

LIGHT AT THE END OF THE TUNNEL; POSTTRAUMATIC GROWTH AMONG INDIVIDUALS EXPOSED TO FLOOD 2010 IN PAKISTAN

Naeem Aslam, Anila Kamal

ABSTRACT

Objective: To explore the stress- related growth experienced by the individuals exposed to the highly stressful and traumatic floods in Pakistan began on July 27th, 2010.

Design: Qualitative Study

Place and Duration of Study: Communities of the flood affected areas, from June 2011 to December 2011

Subjects and Methods: Sample included 300 participants, who were affected in flood in Pakistan that began on July 27th, 2010, following heavy monsoon rains. Age range of the participants was from 13 to 55 (M = 27.45, SD = 6.94) years, with equal participation of male and females. Twenty Focus group discussions (FGDs) and 30 key informant interviews (KII) were conducted to gather the information. Each FGD was consisted of approximately 12 respondents.

Results: The positive changes were reported to occur in five domains of an individual life including, recognizing new possibilities, perceiving personal strength, increasing spiritual sense, improving relationship, and appreciation of life.

Conclusion: The significance of understanding this concept of Posttraumatic Growth helps the mental health professionals in devising the intervention strategies, while keeping in mind the positive changes and strengths of the community.

Key words: Posttraumatic growth, Trauma, Adversity, Flood affectees

INTRODUCITON

Highly traumatic and stressful events typically produce a variety of cognitive, emotional, behavioral responses that influence the eventual outcome. The negative outcomes of the trauma are well documented. For example, Posttraumatic stress disorder^{1,2} and other psychiatric disorders, such as depression, anxiety disorders, and substance abuse^{3,4} are the most commonly studied outcome in the aftermath of disasters. The concept that adversity or trauma may lead to positive changes has been suggested in literature, religion and philosophy. This phenomenon has been empirically studied for not more than last couple of years⁵. Currently, research has focused its attention to see the positive outcome of the loss and trauma that may occur after dealing with a highly distressing event. Researchers have used different terms to describe the Personal betterment and positive changes like benefit findings, adversial growth, thriving and post-traumatic growth etc. So the posttraumatic growth (PTG) is thought to occur in the different domains of an individual including ; perceived changes in self, a changed sense of

relations with others, and a changed philosophy of life⁶.

Posttraumatic growth emphasizes the changing quality of responding to highly adverse or traumatic events. The positive changes include, identifying the new possibilities in life, having forming the better relationship to others, enhancement in personal strength, better appreciation of life, and enhancement in spiritual change. It is not the event that is believed to lead to posttraumatic growth (PTG), but rather the struggle in the wake of trauma⁷. Tedeschi and Calhoun⁶ proposed a theory by which traumatic events shake the individuals' pre-trauma schema regarding themselves, others, their relationships, and the world. Moreover, it may also depend on the level of intrusive thoughts, which will be predictive of the level of deliberate thoughts, since intrusive thoughts are a precursor leading the individual to seek a better understanding of the stressful experience. An individual can show both, the distress responses and growth element together⁸. There are many factors that are positively or negatively associated with PTG. Studies showed that PTG has inverse relation with anxiety, depression⁹, externalizing symptoms, and physical health problems¹⁰, general symptoms of stress¹¹ and there is positive association of trauma with the social support, coping, optimism and wellbeing. Furthermore, in the same individual, psychological distress, trauma and PTG can be found at the same time. For the development of the posttraumatic growth, a sufficient amount of distress

Naeem Aslam, Lecturer, National Institute of Psychology, Quaid-i-Azam University, Islamabad.

Anila Kamal, National Institute of Psychology, Quaid-i-Azam University, Islamabad.

Correspondence:

Naeem Aslam

E-mail: psy_naeem@yahoo.com

is prerequisite. Because a moderate level of distress and struggle in the aftermath of a trauma catalyze the process, not the trauma itself, toward the posttraumatic growth.

Present study is designed to see the posttraumatic growth among the individuals exposed to a natural disaster. Almost all we know about posttraumatic growth comes from studies whose main goal was to determine the negative effects of trauma, mainly in the area of PTSD. There is scarcity of empirical literature on the positive outcome of the trauma. This study explores the positive outcome as the result of a traumatic event among flood affected population as many current researchers express that there is still much to uncover regarding posttraumatic growth and positive responses to traumatic events in general.

