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Process of Post Traumatic Growth in Trauma Victims in Pakistan: A Qualitative Study

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Abstract *The facet of trauma as a constructive means is recent area of study in the field of Positive Psychology i.e, Posttraumatic growth. The present qualitative study is aimed to explore the process of PTG in the trauma victims of Pakistan. Total sample (N=40) having an equal number of participants i.e, manmade disaster (n=20, Male=10 & female=10) and natural disasters (n=20, Male=10 & female=10) was selected purposively. Interview protocol i.e, Semi-Structured Questionnaire was developed with the help of previous literature to go deep about the growth process in participants. The in-depth interviews were conducted on victims showing high Post-traumatic growth on PTGI. In-depth interviews were conducted, tape-recorded and transcribed. Themes were extracted out of bulk of the data through IPA to find out the process of PTG. Main themes were extracted and a Model of PTG was developed with the interaction of those themes.*

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Introduction

The term Post Traumatic Growth (PTG) refers to positive psychological change experienced as a result of the struggle with highly challenging life circumstances (Calhoun & Tedeschi, 1999, 2001). The PTG is a new emerging trend contrary to Post Traumatic Stress Disorder (PTSD) as a result of trauma. However, the study lacks focus in Pakistan. Therefore, the present qualitative study has a rationale to find out the process of post-traumatic growth in trauma victims of man-made and natural disasters. The PTG can also be defined as personal experience of individuals who not only get recover from the trauma but also use that emotional distress for individual development (Shultz, Neria & Espinal, 2013).

Literature Review

Tedeschi and Calhoun define the PTG as "positive psychological change experienced as a result of struggles with highly challenging life circumstances" (Tedeschi & Calhoun, 2004). The PTG is currently being studied in trauma sufferers all over the world due to the positive aspect of trauma on any trauma victims is getting attention. There are many studies which have assessed this phenomenon in different types of disasters individually .e.g, studies on post-traumatic growth in the victims of the earthquake (Haung, Wong, Tan, 2014), flood, fire disasters (Leykin, Lahad, Bonneh, 2013), hurricanes, Tsunami survivors (Augustin, 2014, Kaur, 2009), mount eruptions (Subandi, et. al., 2010), war, bomb blasts, terrorism and abuse (Yih-Hsing Liu, 2012), accidents (Blore, Farrell, & Clifford,2008).

Researchers have used two main qualitative methods to ask participants about the growth. Some asked participants to identify the ways in which their lives had changed as a result of their trauma (Collins, Tylor, & Skokan, 1990: Schwartzberg, 1993), whereas, others explicitly queried about perceived benefits/growth and positive life change (Affleck, Tennen, Croog, & Levine, 1987; Sears, Stanton, & Danoff-Burg, 2003;

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Mendola, Tennen, Affleck, McCann, & Fitzgerald, 1990; Petrie, Buick, Weinman, & Booth, 1999).

Belief in Allah / Religiosity and PTG

The endorsement of a belief in God(s) was significantly and positively associated with posttraumatic growth, but it also significantly and positively associated with complicated grief and psychological distress (Sawyer, 2017). A contrary theme that is reported by Brenner (1980) is in a survey of 708 survivors of the Holocaust and found that of those who reported changes in their beliefs in God during or immediately after the Holocaust, more described a weakening than a strengthening of their faith. It is found that there is a relationship between religiosity and psychological growth (Kleim and Ehlers, 2009).

Spirituality Related to PTG

A small but growing body of research has sought to investigate the specific role of religion and spirituality in posttraumatic growth. While finding out the phenomenological experiences of spiritual and religious posttraumatic growth (PTG) through analysis of IPA, themes identified in relation to religious and spiritual PTG included: the process of spiritual and religious growth, strengthening of religious and spiritual beliefs, and personal and spiritual growth and healing. Participants' trauma and associated distress prompted a process of questioning and meaning-making that facilitated deeply experienced personal and spiritual growth and was related to intrinsic religiosity (Castella & Simmonds, 2012).

Time in Relation to PTG

Linely and Joseph (2004) noted that the rareness of the longitudinal studies of posttraumatic growth but affirm that those do exist consistently hold up the conclusion that growth is a lasting phenomenon. The longitudinal studies they reviewed suggest that PTG develops over time, with most occurring between two weeks and two months. Predictors of enduring growth include self-efficacy and positive affect. The level of social support at 12 and 18 months following the earthquake predicted subsequent PTG (Jia, Liu, Ying & Lin, 2017).

Personal Strength/ Positive Change in Personality and PTG

Aslam and Kamal (2013) explored the stress-related growth experienced by the individuals exposed to the highly stressful and traumatic floods. 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. It was found that 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. Aldwin at al, (1994) concluded that positive (e.g., increased independence, self-esteem, or coping skills) and negative (e.g., combat anxieties, loss of friends, or death and destruction) outcomes resulted from the same.

