

Resilience and Coping among children affected by Kerala Flood in Ernakulam District

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Abstract

Kerala was affected with severe flood in 2018 and 2019. Thousands of people were evacuated to safer places and relief camps. 121 people died due to flood-related incidents since 14 August 2019, these relief camps host more than 2 lakh persons from various parts of the state. In August 2018, over 450 people died and properties worth Rs.40000 crore were damaged. According to world disaster report 2001, about 66.5 million children are affected by natural disaster every year which is considerably more than the number in previous decade before where 10 million children were affected by conflict. Adolescents are vulnerable to disaster trauma and this cause a variety complex psychological and behavioural manifestation. The main aim of the study is to understand resilience and coping of children who are affected by the flood. It is a quantitative and descriptive study by taking 60 samples (30 girls and 30 boys). The study has used standardized questionnaire with two scales such as READ scale - the Resilience Scale for Adolescent (RSA) (Friborget, al. 2003) and the Brief COPE (Carver, 1997). The major finding of the study shows significant relation between resilience and coping, coping across respondents with varied locality and different coping strategy used by the respondents. The results of

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the study can be further evaluated by administering an intervention package among children affected by flood through different methods of social work.

Key words: Resilience, coping, children, Kerala flood, trauma, vulnerability

Introduction

According to world disaster report 2001, about half of child population was affected by the uncertain catastrophe every year during the last decades. This figure is considerably more than the children who were affected by conflict last decade. Children are mostly at risk to disaster trauma and this is apparent in a variety complex mental and behavioral manifestation. When children are affected with disaster, their psychological reaction differ depending on the developmental stage, level of cognitive and emotional growth and limited coping strategies.

In 1924 the Kerala had faced severe rain fall and flood. During that time there was heavy loss of property and other belongingness. In 2018, heavy rainfall was one of the main reasons for flooding in Kerala. The area under the storm witnessed maximum rainfall for three days (India, 2018). Kerala experienced similar situation from June 2018 to 19 August. This caused flood in 13 districts in the State. According to climate report there were heavy rain falls. This rainfall was much above the normal measure.

Kerala once again faced a similar situation of heavy rainfall on 8 August 2019, which resulted in flood and landslides. The government has issued red alert in many parts of Kerala for the security of the people. Many people were evacuated to relief camps.

Review of Literature

On the report of the study 'Flood, Vulnerability & Urban Resilience' which is a qualitative research conducted using semi-structured interviews and focus category discussions of householders, flood workers and other affected people and followed the recuperation occurrence of people across the floods affected above 8000 family circle across the city. The study undertook a real-time lon-
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gitudinal examination to document and perceive the intended meaning of the daily occurrence of individuals following the catastrophe of June 2007 in interaction with networks of actors and organisations, strategies of institutional support and investment in the built environment and armature. The research aimed (i) to find and document key factors of the longer term occurrence of flood bang and flood retrieval, including health and socio- economic aspects, (ii) to scrutinize how resilience is evident in the interaction between everyday strategies of adjustment during the flood recuperation process, modes of institutional support, the management of infrastructure and the built environment, (iii) to take a look at up to what extent the recuperation process entailed the evolvement of new forms of resilience and to recognise the intimation for evolving local level resilience for flood recuperation in the coming times, and (iv) to evolve an archive that will be accessible for coming times research into other aspects of flood recuperation. The findings showed flood recuperation to be a long and difficult process with no clear conception or end. Abstracted an incremental, linear process, respondents' recuperation is punctuated by 'highs' and 'lows' which are closely tied to other pressures and life events. Recuperation is not complete when people move back to home, as aspects of daily life are shown to have elementally changed – both for better and for unpleasant. Many of the difficult occurrences faced by householders result from the survival of a 'recuperation gap'. This come out as a result of decline of the legally-defined eventuality arrangements provided to the community by its local authority and the less well-defined services provided by the non-statutory/private sector e.g. insurance, builders start. The nature of this gap means that householders receive little support during this time and, as a result, they must attempt to coordinate the measure of the different organization involved. Such 'project management' takes lots of time, deplete and anxious as it requires householders to acquire new skills, challenge 'specialist' judgements and engage in new kinds of physical, psychological and emotional work. By suggesting course of action in which householders can be better supported, the research is of direct practical relevance for organizations involved in recuperation and the building of resilience.(Mort, whittle, & Walker)

The study 'Resilience in adolescence: Gender differences two years after the earthquake of L'Aquila' was done mainly to evaluate the impact of L'Aquila earthquake (Italy) and Coping 2 years after the earthquake in a high school sample. 324 males and female students vulnerable to the Resilience earthquake and about 147 not-vulnerable have been evaluated with the Resilience Scale for Adolescents (READ) and the Brief COPE. The two-way ANOVAs for gender by subjection level to the distressing event showed statistically significant inter measure with males vulnerable to the earthquake reporting consistently higher READ factor scores. Problem-focused but not emotion-focused coping strategies showed a similar pattern. These findings are compatible with a resilient 'protective mechanism' for males. (Stratta & Capanna, 2013)

