, (4) somatic/attachment and (5) sense of foreshortened future. Items of avoidance stimuli, loaded across factors, with avoiding places associated with vigilance, avoiding people associated with adjustment problems, and television stimuli associated with re-experiencing. Fourteen months after a hurricane, young children who had experienced the storm showed significantly higher anxiety and withdrawal and more behavior problems than did children who had not (Swenson, 1996).

Even among children, it is important to note that there may be different reactions from boys and girls towards disaster. As David Geary of the University of Missouri, who was involved with a study of post disaster effects on children stated "We can't expect boys and girls and men and women to react the same to these types of disasters". Thus one should account for the gender differences in the psychological and social impact of disaster on children. A study researcher Jacob Vigil of the University of New Mexico states that Females tend to have close intimate relationships and smaller social networks where behaviors like depression "are very effective for increasing help from other people, but only from intimate confidants, the types of relationship partners that females form more so than males," In contrast, males tend to have larger social networks and form less intimate relationships in which dominance and aggression play big roles, Vigil said.

## **Methodology**

Disasters can negatively impact children's lives as they witness tragic incidents, communities falling apart and families losing property and life. If adequate methods are adopted, the process of rehabilitation can gain speed but if the gap between disaster and recovery is wide then the children may experience trauma, sadness, loneliness and dysfunctions in their life.

### **Objectives**

1. To examine the moods, thoughts, emotions and behaviors of the children affected from the disaster
2. To determine the gender differences(if any) in children with respect to psychological impacts of disaster
3. To determine which coping strategies or areas need intervention from guardians or rehabilitation centers

4. To understand the role of caregiver in rehabilitation of children after disaster

#### **Hypothesis:**

1. Human made disasters have a negative influence on the psychosocial state of children
2. Role of caregivers has a positive effect on the rehabilitation of children affected from disaster
3. Gender has an effect on the rehabilitation process of children after disaster

#### **Operational definitions**

**Human-made disasters:** A major adverse event caused by deliberate (bomb blasts) human actions that's causes damage, loss of human life on a scale sufficient to warrant an extraordinary response from outside the affected community area.

**Caregivers:** Female mother-maids that facilitate the children in the rehabilitation center

**Psychological Impact:** relating to mental thoughts or emotional state

#### **Research design**

It was a qualitative study with semi-structured interviews comprising of open ended questions.

#### **Sample**

There were a total of 18 children (9 girls and 9 boys) who had been affected by man-made disaster and 9 primary caregivers (mother maids) interviewed for this study. The sample was selected via purposive convenience sampling. The approximate age for mother maids was from 18-25 years who had passed middle school which is one of the criteria of being a mother-maid at the centre. The children came from diverse backgrounds; Swat operation, Dera Bugti turmoil, Barakhu blasts and Kashmir. The orphanages of Pakistan Bait-ul-Mal project of "Sweet Homes" were approached for the interviews which were taken from:

1. 9 girls with approximate age from 8-12 years who had spent a month or two at the centre after the disaster along with 5 caregivers
2. 9 boys with approximate age from 8-13 years who had spent around 4-5 months at the centre along with 4 caregivers

#### **Instrument**

A semi-structured interview with five open ended questions was conducted separately for caregivers and children. Language employed was Urdu which was the second language for the children and also was used at the rehabilitation centre for communication among staff and children.

#### **Procedure**

The researcher had contacted a member working for the Pakistan Sweet Homes project and requested her to grant permission to access children for interview purposes. After providing the Pakistan Bait-ul-Maal with the necessary university approval documents and explaining the nature of the research, the researcher was assigned time slots to visit the sweet homes orphanage. In the field, the researcher was helped by the staff to identify girls and boys who had suffered from a man-made disaster and were vocal in expressing their thoughts so that the interview process could yield significant data. Approximately 15 minutes per participant were allotted for the interview and the responses from the field notes were analyzed in accordance with the themes and categories assigned to each question.

#### **Pakistan Bait-ul-Maal**

Pakistan bait-ul-maal (PBM) is an autonomous body set up through 1991 act and significantly contributes towards poverty alleviating projects and providing assistance to deserving strata of the society including widows and orphans.