Emotional Reactions and PTG

Across the qualitative studies, four themes emerged, namely cognition, emotional reactions, resources and terrorism exposure. Blix et al. (2013) showed that participants with higher peri-traumatic emotional reactions such as fear, helplessness and horror, experienced higher PTG. They explain that greater trauma-exposure and peri-traumatic reactions triggers a process of meaning-making where individual's try to understand what happened and work with the emotional reactions. This in turn leads to PTG.

Acceptance in Relation to PTG

Acceptance may give power to individuals to process their trauma and impedingly promote PTG. It is based upon the concept of accepting whatever good or bad happens in the life, is needed to be accepted as it is. Because all happens by the 'Will of Allah',

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that's why it is necessary to accept for growth (Lepore, 2001).

Contentment and Optimism as a Predictor of PTG

Positive thinking and patience act as part and parcel of optimism that is direly needed for the growth process in the sufferers of trauma victims. It gives strength to grow (Rini, et. al, 2004; Hiadt, 2006). Even the case of a famous Indian cricketer, Yuvraj Singh who was diagnosed with lung cancer reported that cancer has made him a stronger, positive and better person. He emphasized that the most imperative thing in life is contentment and satisfaction, as money cannot buy them both (Singh, Ugra & Arora, 2013)

Vision of Life in Relation to PTG

Changes in activities/priorities and relationships were primarily positive, whereas changes in views of the self, the world, and the future were affectively mixed. Active coping was associated with positive belief changes, as was use of multiple coping methods (Collins, Taylor & Skokan, 1990). In a study conducted on a sample of female sexual assault survivors, it was found that Seventy-four percent of survivors reported perceived growth and their vision of life changed for the sake of acceptance coping for adjustment (Cole, Aldwin, Fenster & Synder (2010).

Social Support and Role of People in PTG

In the previous qualitative literature, the relationship between PTG and social support is highly sought. In a longitudinal study, this relationship is found among adolescent survivors of the Wenchuan earthquake. Follow-up assessments were conducted with 452 participants at 12, 18, and 24 months after the earthquake. The results showed that the level of social support at 12 and 18 months following the earthquake predicted subsequent PTG, but not vice versa (Jia, Liu,Ying& Lin, 2017).

Self and PTG

As a pioneer of the concept 'Self' in relation to PTG, Tedeschi and Calhoun (2004) established five areas of PTG (Tedeschi & Calhoun, 2004). First, some individuals experience perceived change in self, which means they have a better perception of their self-reliance and increased sense of personal strength following TBI (Tedeschi & Calhoun, 2004). In the field of qualitative studies, it is found that PTG may provide a positive engagement with life, strengthening peoples' feelings of self-reliance and fostering social relationships (Pakenham, 2005)

Sense of Responsibility and PTG

In a study, the sense of responsibility is found to a predictor of posttraumatic growth (Topcu, 2016). It means that the people who have more sense of responsibility will show more traumatic growth. It has also strong rationale behind it. The previous studies report that trauma leads a person towards sense of responsibility. Because trauma results in a sense of loss and this sense of loss again develops sense of responsibility. The previous research conducted by Topcu (2016) showed a direct relationship between PTG and responsibility.

Studies on PTG in Pakistan

Jami & Iqbal (2017) studied Posttraumatic growth and perceived social support among women who experienced miscarriage and found that perceived social support was a positive predictor of posttraumatic growth.

A qualitative study on posttraumatic growth was carried out to explore recipients' perceptions and transitions concerning their personality and life orientation as a consequence of a major surgical experiencing the renal transplant recipients (RTRs). A thematic analysis revealed that transplantation brought positive changes in their psychological well-being. Participants tended to have an optimistic attitude towards life focus regarding past, present and future plans and concerns (Kamran & Ogden, 2016).

Another study by Aslam & Kamal (2015) explored the Coping Strategies as a predictor of psychological distress and post-traumatic growth among flood-affected individuals. They found that coping strategies such as,

self-distraction, denial, substance use coping, behavioural disengagement, venting, humour and self-blame coping accounted for 33 % of the variance in psychological distress. While, active coping, use instrumental support coping, positive reframing, planning, religious coping, and acceptance coping accounted for 31% of the variance in PTG. There are very few researches conducted in Pakistan,e.g, PTG and Marital satisfaction after breast cancer patients by Kausar & Saghir (2010), found patients show high PTG as compared to their spouse. Same as PTG amongst Survivors of a Suicide Bombing Attack in Northern Pakistan by Kiran, Rana, & Azhar (2010) and found High PTG scores are seen in more than half of the survivors of a suicide bombing attack and PTSD and PTG can coexist in survivors of terrorist activities.