The article 'Tips for Talking with and Helping Children and Youth Cope after a disaster or Traumatic Event' shows that Children and youth can face emotional strains after the traumatic events such as a car crash or violence. Catastrophe also may depart from them with long-lasting harmful effects in their life. When a child experience a trauma, watch it on TV, or overhear others discussing it, they may feel scared, confused, or anxious. Youngster react to trauma differently than the way adults does. Some may react right away and others may show signs that they are having a difficult time much later. As such, adults may not know when children need help coping. This article gives tip sheet which will help parents, caregivers, and teachers learn some common premeasured, respond in a helpful way, and know when to seek support. (Tips for Talking with and Helping Children and Youth Cope After a Disaster or Traumatic Event, April 20, 2012)

The study coping with vicarious trauma in the aftermath of a natural disaster documents the vicarious psychological impact of the 2010 earthquake in Haiti on Haitians living in the United States. The role of coping resources in family, religious, and community support was looked at. The results of the study mainly highlight the importance of family and community as coping strategies to manage such trauma. (E. Smith, Bernal, & S. Schwartz, 2014)

According to the study “The Associations between Coping Self-Efficacy and Posttraumatic Stress Symptoms 10 Years Post disaster” mediating roles of coping self-efficacy (CSE) perceptions between catastrophe-related post-traumatic stresses symptoms (PSS) in the intermediate term and PSS in the long term (10 years post event) were evaluated. The study included 514 adult Dutch native householders affected by the Enscheda fireworks catastrophe as participants. The catastrophe happened in May, 2000 was caused by a massive explosion in a fireworks storage facility that destroyed a residential area. The study also included multiple regression examination and path analyses used to evaluate the mediating role of CSE and whether the mediating role was the same for men and women. The respondents Age, education, catastrophe subjection, home destruction, optimism, and stressful life events were also taken into account. Regression examination showed that the former variables were not associated with PSS at 10 years post event, in contrast to PSS at 4 years, and were therefore omitted from the path analyses. CSE evaluated at 10 years postcatastrophe partially mediated the association between PSS at 4 and PSS at 10 years postcatastrophe. Post hoc multigrain examination showed that this effect was significantly stronger for men, whereas the association between PSS at 4- and 10-years post event was stronger for women. PSS at 10 years post event were better predicted among men. (Bosmans, Benight, & van der Knaap, 2013)

Methodology

Objective of the research was to study Resilience and Coping among children effected by Kerala flood in Ernakulam district. This study had employed quantitative, descriptive design. The sample size of the study is 60 which is collected from Eloor and Manjumell, 30 children from each municipality of which 15 girls and 15 boys. The method used was probability sampling, in which simple random sampling method is used for selecting the sample.

The READ scale was derived from the Resilience Scale for Adults (RSA) (Friborg, Hjemdal, Rosenvinge, & Martinussen 2003) in order to ex-

amine resilience and understand stress adaptation across multiple levels and to assess the protective resources of the person (Friborget al., 2009; Hjemdal et al., 2006). The Brief COPE (Carver, 1997), an abridged version of the COPE (Carver, Scheier, & Weintraub,1989), is a self-report instrument developed specifically, to reduce total participant response burden and can be tailored to the population under examination to address specific research questions without compromising the integrity of the instrument.

Results

Table 1
Level of coping among respondents

Coping	Frequency	Percent
Very low	15	25.0
Low	13	21.7
High	22	36.7
Very High	10	16.7
Total	60	100.0

This table shows Level of coping among respondents. 36.7% respondent have high level of coping. 25% have very low Level of coping 21.7% of them have low Level of coping and 16.7% of them have very high level of coping.

Table 2
Type of coping among respondents

Coping	Frequency	Percent
Avoidant Coping	8	13.3
Approach Coping	52	86.7
Total	60	100

This table shows level of coping among respondents. The level of coping is divided into two in which 86.7% respondent have Approach Coping and 13.3% of them have Avoidant Coping.

Table 3

Level of Resilience

Resilience	Frequency	Percent
Very low	10	16.7
Low	16	26.7
High	28	46.7
Very High	6	10.0
Total	60	100.0

This table shows Resilience of respondents. 46.7% respondent have high resilience family cohesion. 26.7% have low resilience family cohesion. 16.7% of them have very low resilience family cohesion. 10% of them have very high resilience family cohesion.

Correlation between resilience and coping among respondents

The Pearson correlation analysis was carried out to understand the relationship between resilience and coping among children. It was found that there is a significant relationship between Resilience and Coping, $r=.500$, $p=.000$, $p<.05$ indicating that there exists a Positive relationship between Resilience and Coping. Hence, the H_0 is rejected.