## Pakistan Sweet Homes

One of the projects of Pakistan Bait-ul-Maal is ‘Pakistan Sweet Homes’ orphanages which cater to 3100 children all over Pakistan. According to the official website <http://www.pbm.gov.pk>, the resident children are provided with free facilities for rehabilitation. This includes furnished accommodation, nutritious balanced diet, academic and religious education, clothing, medical care, skill development, laundry service, legal aid and counseling services. There are approximately 15-20 children in one room who are looked after by a mother-maid. There are orphans with different backgrounds. Some have suffered trauma of a natural disaster like floods or earthquakes whereas some have experienced loss of a parent or parents in technological or man-made disasters like bomb-blasts. There are many mothers who could not afford education or a healthy upbringing of their children after the death of the father and therefore have sent them to the orphanage to avail the free facilities provided.

## Discussions and Analysis

The study aimed to explore the psychological and behavioral impact of disaster on the children. It also looked at the roles of caregivers at the rehabilitation center and how they shape up the relationship of children with the caregivers. The interviews were conducted to assess the changes in moods, thoughts, emotions, behavior and the nature of relationship the children have amongst themselves and with their primary caregivers i.e. the mother maids. The following themes emerged from the responses of the children and their mother-maids.

### 1. Moods/Thoughts/Emotions Related Issues

#### a. Expression of feelings

One of the girls said that her deceased father was a “fauji” (soldier) and she wanted to talk about him because “dil halka ho jata hai” (it soothes the heart). Some girls stated that during the initial days, no one talks a lot about the past because it feels “ajeeb” (weird) and after a few days there is so much activity like functions, visits and everyone becomes happy and “yahan sab khush lagtay hain to dil nahi karta kuch bura batanay ka” (All girls seem happy here so I don’t want to talk about anything bad). However, the girls said that they liked to discuss their home and pre-disaster days at school with other girls at night before sleeping. Most of the girls stated that they felt close to the elder mother-maids and shared “dil ki batein” with them (personal stuff). One of the mother-maids stated that “larkiyan haadse ki bajaaye us se pehlay ki baatein karna pasand krti hain, puranay dost aur school ki baat kr k kahaniaan sunati hain” (girls prefer to talk about pre-disaster life back home, about old friends and school). The caregivers also mentioned that the girls were expressive about their trauma and communicated with other girls more than with the mother maids as one of the girls said, “doston ko andaaza hai hum sab ka issi liye us se share krti hon” (friends know of our situation so I share with them) All the girls who had their biological mothers back home stated that they eagerly waited for their mothers’ phone call to talk to them. They said that their mothers had told them that the girls will get a good education at this centre as one of the girls said, “mama nay hostel parhnay k liye bheja hai ta k mai doctor ban jaon” (my mother has sent me to this hostel so that I become a doctor). One of the girls said that she could not talk to anyone except her mother and waited all day for her phone call and told that “meri mama ayengi iss haftay and lay kr jayengi” (my mother will come this week and take me away). The caregivers were inquired regarding the accuracy of the children’s statements when they say that their mothers will come to pick them up. The mother-maids said that the children make up stories saying that their mothers are coming today or tomorrow when in reality they are assured time and again that they will have to adjust here in the centre. One of

the boys said that he had pictures of his family from home which he uses to make up stories to tell to other children about his life at home before disaster.

Five of the nine boys stated that they did not like to express their feelings as it makes them unhappy and “baat kar k yaad ati hai to rona ata hai...wo wakaya aur awazein” (after expressing, I remember things and then want to cry...the incident and the noise) and also “Jijhak hoti hai, ab to hogaya, ab kia faida batanay ka” (I feel hesitant to talk because what is done is done, what is the need to tell now?) The boys stated that they felt comfortable with elders around and preferred to talk to elders regarding the disaster rather than their peers as one of the boys said, “share nahi karta kissi se laiken aunty ziyada poochti hain so unsey baat kr leta hon” (I don’t share with anyone but with aunty because she asks a lot (about the disaster)).” The caregivers for the boys said that initially the children were very upset and did not know how to vent out but after a few weeks, they started to trust us and were expressive about their feelings. The boys counted both their peers and mother-maids as someone they were close to and easily talk to when feeling low due to memories of home and the disaster but it had taken them some time to build a rapport with their new friends.