A qualitative study conducted on PTG among individuals exposed to flood in Pakistan by Aslam (2010) and found that 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. Kausar and Arif (2011) investigated the level of resilience, post-traumatic growth and coping strategies used by flood survivors in response to the flood 2010. It was found that: a) there is relationship between resilience, post-traumatic growth and coping strategies used by flood survivors; b) there are gender differences in the level of resilience, post-traumatic growth and coping strategies used by flood survivors.

PTG and Man-made Disaster/ Natural Disasters

Linley and Joseph (2004) conducted a review of 39 studies and indicated that positive change is reported in approximately 30-70% of survivors of different traumatic experiences. Some of these events include plane crashes, car accidents, hurricanes, earthquakes, combat, child abuse, cancer, heart attack, HIV/AIDS, and other life experiences such as parental divorce, bereavement and immigration.

Process of PTG

Calhoun & Tedeschi (1998) provides general overview of the process of PTG. The process model describes that some of the individual characteristics and the styles of managing distressing emotions that may increase the likelihood that individuals will experience posttraumatic growth. it suggest that the degree to which individuals engage in self-disclosure about their emotions and about their perspective on their crisis, and how others respond to that self-disclosure, may also plays role in growth. Then the cognitive processing of the traumatic event, particularly the process of ruminative thought, is related to growth; and how the individual cognitively processes the crisis plays a crucial role in the process of posttraumatic growth. Finally, posttraumatic growth can be connected to significant development of wisdom and of the individual's life narrative.

Methodology

The purpose of presents part is to find out qualitative study is to explore the process of posttraumatic growth in victims of man-made and natural disasters in order to find out the perception of victims regarding the experience of growth after facing a severe trauma as well as the process of growth.

Qualitative Research Design

The paradigm used in the present study is Phenomenology. Phenomenology is a method of qualitative study that concentrates on human perception, emphasizing people's personal experiences as they happen (Riviera, 2010).

Interpretative Phenomenological Analysis (IPA)

Mostly the type of analysis that is run on the Phenomenological study is Interpretative Phenomenological Analysis (Creswell, 2009). Therefore, themes are extracted out of the data of the present study was through Interpretative Phenomenological Analysis (IPA). This analysis is best to use and find out the process of PTG (Wang et. al, 2015). It had been utilized to find out the process of

posttraumatic growth among individuals with traumatic spinal cord injury in Mainland China.

Assumptions

The assumptions regarding the present study are as follows:

- Most of the trauma victims of man-made disasters and natural disasters have post-traumatic growth after facing severe trauma.
- All the trauma sufferers don't necessarily grow in future.
- The process of PTG may have the role of a strong support system.
- The process of the growth in victims of man-made disasters and trauma disasters is the same.
- The process of PTG is assumed to be dependent on the type and severity of the traumatic event.
- Themes would be more enough to relate for the formation of model about post-traumatic growth i.e, how PTG develops in trauma sufferers.
- It is assumed that themes that emerged out of the data of trauma victims of man-made and natural disasters would be comparable.
- It is assumed that themes that emerged out of the data of trauma victims of man-made and natural disasters would be contrastable.

Sample

The process of posttraumatic growth is explored for present study on trauma victims (N=40) who had suffered man-made (n=20) or natural disasters (n=20) with the range 20 to 40 years. Figure No. 3 is representing the sampling plan. The victims of man-made disaster were those who went through either bomb blast (n=10, comprising of n=05 Males and n=05 females) or abuse (n=10, comprising of n=05 males and n=05 females). On the other hand, the victims of natural disasters were those who went through either earthquake (n=10, comprising of n=05 males and n=05 females) or flood (n=10, comprising of n=05 males and n=05 females). Victims of disasters were taken after consent and who were reported and identified by Shelter Homes and Dar-ul- Aman and Police Department of Rawalpindi and Islamabad. Those victims were included in the present study who have faced earthquake, flood, bomb blast or abuse before six months at least because the time duration of bereavement or overcoming the grief period is at least six months (DSM V, 2013) and the growth process is only possible after bereavement period. Those participants showing high scores on the PTGI were offered to participate in study.

Instruments

Interview Protocol for Post Traumatic Growth

The qualitative research frequently relies on interviewing as the primary data collection strategy (Creswell, 2003., Denzin & Lincoln, 2005 & Roulston, 2010). An interview guide was developed on concepts that were taken from the literature review about post-traumatic growth.

The type of interview which was chosen to collect data was semi-structured interviews. This semi-structured interviewing questionnaire was to used get a bulk of data from the sample which has gone through major traumatic events in life. A semi-structured interview format worked very well to find out the process of PTG in trauma effected sample.