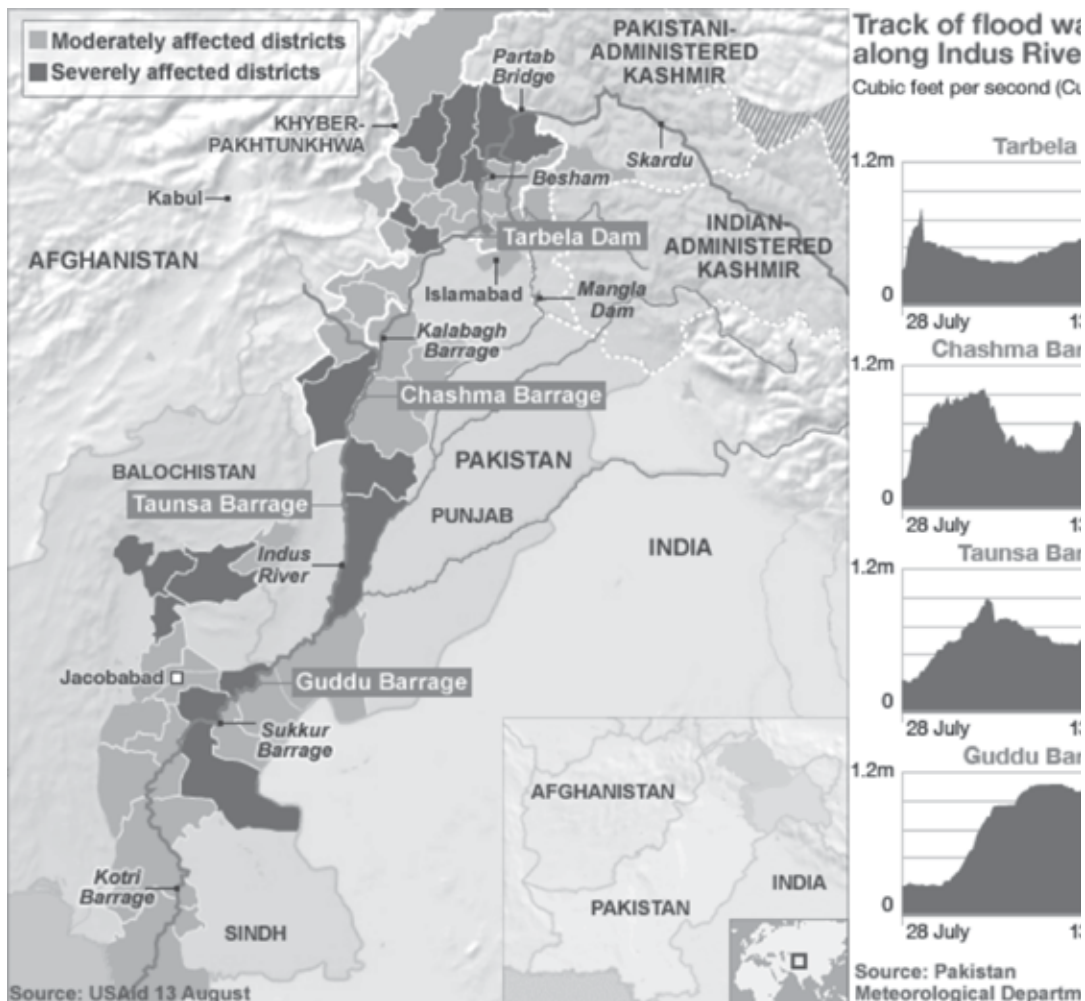
SUBJECTS AND METHODS

The present study aimed at identifying the post adversarial growth/post traumatic growth among individuals who were affected in the flood. The floods in Pakistan began on July 27th, 2010, following heavy monsoon rains. The flood caused unprecedented losses and

damages to Pakistan's infrastructure, industry, houses, communications, and roads. According to the National Disaster Management Authority (NDMA)¹³, the floods have claimed nearly 2000 lives, 1.8 million houses have been damaged and more than 20 million people have been affected in over 30 districts. An area of at least 160,000 square kilometers has been affected by floods. Over 2.2 million hectares of crops have been destroyed.

Sample was selected by convenient sampling technique. Flood affected individuals from affected areas of four provinces of Pakistan (i.e. Punjab, Sindh, Khyber Pakhtunkhwa, Baluchistan) and Neelum valley of Azad Kashmir, have been taken. Sample included the 300 participants, with equal participation of male and females. Age ranged from 13 to 55 ($M = 27.45$, $SD = 6.94$) years, 20 Focus group discussions (FGDs) and 30 key informant interviews (KII) were conducted to gather the information. Each FGD was consisted of approximately 12 respondents. Both male and female, married and unmarried flood affected individuals were included in the sample. The inclusion criterion for the participation of the focus group was not to have any diagnosed psychiatric illness.