The mother-maids were of the view that the boys were not very expressive in the initial days at the centre and tended to avoid the subject of the traumatic experience as one boy said, “yaad hi nahi karta jab koi poochay” (I don’t try to remember when someone asks me about the experience). When some boys started to speak up, the rest of them followed suit. Majority of the boys said that they could not relate to the mother-maid as she always seems busy in domestic chores around the centre therefore they called her only when going to the washroom.

#### **b. Sense of connectedness with other children**

One of the girls said that when she opened up her heart to another girl by revealing her experience of the traumatic experience she found out that even her new friend had something similar to share. “We became best friends after that and I asked my mother-maid to shift her to my room so that we can share our feelings easily” When asked why she did not prefer to talk to her mother-maid, the girl said, “Kuch baatein sirf friends se share karnay waali hoti hain” (There are some things that can only be shared with friends) and explained that her friends understand what she is talking about because they have themselves had experiences of traumatic incidents and also because “dost har waqt saath hoti hain” (friends are always with her) The boys said that although they are friendly with one other and help each other in studies but when someone has to share feelings of the disaster, they seek help from an elder. This is because the boys feel that other children will not be able to understand their issues.

#### **c. Sadness/emotion regulation**

The girls were grief-stricken because they had to abandon their schools and families after disaster as a girl said “udaas hon k ghar kharab hogaya aur chorna para” (I am sad that my house broke down and I had to leave home) One of the girls stated that she does not express her feelings about the death of her father in a bomb blast because “royen to gunah milta hai, mai nahi batati kissi ko, mehsoos hi nahi honay deti” (It is a sin to cry, I don’t tell anyone, I don’t let myself feel it)

One of the boys was biting his nails continuously and stated “Rona ata hai par razaai mai rotay rotay chup hojata hon, kissi ko pata nahi chalnay deta” (I cry under the quilt and stop after sometime and don’t let anyone know). Another boy said “rona ata hai laiken control kar leta hon” (I want to cry but I control it). A boy said that when he feels like crying, he finds a quiet place to sit alone because he thinks that “dost nahi samjhain gay jo unko bataaonga” (peers will not understand what I say) When they see anyone crying, the boys said that they

comfort each other by saying “Chup karo, kal parson ghar se koi ajayega” (calm down, there will be someone from home to visit you here soon). The caregivers said that the boys tend to cry for five minutes at the most and when someone cracks a joke or a sports or art activity is planned, the boys forget that they were crying and instead take part in the activity.

#### d. **Bad dreams/Sleep disturbances**

The children said that they usually had bad dreams which woke them up from sleep. Sometimes, evil or bad things like ‘jins or churails’ came into their dreams which scared them. At other times, they dreamt up their family members who had died in the disaster or saw pictures of their schools and homes which had to face destruction in the wake up disaster.

Majority of the girls mentioned that they had trouble sleeping at night and sometimes due to a bad dream they try to wake up their friends and narrate fairytales with them. One of the girls said that “churailain aur jin atay hain (khawab mai) to mai apni dost se kehti hon k kahani suna do” (I see witches in dreams so I wake up my friend and ask her to tell me a story). Another said, “ammi ko yaad karti hon to raat ko khawaab mai bhi ajati hain to bechaini hoti hai milnay ki” (I miss my mother so she comes in my dreams at night and I grow restless to meet her)

When asked from the boys about their dreams at night, four of the nine boys said they see their mothers or fathers in the dreams. One of the boys remembered his dead father and said “Abu khwab mai a kar kehtay hain k meray pass ajao” (In the dreams, my father asks me to come to him) A boy said that he has pictures of his family and he makes sure that he keeps them close to him when going to the bed at night so that he dreams of his mother and father. Another boy said, “Jin a kar daratay hain laiken phir so jata hon” (Jin comes in nightmares but I sleep again)

None of the girls or boys mentioned any problems regarding the usage of washrooms but while interviewing the caregivers, surprisingly, all of them stated that the children did not bother if they peed in their pants. The mother maids said that sometimes when asked as to why they did not go to the washroom, the girls used to say that they did not feel it coming. It was after a few weeks that the girls started to realize that they should schedule their washroom routine to avoid any untoward incident but still there were some complaints from the mother-maids regarding the girls’ bowel movements outside the toilet. Similar was the case with the boys where they did not have shame in excreting outside washroom. After training and admonishment from the mother-maids, the children realized the problem.