Procedure

Trauma victims of man-made disasters (bomb blast and abuse) and natural disasters (earthquake and victims of flood) showing high score on PTGI were selected for qualitative part of the study. The total sample was forty (N=40), comprising of 20 from man-made disaster and 20 from a natural disaster. Selected participants were briefed about the aims and objective of the present study. It was kept into consideration that; those trauma sufferers were selected who have faced the trauma not less than six months ago because as the purpose of the present study is to find outgrowth in them, therefore, the duration of at least six months is required to grow psychologically after facing any trauma and

the bereavement period is also six months (DSM V, 2015).

In first stage of study interview protocol i.e., the Semi-Structured Questionnaire, was developed with the help of previous literature. After it, in-depth interviews were conducted on the selected participants. Interviews were tape-recorded and transcribed later. Themes were extracted out of the bulk of the data. These themes were helpful to assess the pre-study assumptions enlisted by the researcher and was latterly aid for exploring the process of growth both in the trauma sufferers of man-made disasters and natural disasters. Themes and subthemes were listed and described in details. The interaction of themes depicted the actual process of posttraumatic growth in trauma victims.

Data Analysis

Data were analyzed by the process, which is most specific for phenomenological studies, i.e., Interpretative phenomenological analysis. Interpretative phenomenological analysis (IPA; Smith, 1996) was used to explore the meaning of the experience for each individual rather than generate general theory. IPA permits researchers to interpret, based on their own experiences and knowledge, the participants' accounts. A flexible IPA framework guided the analysis (Harding & Gantley, 1998; Smith & Osborne, 2003).

Results

Qualitative part of study is based on the assumptions regarding the process of posttraumatic growth in the victims of man-made disaster and natural disaster. In the previous chapter, qualitative analysis was clearly illustrative of the data, including the practical steps involved in the analysis. In the qualitative stage, the qualitative data was analyzed into generative themes, which is described in details individually. It was described that how the themes are related, which sub-theme come under the main theme (primary themes) and how the themes overlap. The findings were linked to the literary body to find out that how the data elucidated and answered the research questions asked in the light of semi-structured questionnaire.

Themes

A theme stands for a level of patterned response or meaning from the data that is related to the researchers' assumptions about the rationale of the study. Figuring out what can be considered a theme can be used with deciding the rate of prevalence. This does not necessarily mean the frequency at which a theme occurs, but in terms of space within each data item and across the data set. A thematic analysis generally focuses wholly or mostly on one level (Braun & Clarke, 2006)
Following themes emerged from participant narratives:

- Closeness to Allah Almighty
- Acceptance
- Life
- Contentment
- Self
- Responsibility
- Positivity in Personality
- Role of People
- Time
- Financial support

Table 1. Theme wise Comparison between Man-Made Disaster and Natural Disasters(N-40)

Themes	Man-Made D		Natural disaster		Difference
	F	P (%)	*F*	P (%)	
Closeness to Allah Almighty	13	65%	14	70%	15%
Acceptance	12	60%	15	75%	15%

Themes	Man-Made D		Natural disaster		Difference
	F	P (%)	*F*	P (%)	
Life	10	50%	16	80%	30%
Contentment	13	65%	15	75%	10%
Self	13	65%	18	90%	25%
Responsibility	16	80%	17	85%	05%
Positivity in Personality	14	70%	18	90%	20%
Role of People	11	55%	16	80%	25%
Time	18	90%	17	85%	15%
Financial Support	10	50%	14	70%	20%

Table 1 portrays the theme wise comparison between man-made and natural disaster. Results show that the highest level of difference between the categories of man-made and natural disaster is found on the theme 'Life' i.e., 30%. Whereas lowest difference is found on the theme 'Responsibility'. On themes self, positivity in personality, the role of people and financial support, the difference is considerably high between both categories of disaster. On the contrary, closeness to Allah, Acceptance, Contentment and Time; the difference is not so high.

Interaction of Themes

In the present study, it was a challenge to keep different themes separate, as the content of one theme either challenged the content of another, was a deep part of another theme, or the result or cause of another theme. The participants' expression of psychological growth factors are depicted in the forms of themes resultantly.

Themes extracted out of rich, thick data has interrelationship to represent the process of posttraumatic growth. It is evident through data that when trauma occurs, it affects the personality both positively and negatively. When it affects the personality of the victim in a positive way as that is highly prevalent in my study; there are many contributing factors e,g acceptance to reality, closeness to Allah Almighty, contentment, sense of responsibility, positive self, emotional &financial support, Positive role of people, life, and time. Contrary to it, when these factors are absent from the process in addition to negative role of people, the result will be lack of posttraumatic growth.