Figure 1: Map of the flood affected areas from which data is collected¹²



This is the qualitative study; no quantitative instrument was used for the data collection. However, FGDs guidelines for measuring Posttraumatic Growth were based on the Posttraumatic Growth Inventory⁶, that has 20 items inventory and widely used to measure personal growth in the following domains: relationship with others, realization of new possibilities, increased personal strength, spirituality, and appreciation of life.

RESULTS

Despite of lot of problems, many respondents reported that 'flood made us mature and tougher'. Many others reported that they experience enhancement in empathetic feelings, decision making, self-confidence, communication, participation/interaction in community activities 'Now when I see the other flood affectees I realize their problems and wish to help them because I can understand the problems of other flood affectees'. They are much organized after the crises. They start saving money for any future calamity. They are interested to know the other problems and close with their families and more prepared and alert. They are now more conscious about health and hygiene. They had learnt to talk about their rights. Their unity, concerns about others issues, spirit of sacrifice, donating personal things to others got improved. They feel themselves as more capable, empowered and informative. They learned disaster preparedness and evacuations plans in case of any future calamity. They realized the environmental factors of flood (i.e., cutting the trees). Their interpersonal relations got better. People started to participate with NGOs in community matters and their willingness has been increased. Small political conflict decreased. Ownership and participation in social and community activities has been increased. One of the participant reported that people started to enrol their children in school, their communication got better, more NGO oriented; they had now more right conscious. Those members in the community who completely lost their home and land, they were provided the shelter by those community members who were partially or less affected. People started to sit down together to resolve the day to day issues. Some community member had identified the new possibilities (for example, some students reported that they will now looking for some jobs in city as their lands are no more as, previously they had decided to continue agriculture. They had identified their problems and resources. Interest in education, specially, among females has been increased and the rate of school going children increased. During focus group discussion, a female teacher reported 'Our self-confidence has increased, we are more mobile. We participate in community activities. Those girls who had left the education had reinstated their education'

While seeing the spiritual changes, it is observed that prayer rate increased among old age people, recitation of Holy Quran is increased, and people are more health conscious. Female interaction and involvement with community matter enhanced. In some areas male/female

interaction and combine educational sessions have been reported as there was hardly any combine gathering of both sexes before the disaster.

DISCUSSION

The study was planned to see the positive changes among the flood affected individuals. As an ample of research evidence suggest that after disasters or traumatic events, sufferers not only show the distress responses but also besides this, report the positive changes. Our findings are in line with the theoretical assumptions that have been proposed by Tedeschi and Calhoun. Positive changes among the survivors have been reported that include the changing the philosophy of life, improve the relationship with others and increased spirituality. For example, 13 years old boy, who was in class 6th reported "I now decided to become a doctor, because we lost all our land, I have no other option, but study". Findings of our study are consistent with the past studies that claim the people after struggle with distressed event identify the new possibilities in life.

We found the growth in both the genders irrespective of age and education. In a key informant interview, One of the participant shared that "After flood people became more intelligent, our communication got better" These changes can also be seen in female, as during the discussion female reported that our interaction and involvement with community matter increased. There are mixed findings regarding the gender difference and PTG. Some studies found higher rates of PTG for females¹⁴ and some found higher rates for males¹⁵ and few did not find significant gender differences¹⁶. Prayer rate has been increased among the old age people. My love with people increased. I feel I give everything to people; I have no ill feelings with people. I love to serve my people. Our findings are consistent with the past studies that proposed the positive relationship between PTG and spirituality. Another finding of the study is the posttraumatic growth was commonly observed among those individuals who had the characteristic of hope, optimism, social and religious support, self-esteem and positive affect we know more, and interested to know the other problems.

PTG related constructs were found to be positively related to a wide range of such positive mental health resources like positive affect, optimism¹⁷, hope¹⁸, self-esteem competency beliefs and quality of life Likewise, PTG was negatively related to pessimism. There is also the evidence of an inverted "U" curvilinear relation between exposure and PTG¹⁹. suggesting that a certain level of severity (objective or subjective) may be necessary to engender growth, beyond which growth may actually be hindered.