## 2. **Attitude/Behavior Related Issues**

The children and the caregivers were asked to list any behavior related changes they had noticed after the traumatic experience. Following behaviors were inclusive in the responses. The girls and boys exhibited social withdrawal, non-cooperative attitude and bowel movements outside the toilet whereas the boys also showed aggression in the initial days.

### a. **Social withdrawal**

The boys and girls, both, had taken time to adjust to the new surroundings after disaster. They said they wanted to be alone because they could not believe or understand how things had changed and for how long would they be required to face the impacts of disaster. One of the boys said, “Akelay beth jata hon ta k koi poochany na aye k kia hua” (I sit alone so that no one comes to ask me what happened) The caregivers mentioned that the girls remained aloof and remote when first brought into the centre. The girls said that the traumatic incident as well as the separation from the family was difficult for them and it had taken them a lot of time to adjust to the new environment. One of the girls stated that “shuruh mai akelay

bethnay mai sakoon milta tha” (Sitting alone helped me in the beginning) because she could observe other girls and slowly accept the other girls as part of her new family. A girl said “shuruh mai nai jaga ko pechananay mai masla hota tha” (She had trouble knowing the new place) One of the boys mentioned that sometimes he likes to sit alone and think of his old home and school and how his friends were doing without him and said “mai jab akela hota hon to sochta hon merya puranay dost ko pata bhi nahi mai yahan hon” (when I am alone, I wonder that my old friends don’t even know where I am)

#### **b. Non-cooperation/Aggression:**

The girls and boys, both were non-cooperative in the beginning but the girls did not talk about any form of aggression whereas the boys said that sometimes they feel angry that they had to face disaster and be separated from the family. The caregivers for the boys mentioned that in the first few weeks, the boys used to throw away plates in the dining hall at food hours and “khanay ko dekh kr mun banatay” (make faces while looking at the food). Some Balochi children were not used to eating “daal, sabzi or salan” (pulses, vegetables or gravy) but at the same they could not talk about their emotions owing to language barrier and also the grief they faced. Thus, they showed aggression or detachment from the rest of the children during lunch or dinner time. Eventually, a tea and bread item was introduced and an elder was seated amongst them during eating time so that children could gel in the new environment. The girls, on the other hand did not show aggression and after disaster, they did not want to change their routine. Hence, they were non-cooperative and ignored the instructions of the mother-maids.

### **3. Role of Caregiver**

The mother maids have the task to look after the practical needs of the children as well as to make it easy for the children to express their feelings and adjust to a new environment.

One of the caregivers said that “shuru mai khanay peenay aur safai k koi adaab nahi atay thay bachon ko..ghussay mai ya dukh mai badtameezi kartay thay. Humai khud table pr beth kr sikhana parta tha k achay bachay kaisay khatay hain” (In the beginning, the children were ill-mannered regarding eating and hygiene issues so we had to exhibit manners ourselves to help them learn) The mother maids said that boys did not even do small things like cleaning nails or brushing hair by themselves and “humaray pr bohat depend krtay, kuch khud se nahi krtay” (they depend a lot on us and don’t do anything by themselves). In the beginning, the children used to speak foul language and abuses and the mother maid had to correct them, “mainay kaha ye gaali ammi ko lagti hai..mat dia karo...salute hai ammi ko...ammi k naam pr bachay chup hojatay hain...” (I told them that abuses relate to mothers so don’t give abuses, I salute mothers because children listen to me due to her name) Sometimes, we have to train children by giving punishments or rewards like one mother maid said, “ Mai kehti hon jo bacha namaz parhay ga usko khana milay ga” (I tell the boys that they will be served food if they say their prayers properly)