The figure depicting the relationship of themes, also illustrates that there are many contributing factors in the positivity of personality e.g, Closeness to Allah make us more positive by personality. Same as time, contentment, sense of responsibility; positive and supportive role of people also plays vital role in developing positivity in the personality; which further results in growth.

On the other hand, it is found that if the role of people is negative and non-supportive during and after a traumatic event then, the trauma sufferer becomes depressed, rigid, rebellion, revengeful and negative inside. It stuck the growth process, and the contrary situation develops.

Another important area which is figured out, is that when a trauma victim accepts the traumatic even as a happening by the Will of Allah, it leads him/ her towards the 'Closeness to Allah'. This closeness generates positivity in personality, which in turn goes towards the growth process.

The diagram below exhibit how entangled the different themes are, how complex participants' experiences were and

the challenge it was in the current study to differentiate participants' lives into distinct categories according to the type trauma. The figure shows the process of posttraumatic growth by the interaction of themes.

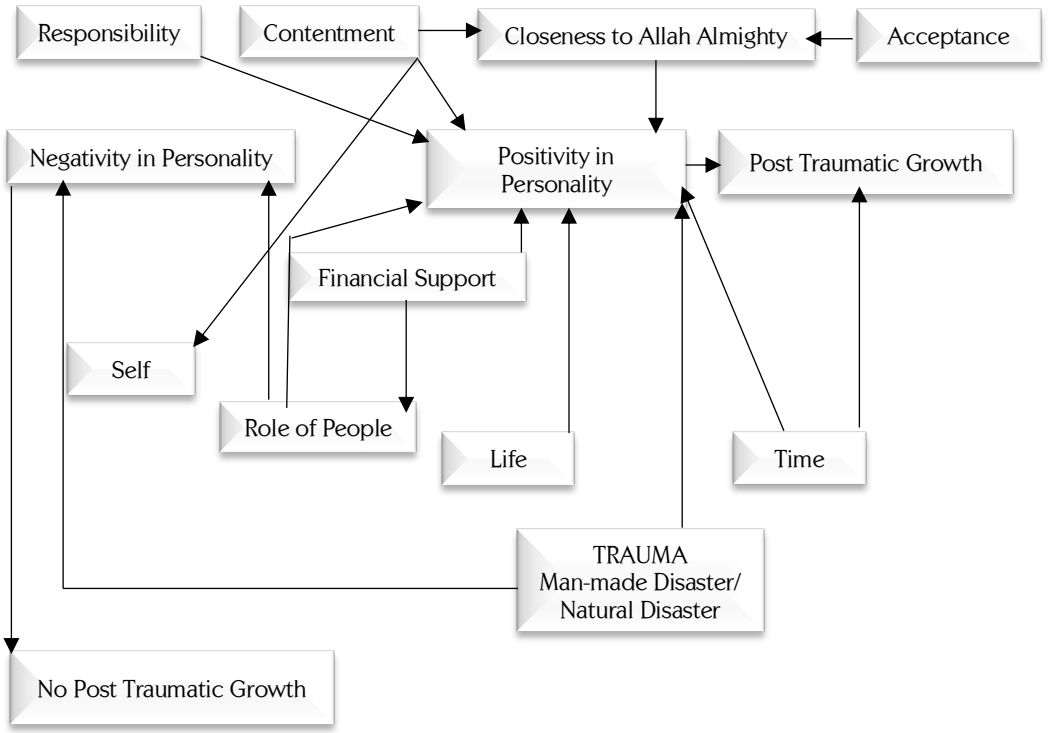

Figure 1: Model of PTG Developed by Thematic Analysis: Relationship between themes taken out of In-depth Interviews from Victims of Man-made Disaster and Natural Disaster (N-40)

Comparison of Models

The conceptual framework of this study was the Model of PTG (Tedeschi & Calhoun, 2006). Post-traumatic Growth Calhoun's (2004a, b, 2006) model of posttraumatic growth (PTG) directly attribute an individual's struggle with stressful and often traumatic life events like the loss of a loved one with psychological processes of growth (1995, 2008). In their current (2006) model (see Fig. 1), they present a sequential process which, in terms of bereavement, positions an individual, or group, before and then after bereavement. They explain how traumatic events produce disruptions both to a sense of self and the assumptive world. Subsequently, the bereaved may struggle with a number of challenges in which they manage their emotional distress and engage in intense cognitive processing of beliefs, goals and life narratives.

At this point, intrusive ruminations may occur, causing emotional distress but are greatly reduced by acts of self-disclosure such as writing and talking. Management of these automatic ruminations eventually allows the griever to disengage from previously significant goals. Then, more deliberate rumination allows cognitive changes to occur involving rebuilding a meaningful and coherent view of self and the world that leads to further narrative development. In a parallel process, Tedeschi and Calhoun also suggest

that an individual's interaction with two socio-cultural categories: proximate, representing smaller social networks and communities, and distal that encompass broader cultural themes, be considered in the PTG process as a whole.