Implications, limitations and Recommendations

These findings may have possible clinical implications. The significance of understanding this concept of PTG helps the mental health professionals in devising the

intervention strategies, while keeping in mind the positive changes and strengths of the community. Moreover, study will be helpful for the practitioners working with people who have experienced major life crisis. We did not use non-trauma comparison groups, it is not possible to compare PTG to levels of non-traumatic (i.e., maturational) growth. Our analyses focused exclusively on individuals' reports of posttraumatic growth (i.e., retrospective self-reports of survivors) which were often subject to recall and social desirability biases. There are inherent limitations relying solely on self-reporting, so the self-reported PTG warrants further investigation. In the present study we only reported the positive changes that are faced by the flood affected individuals. Participants may develop a 'desirability bias' which may lead individuals to over-report PTG. Hence, the results of the research should be interpreted in that frame work and with caution.

CONCLUSION

Findings of the current research showed that people after experiencing traumatic event, have changed the priorities about the important in life, establish new path in life, had greater appreciation for the value of their life. Their beliefs to be able to do better things with life and handling difficulties has enhanced. They had better understanding of spiritual/religious matters and a greater sense of closeness with others.

REFERENCES

- Leon GR. Overview of the psychosocial impact of disasters. *Prehosp Disaster Med* 2004;19:4-9.
- Neria Y, Nandi A, Galea S. Post-traumatic stress disorder following disasters: a systematic review. *Psychol Med* 2007;38:467-80.
- Brown ES, Fulton MK, Wilkeson A, Petty F. The psychiatric sequelae of civilian trauma. *Compr Psychiatry* 2000;41:19-23.
- Foa EB, Stein DJ, McFarlane AC. Symptomatology and psychopathology of mental health problems after disaster. *J Clin Psychiatry* 2006;67:15-25.
- Helgeson VS, Reynolds KA, Tomich PL. A meta-analytic review of benefit-finding and growth. *J Consult Clin Psychol* 2006;74:797-816.
- Tedeschi RG, Calhoun LG. The posttraumatic growth inventory: measuring the positive legacy of trauma. *J Trauma Stress* 1996;9:455-71.
- Tedeschi RG, Calhoun LG. Posttraumatic growth: conceptual foundations and empirical evidence. *Psychol Inquiry* 2004;15:1-18.
- Phipps S, Long AM, Ogden J. Benefit finding scale for children: preliminary findings from a childhood cancer population. *J Pediatr Psychol* 2007;32:1264-71.
- Wolchik SA, Coxe S, Tein JY, Sandler IW, Ayers TS. Six-year longitudinal predictors of posttraumatic growth in parentally bereaved adolescents and young adults. *J Death Dying* 2009;58:107-28.
- Vaughn AA, Roesch SC, Aldridge AA. Stress-related growth in racial/ ethnic minority adolescents: measurement structure and validity. *Educ Psychol Meas* 2009;69:131-45.
- Kimhi S, Eshel Y, Zysberg L, Hantman S. Getting a life: gender differences in postwar recovery. *Sex Roles* 2012;61:554-65.
- BBC. Pakistan floods: maps and graphics [Online]. 2010 [cited on 2011 Aug 20]. Available from URL: <http://www.bbc.co.uk/news/world-south-asia-10986220>
- National Disaster Management Authority. Pakistan floods relief and early recovery response plan [Online]. 2010 [cited on 2011 Aug 20]. Available from URL: http://www.ndma.gov.pk/Documents/flood_2010/Pakistan%20Floods%20Relief%20and%20Early%20Recovery%20Response%20Plan.pdf
- Calhoun LG, Tedeschi RG. The foundations of post-traumatic growth: an expanded framework. In: Calhoun LG, Tedeschi RG, editors. *Handbook of posttraumatic growth: research and practice*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc., Publishers; 2006. p. 3-23.
- Laufer A, Hamama-Raz Y, Levine SZ, Solomon Z. Posttraumatic growth in adolescence: the role of religiosity, distress, and forgiveness. *J Soc Clin Psychol* 2009;28:860-2.
- Yu X, Lau JTF, Zhang J, Mak WS, Choi KC, Lui WS, et al. Posttraumatic growth and reduced suicidal ideation among adolescents at month 1 after the Sichuan Earthquake. *J Affect Disord* 2010;123:327-31.
- Phipps S, Long AM, Ogden J. Benefit finding scale for children: preliminary findings from a childhood cancer population. *J Pediatr Psychol* 2007;32:1264-71.
- Barakat LP, Alderfer MA, Kazak AE. Posttraumatic growth in adolescent survivors of cancer and their mothers and fathers. *J Pediatr Psychol* 2006;31: 413-9.
- Ickovics JR, Meade CS, Kershaw TS, Milan S, Lewis JB, Ethier KA. Urban teens: trauma, posttraumatic growth, and emotional distress among female adolescents. *J Consult Clin Psychol* 2006;74:841-50.