One of the mother-maids said, “Wo royen to hum koi activity start kardetay hain ya joke ya kahani ta k bachay behal jayen” (If they cry then we start some activity or joke or story session so that the children become distracted). The mother maids have to explain the tragic experience to the children for them to understand what happened as one caregiver stated, “hum haadse ko asaan kr k samjhatay hain, unko itni samajh nahi bas ghabra gaye hain k achanak kia hogaya aur normal kab hoga” (We use easy words to explain the tragedy, children don’t have much understanding, they have become nervous). This also is shown by statement of a boy who said “wo bhula deti hain k hum peechay kia chor kr aye aur ye k yahan hum safe hain” (she makes us forget what we suffered in the past and assures us that we are safe here)

#### 4. Relationship of Children with the Caregiver

The mother-maids were of the view that the children had grown very dependent on them especially when they are first brought into the centre because it takes a lot of struggle, time and energy to train these children and teach them manners so that they become responsible. The problem arises when these children visit home for vacation which is usually after two years and then come back with the same old habits as one caregiver said “mayoos ho kar bachay waapis atay hain” (the children return to the centre, dejected) They see their mothers and home affected by disaster and it brings back memories of the traumatic incident therefore, sometimes, they stick to the mother-maids, listening to their commands and don't want to go back to their homes. A caregiver for the girls mentioned that the girls were very quiet on the first few days so they were asked to call me mama as “mama k lafz se ab wo bilajihak mujhse baat karti hain” (By using the term mother, they can talk to me without any hesitation) A boy stated that he prefers to share with mother maid because “baji sun leti hain...dost to poochtay hi nahi” (she listens to me...friends dont even ask) Another said, “Ghar ki yaad ati hai ya haadse k baray mai jee chahay to baji ko batata hon...wo shauq se sunti hain...mashwaray deti hain” (When I remember home or want to talk about disaster, I tell mother-maid, she listens with interest and gives suggestions) Another boy said, “incharge meri baat sun kr mama se baat karwa deti hain issi liye un se share krta hon” (The mother maid helps me call my mother back home so I share with her)

The boys and girls both were very fond of listening to stories from their mother-maids and said that she keeps all the children engaged till we fall asleep because otherwise it is very hard to sleep early. One boy said, “aunty kahani sunati hain to dil karta hai mai bhi kuch bolon (Aunty tells stories which encourages me to speak). The girls stated that in the beginning they could not relate to the mother maid and as one of the girls said “ye to meri mama nahi hain” (she is not my mother) but gradually, they realized that the caregiver paid attention to them and looked after their needs so the girls got attached to her and now they cannot let go of her or imagine a day without her as one of the caregivers mentioned that, “larkiyan meray janay pr ro perti hain” (girls cry when I have to take leave) One of the caregivers said, “itna attach hogaye hai k chutti par bhi nahi janay detay (The children have become attached to us that they don't let us take leave)

The children were all friendly with one another but in relation to boys, the girls tended to form quick relationships with other peers and caregivers. For girls, some had initiated the friendship on their own while the others had waited for someone to come to them and share feelings. The boys said that they had made friends while helping others with school work or joining them in outdoor activities where they were put together in groups by the rehabilitation centre. The girls said that there occur many fights but not for long. If one girl cries, the other girl, usually an elder one tries to console her. The caregivers said that there was competition and jealousy among the girls but at the same time, they did not prolong the fight. Similarly, the boys and their caregivers stated that whenever a boy cries, the others quickly notice it and call the mother-maid in charge of the boy to come and help him as one mother maid said, “aik rota to dosra meray pass a kr kehta, aap usko chup karanao” (when one cries, the other comes to me and asks me to pacify him) During the interview, many such cases emerged where some of the boys were concerned about the condition of a crying boy and had asked the caregiver to assist him.

The children said that the usual topic of discussion among them was regarding home and how they used to live in their regions. The caregivers mentioned that whenever there is time for selection of a monitor from amongst the children, there occur fights over the post and children become jealous of one another but in the end, they usually listen to the elected monitor.