In cases where posttraumatic growth has occurred, individuals are more likely to be able to manage their distress, develop new personal narratives and acquire wisdom and new understanding. Through these struggles, bereaved persons begin to adopt new beliefs and values, view themselves and the world differently and have an increased appreciation of life.

On the other hand, the model generated through the present study (figure 6) was Model of PTG developed by thematic analysis reflecting the "Process of Posttraumatic growth" in the victims of Man-made Disaster and Natural Disaster. This model states that when trauma occurs, it affects the personality both positively and negatively. When it affects the personality of victim in a positive way as that is highly prevalent in my study; there are many contributing factors e,g acceptance to reality, closeness to Allah Almighty, contentment, sense of responsibility, positive self, emotional &financial support, Positive role of people, life, and time. Contrary to it, when these factors are absent from the process in addition to negative role of people, the result will be a lack of posttraumatic growth. When a trauma victim accepts the traumatic event as a happening by the Will of Allah, it leads him/ her towards the 'Closeness to Allah'. This closeness generates positivity in personality, which in turn goes towards the growth process.

While comparing both models it is found that the process of PTG in the model of current study depicted some features e.g acceptance to reality, closeness to Allah Almighty, contentment, sense of responsibility, positive self image, changed vision of life and role of time in the process of growth. These elements were not part of the comprehensive Model of PTG by Tedeschi & Calhoun (2006). On the other hand, the model given by Tedeschi & Calhoun (2006) containing 'Self Disclosure' is missing in the model developed in current study. The commonalities among both models are socio-cultural context, rumination (thoughts comprising self and life), Narrative and wisdom. These aspects are the same in both models.

Prior assumptions of the study that are proved from interpretative analysis of data are;

- Most of the Trauma victims of man-made disasters and natural disasters have post-traumatic growth after facing severe trauma is proved.
- All the trauma sufferers don't necessarily grow in future.
- Process of Post traumatic Growth may have the role of strong support system that is depicted in the themes of 'Role of people' and 'Financial support'.
- The process of the growth in victims of man-made disaster and trauma disasters is the same.
- The level of post-traumatic growth is assumed to be dependent on the type and severity of the traumatic event as there is a high level of PTG in the victims of natural disaster as compared to the victims of man-made disaster.
- Themes would be more enough to relate to the formation of a model about post-traumatic growth, i.e., how PTG develops in trauma sufferers as mentioned in the 'Interaction of Themes'.

It was assumed that themes that emerged out of the data of trauma victims of man-made disasters and natural disasters would be comparable.

Discussion

The current study was qualitative in nature and was aimed to compare the process of PTG in the victims of man-made disaster and natural disaster. It was pertained to go through the life experiences of victims of man-made disaster and natural disaster to get their perception to encompass their process of growth. The indepth interviews were transcribed, and IPA analysis was done on the transcribed data in a stepwise manner.

It was assumed that most of the trauma victims of man-made disasters and natural disasters have post-traumatic growth after facing severe trauma. And thematic analysis represents that the highest frequency of participants, showed high level of posttraumatic growth. Previous studies show that the estimated of the prevalence of the growth that have relied upon quantitative assessments suggest that range from 3% to 100% and more commonly reported percentages tend to range from sizeable minorities (e.g., 30%-40%) to majorities (e.g., 60% - 80%) of persons who have struggled with trauma (Linely & Joseph, 2004). So the results of current study are in line with previous literature.

The second assumption of the study was based on the idea that all the trauma sufferers don't necessarily grow in future. In the present study the ratio of participants who showed posttraumatic growth is really very high even more than eighty percent. Whereas a small number reported no growth as a resultant factor. But it is evident from the previous researches that facing trauma can result in two consequences. Traumatic life events result in positive and negative life changes. Most survivors respond to positive life changes even 2 weeks after trauma. While positive life changes generally increase over time and negative life changes decreased (Frazier, Conlon, & Glaser, 2001). During a natural disaster, the degree of psychological impact generally relates to the extent of exposure to the physical forces of harm, but a further distinction comes into play. "Direct victims" experience intense exposure to the forces of harm (Galea and Resnick, 2005; Norris and Wind, 2009).