Coping strategies used by the respondents

Table 4

Coping strategies used by the respondents

Coping strategies	Frequency	Percent
Activities in camp	29	48.3
Family support	27	45.0
Social activities	4	6.7
Total	60	100.0

Table 4, depict the coping strategies used by the respondents in the study. It was found that most of the respondents used activities in camp (48.3%) and 45.0% used family support as a coping strategy, only 6.7% of respondents used social activities as coping strategy. This show Activities in camp was one of the best strategies for coping.

Major Findings

- The classes of respondents, most of the respondents are studying in class 12 i.e., 28.35% and 26.7% of them studies in class 10. Only 6.7% of respondents are studying in 8 standards.
- The number of siblings each respondent is having from which its observed that around 70.0% of respondents are from Two children family and 23.3% of respondents are from More than 2 children family. And only 6.7% are from Single child family.
- Around 46.7% respondent has high resilience. 26.7% have low resilience. 16.7% of them have very low resilience. 10% of them have very high resilience
- The level of coping is divided into two in which 86.7% respondent have Approach Coping. 26.7% have low resilience family cohesion. 13.3% of them have Avoidant Coping.
- In Pearson correlation analysis it was found there is significance between Resilience and Coping at (p=.000)
- The Coping strategies used by the respondents in the study, in which it was found that most of the respondents used Activities in camp (48.3%) and 45.0% used Family support as a coping strategy. only 6.7% of respondents used Social activities. This show Activities in camp was one of the best strategies for coping.

Implication of the study at client level

The education curriculum must focus on the development of resilience

level and coping of children. In order to minimize the catastrophic impacts of natural disasters, more children are to be sent to school. Educating people, developing and harnessing their personalities should be the focus of schools, specifically teachers.

Every children affected by the disaster also should be given psychological support which should be included in their academics to improve their level of resilience and coping.

Effective and efficient interventions should target the person, peer, and caregiver level, each serving to strengthen the young person's psychological adjustment.

Interventions should also strengthen their social abilities, facilitate social connections with peers at school, institution and caregiver or mentors. A good social network is more likely to protect young adolescents from developing psychological disorders in later life and help them successfully navigate their current out-of-home care environment.

Implication of the study at policy level

Policy makers should also set up such relief measures in flood affected regions that would focus on the psychological well-being of affected children. This is possible through involving psychologists in disaster management.

Western societies have already set up an example by seeking psychological intervention at various levels of disaster management but unfortunately in India psychologists are yet to establish their footing in National Institute of Disaster Management as well as in Indian Red Cross Society for the same purpose. Flood affected people should be encouraged to make strong social support groups where they can relate themselves with other flood victims and lighten up their emotional burdens.

Children's perception in disaster becomes important. So needs are to be identified and further build awareness about the uncertainty of disaster (Paton & Johnston, 2001) and also encourages people to engage in disaster reduc-

tion. Though children are heterogeneous, an uncertain future resulting from an impending disaster coalesces them towards collective action in order to achieve a long-term solution

Implication of the study for social workers

After floods strike, the first action is to find out the target population of children which requires immediate help. Our target should be children who are of age from 12-18 who are at the edge of their transition and not having enough capacity to take care of themselves in such circumstances. We must look for children who are not secure in terms of their family cohesion and are often at stake of losing more to the floods. We should be taking care of our young population who may be easily frustrated due to the lack of emotional stability.

Conclusion

The study titled “Resilience and coping among children effected by Kerala flood” was conducted to check the level of resilience and coping among children during flood. This study was conducted by collecting data from 60 clients from Eloor and Manjummel areas. The study used descriptive design. The data were collected by using standardized questionnaire to measure the level of coping and resilience among children effected flood. SPSS version 25 was used to analyse the data collected and to formulate needed information.

There are many children who are ignored in times of disasters. For instance, there are many instances in relief camps, when they are exploited. Moreover, their health also gets compromised in these circumstances. These children are malnourished, and they often get sick in such brutal environmental conditions. The child who would be going through tremendous body changes suffer from malnourishment and lack of hygienic conditions. The children affected by natural and man-made disasters often appear to be “cheerful” or “playful” so parents misinterpret them to be ignorant about the situation or not psychologically affected by these disasters. However, that is not the case

because most of them do suffer from severe emotional distress and anxiety. It is the society's responsibility to rehabilitate the children through a positive environment. The laws to protect children in times of disaster are non-existent; however, there are few government schemes that provide a bit of support to the disaster affected families. The government should take measure to equip the children with training and skills in order to face such disasters effectively, without panicking. The curriculum should include disaster management education and training for the betterment of the future generations.

Recognizing children and adolescents' typical and clinical traumatic stress symptoms after natural disasters will guide family therapists in providing needed therapeutic interventions. Since most of the recovery takes place at home and at school, family therapists must teach parents and teachers to understand symptoms and intervene with reassurance of normalcy, extra attention and nurturance, re-establishing routine, open communication, and facilitating adaptive coping strategies.

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