## Discussions

The results of the study show that there was some similarity in the mood and behavior of the children after the disaster. There was an impact of the disaster on the relationships that the children formed with their peers and caregivers. Also, gender played an important role in some dimensions while checking for the impact of disaster on children.

The gender differences were prominent only some aspects of the impact as the sample was small and of young children. In majority of the responses, the children had stated that they distanced themselves initially because adjusting to a new environment after a disaster and without the guidance of biological mother or family was difficult. There was no aggression or hyperactivity found in girls whereas the boys showed slight displacement of emotion in the form of aggression. The children were asked who they approach when they want to share their feelings or talk about the traumatic experience. There were differences in the responses of boys and girls where, in comparison with boys, a greater number of girls stated that they liked to express their feelings and share thoughts on what happened to their families and homes after disaster. The boys, on the other hand, stated that expressing their thoughts about disaster was difficult for them as it usually brought tears and sadness, therefore they avoided it. The girls were comfortable with peers and caregivers whereas the boys sought elders only for conversation on disaster related experiences. These gender differences exist due to the socialization of children into stereotypical roles where boys are groomed to control their emotions and girls tend to have many emotional outlets. "Boys learn to deny or suppress psychological symptoms whereas girls learn to reflect their feelings more and become more emotionally expressive" (Korol, Green & Gleser, 1999). These roles are culturally defined and in Pakistani society and it is not socially acceptable for males to cry in public or explicitly show their emotions after a traumatic experience. Therefore the boys tend to be calm and composed rather than explicitly expressing their negative emotions. This attitude poses serious problems or internal conflict which aggravates the situation after disaster when the child needs to share feelings and express emotions. "Greater parental attention given to particular forms of emotional expression may lead children to increase their expressions of those emotions and not others. As other factors converge upon a child's life to contribute to their risk of problems, the presence of different emotional tendencies may be an early marker for the nature of symptoms" (M.Chaplin, M.Cole & Zahn-Waxler, 2005) In addition to this, this emotion regulation or lack of support or catharsis leads to bad dreams and sleeping disturbances.

The girls and boys were also asked to state any differences in their emotions, thoughts, behavior or moods that they felt after the disaster. The children noticed that grief over lost lives and homes and bad dreams leading to sleep disturbances were worrisome issues which have affected them after the disaster. In a study of third to fifth grade students after a hurricane, symptoms of social withdrawal, self blaming and emotional regulation were observed (Gammon 1993). In this study, there was no mention of self-blaming but the children wanted to sit alone in their own shells and had tried to conceal their emotions during the initial period at the centre. The children had not complained of any washroom related issues but the caregivers mentioned that they had trouble teaching the kids to learn how to control their bladder and go to the washroom when needed. A post-disaster study in Bangladesh on children aged 2 to 9 years state that "45 of the 134 children who had bladder control before the flood (34%) developed enuresis (bed wetting)" (Khan, Zaman, Stein, 1993).

The children were separated from their families and old routine and were disconnected from their educational institutions and friends. In addition to this, they had to adjust to new surroundings and unfamiliar faces, some having language and culture barrier. They had a vague understanding of current scenario so they exhibited social withdrawal.

It was observed from the responses that the emotions, thoughts and moods did not persist for a long time and the children involved themselves into learning and fun activities, provided by the rehabilitation centre. Thus natural or man-made disasters had a negative impact of the psycho-social state of the children but it was minimized due to the rehabilitation process. The emotional, psychological and behavioral changes the children faced after disaster like sleeping disturbances, mood swings, aggression and social withdrawal are inclusive in the symptoms of post-traumatic stress. They can be “attributed to magnitude of disaster experiences e.g. loss of loved ones, exposure to dead/injured bodies...separation from family and lack of proper housing ...traumatic reminders” (Dogan, 2011)

The children in this study were being rehabilitated in a peaceful environment with a number of facilities like a primary caregiver (mother-maid), education, entertaining events, trips to nearby places etc which provided them with the necessary support they needed to recover from the negative impact of disaster. Thus the prevalence of stress or grief might be mitigated by these successful efforts of the orphanages. As Nilamadhav Kar in the study of psychological impact of disasters on children states that “Prevalence (of stress) figures vary depending upon various factors including nature of disaster, duration following disaster, diagnostic criteria used, cultural issues regarding meaning of trauma, support available, etc”. It was found that mother-maids were influential in telling stories and making it easy for the children to express their feelings especially for the boys who looked up to elders. The children usually took help from the mother-maid who gave “mashwaray” (suggestions) to a sad or crying child. This was selective catharsis which could not benefit all children.