It was assumed prior to conduction of present study that Process of Post traumatic Growth may have role of strong support system. In the present study social support is explained as the role of people is frequently reported (65.6%) in the development of posttraumatic growth. They defined that the role of people is mostly positive, as they most support financially to the trauma sufferers which results in 'growth' after trauma. Literature supports these findings. It is previously found that Social support also emerged as one of the most robust predictors of growth in all previous studies. This reinforces earlier findings on the benefits of social support as a potential buffer against stressful events (Linley & Joseph, 2004). It has been suggested that recognition of one's own vulnerability as a result of exposure to adversity can lead to increased sensitivity towards other people and the revision of schemas (Tedeschi & Calhoun, 2004).one of the subtheme of 'Role of People' was 'Sharing with close ones' which reflected the fact that disclosure helps to grow psychologically. Same was reported in previous studies that enhanced social networks can bring out chances for disclosure that in turn promote positive outcomes (Ullman & Peter-Hagene, 2014). Importantly, social support appears to permeate across all types of adversity and populations, which highlights the significant role that the accessibility and maintenance of supportive networks play in post-event adjustment (Linley and Joseph, 2004). This study examined the contributory roles of life-style themes, coping resources, trauma symptoms, and their interaction on different forms of PTG in a sample of college graduate and undergraduates. Wanting Recognition, Tension Control, Social Support, and trauma symptoms were significantly related to PTG. Significant interaction effects were revealed between Wanting Recognition, Social Support and trauma symptoms (Leeman, 2015).

An important assumption, i.e., the process of the growth in victims of man-made disaster and a trauma disaster, is the same; it is also proved after data analysis. It was found that the themes elicited out of the data of categories, i.e., man-made disaster and natural disaster theme-wise comparison between man-made and natural disaster. Results show that the highest level of difference between the categories of man-made and natural disaster is found on the theme 'Life' i.e., 30%. It means the perspective about life changes a lot in the victims of man-made disaster versus natural disasters after suffering trauma. They perceive the events differently. Those who go through man-made disaster e.g bomb blast and abuse they consider life as less attractive

as compared to other group of victims. At the same time, lowest difference is found on the theme 'Responsibility'. On themes self, positivity in personality, role of people and financial support the difference is considerably high between both categories of disaster. On contrary, closeness to Allah, Acceptance, Contentment and Time; the difference is not so high. The previous qualitative studies conducted on the Posttraumatic growth reported some themes align with the present study e.g, in a study conducted by Mehrabi et al., (2015), it was found that themes representing psychological growth were maturity, appreciate of life, stability, spiritual prosperity and 4) effective interaction. Other themes supporting the current study from a literature are Social support, Positive attitude and Confidence in your ability to face challenges.

As a main assumption of the qualitative part of the study i.e, level of Post-traumatic growth is assumed to be dependent on type and severity of traumatic event. It is found in the present study that the highest level of posttraumatic growth is found in the victims of earthquake, then in Flood victims under the category of natural disaster. whereas the under the category of ma made disaster, there is a high level of PTG shown in the victims of Bomb Blast as compared to the abuse victims. In short, it was concluded that there is high level of PTG found in the victims of natural disaster as compared to man-made disaster. This finding is also inline with the previous literature (Gambone, 2009). To support or negate this finding, a lack of literature is found as the comparative studies on man-made disaster versus natural disaster are rare with context of Posttraumatic growth.

The assumption that themes would be more enough to relate for the formation of model about post traumatic growth is proved because i.e, how PTG develops in trauma sufferers is explored on a large scale through mixed design and the findings of both parts of study are found consistent with each other. The present study founds a proper processing model of posttraumatic growth by the interaction of extracted themes out of the bulk of qualitative data. It is evident through data that when trauma occurs it effects the personality both positively and negatively. When it affects the personality of the victim in a positive way as that is highly prevalent in my study; there are many contributing factors e,g acceptance to reality, closeness to Allah Almighty, contentment, sense of responsibility, positive self, emotional & financial support, Positive role of people, life, and time. Contrary to it, when these factors are absent from the process in addition to it, there would be negative role of people, the result will be lack of posttraumatic growth.

At the start of present study, it was assumed that themes emerged out of the data of trauma victims of man-made disasters and natural disasters would be comparable and contrastable. In present study themes elicited out of transcripts are almost same in victims of man-made disaster and natural disaster, but the frequency varies in both categories of disasters. It was found that there is difference on the frequency of some themes when theme wise comparison is made between man-made and natural disaster. Results show that the highest level of difference between the categories of man-made and natural disaster is found on the theme 'Life' i.e, 30%. Whereas lowest difference is found on the theme 'Responsibility' i.e, 5%. On themes self, positivity in personality, role of people and financial support the difference is considerably high between both categories of disaster. On contrary, closeness to Allah, Acceptance, Contentment and Time; the difference is not so high. These findings are actually filling the gap in the previous literature because there is lack of literature on the comparative studies on man-made and natural disaster regarding posttraumatic growth. But some previous studies are inline with present findings which are conducted on one type of disaster at a time. Themes found in those researches are social support (Sheikh, 2004 ;Zhou and Wu, 2016; Prati and Pietrantoni, 2009, Kilmer and Gil-Rivas, 2010; Wu et al., 2016; Hill and Watkins, 2017; Jia, Liu,Ying & Lin, 2017; Prati and Pietrantoni, 2009, Kilmer and Gil-Rivas, 2010), religiosity and spirituality (Hill 2005; Tsang & McCullough, 2003; Castella & Simmonds,