From the responses of the children and caregivers, it is evident that although the children want to express their feelings regarding the traumatic experience but they usually talk about pre-disaster life back home. One of the children said, “Apnay ghar aur school aur puranay doston ki kahaniaan suna kr dil khush hota hai” (I feel happy when I narrate stories of my home, school and old friends). The mother-maids, in order to distract the children from their grief, indulge them into fun activities like sports or academic work. The mood of the children might get better with such interventions but there is a dire need for emotional expression of the traumatic experience as well. The major activities like the 23<sup>rd</sup> March 2013 sports gala attracted the children and they actively participated in it. The busy routine distracts them from the otherwise trauma they experienced. Some of the performances that stood out were Mardan-born first grader Shah Faisal’s speech on terrorism. He said that with terrorism claiming the lives of men and women, many children will become orphaned like him, and not having access to education will make them vulnerable to extremist groups. (Bari, 2013)The children did not have a lot of platforms or opportunity to talk about what happened in the disaster and how their life changed or will change in future as a result of that incident. According to Dogan (2011), “Clinical interventions should focus not only on adolescents’ immediate psychological reactions but also consider their long-term problems”

There was a heightened need for dependency on some elder which showed itself when the children related to their mother-maids. The children seem hopeless after the disaster and seek attention from elders. According to a study conducted by UNISDR in June 2012, “Unlike adults, the children rely more on the external support system for their survival and protection, which crumble during disasters.”After disaster and especially upon relocating to an orphanage, the children face decreased physical and emotional availability of family members. They lose contact with old friends, school fellows, and teachers and have to let go of the old routine of life. Thus they feel comfortable with the caregivers in a new setting and become dependent on them.

## Recommendations

1. Apart from the immediate catharsis which helps the children to ventilate their emotions, there is need for a long term planning to prevent any complication due to inhibitions or repressions of the initial psychological reactions. This can be done via **play or art therapy** in which the disaster affected children can be asked to draw pictures of the traumatic incident or to enact the roles they performed or saw other people exhibiting at the time of disaster. This exercise can make the children better understand what, how and why the disaster happened and especially, what consequences it has for them in the future. This can be beneficial for both children and adults as an attempt to bridge the gap of communication and “help children communicate with adults and counselors about their focus of trauma, how the traumatic event has impacted them and to bring a sense of empowerment back to the children and aid in the healing process”
2. There should be training of caregivers for effective psychosocial support of children and also to train the mother-maids to be able to screen out those children who exhibit symptoms of stress or anxiety so that they are referred to a mental health professional for medical aid.
3. There should be more focus on the community service by the society and especially the young generation which is able to lend the required time and energy to engage these children into constructive activities. There can be mini workshops, sports or excursion trips that can give the children an **exposure to a healthy atmosphere** and distract them from negative thoughts of the disaster. The young children are in the developing stages of their lives so they are able to learn new things quickly. Hence, these sessions can help them in future as well.
4. This research can serve as a basic research to check for the psycho-social impact of disaster on children. **Further studies** can be conducted where the confounding variables are adjusted and more accurate results calculated so that experiences of children are also taken into account when conducting disaster related studies.

## Limitations

1. The main confounding variable was that all of the children who were interviewed were part of an orphanage system away from their families. In one way it might have aggravated the negative impact of the traumatic incident/ disaster they had faced but on the other hand, the many supportive facilities provided at the rehabilitation centre attempt to mitigate the grief of the children.
2. The age group of the sample ranged between 8-13 years. For interview and research purposes, the researcher needs to have a great command over the techniques of data collection so that the children are able to understand and answer the questions effectively. For this reason, interviews were also conducted for the caregivers so that that information provided by the children could be re-affirmed by their elders who had monitored them.

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