2012), positive change in personality (Aslam & Kamal, 2013; Frazier et al., 2001., Jenoff& Bulman, 1992; Linely et al., 2003; Peton et al., 1989 &Aldwin et al., 1994), self reliance (Tedeschi & Calhoun, 2004; Pakenham, 2005), contentment (Milam, 2006; Rini et, al; Haidt, 2006), time (Linely and Joseph, 2004; Jia, Liu,Ying & Lin, 2017), vision of life (Collins, Taylor &Skokan, 1990).

Major themes identified in the study were Closeness to Allah, Acceptance, Contentment, Positive Changes in Personality, Financial support, Self, Role of People, Responsibility, Time and Vision of life. These are comprised of many subthemes which are going to be discussed below with the support of literature.

Themes got in the current study that are inline with previous literature are 'Closeness to Allah' that is attained through religiosity and spirituality comprising prayer, belief in God, wisdom, compassion, and patience changed suffering experience into a more positive thrust towards growth (Subandi, et,al, 2014; Sawyer, 2017; Zinnbauer, Pargament, & Scott, 1999). Spirituality is separately defined in literature as a source of growth in personality after suffering from the traumatic situation (Hill 2005; Tsang & McCullough, 2003; Castella & Simmonds, 2012). Another theme 'Acceptance' i.e, whatever happens is needed to be accepted by trauma sufferer as a tool of growth; is less defined in previous studies (Cole, 2008; Lepore, 2001) but highly reported in present study. Participants of the study reported the importance of willingness, acceptance of reality and acceptance of Allah's will as the components of this theme.

An emerging theme 'Contentment' came at the surface of the present study which is comprised on positive thinking, patience tolerance which is maintained through the previous qualitative work on PTG as a component of growth (Rini et, al; Haidt, 2006). It was also sought by Milam(2006) who examined optimism and pessimism in relation to PTG and found that both mediated the relationship between PTG and positive outcomes.

Main theme 'Positive change in Personality' as a result of suffering was extracted out from the data of present study. As it was found that the trauma victims either went through man-made disaster or natural disaster develop positive changes in their personalities., being expressive, these changes are sense of responsibility, courage, strength in faith, tolerance, independency, increased inner strength, socialization, maturity and empathy. There is remarkably huge body of research on positive change in the personality of trauma victims. The findings of the current study are consistent with earlier researches (e.g, Aslam & Kamal, 2013; Frazier et al., 2001., Jenoff& Bulman, 1992; Linely et al., 2003; Peton et al., 1989 &Aldwin et al., 1994; Frazier, Tashiro, et al., 2004).

Another highly prevalent (72.5%) main theme elicited out of the responses of the participants is 'Financial support' encompassing subthemes of Role of Government, Army, NGO's, Role of relatives and Role of strangers. It was reported that most helpful people at the time of disaster were strangers and army personales. They not only saved lives but also financial and physically supported them. Secondly strangers do more help at the time of difficulty than relatives. And Army helps more than government, therefore they feel obliged to Pakistan Army. The body of previous researches focusing more on 'Social support' than 'financial support' for trauma victims. The findings of the current study are consistent with earlier researches, which focus more on the role of social support in developing PTG. They operationally define social support as (Sheikh, 2004; Zhou and Wu, 2016; Prati and Pietrantoni, 2009, Kilmer and Gil-Rivas, 2010; Wu et al., 2016; Hill and Watkins, 2017).Social support can be defined as the perception and certainty that one is concern for, has support available from other people, and most popularly, that one is part of a supportive social network. These supportive resources can be emotional (e.g., nurturance), tangible (e.g., financial assistance), informational (e.g., advice), or companionship (e.g., sense of belonging) and intangible (e.g., personal advice).So this theme 'financial support' comes under the definition of 'social support'.

'Self' is defined as collection of self-reliance, self respect, and independency by the participants of the present study. Those who show growth after facing traumatic event, frequently reported that they have more self reliance and developed sense of independency as compared to those who didn't report growth. This theme is supported by previous literature (Tedeschi & Calhoun, 2004; Pakenham, 2005)

Another theme that is extracted out of qualitative data is Role of People for growth after facing traumatic event. Participant of the study reported that in the process of growth, the role of people is very significant. They reported that growth takes place when we compare ourselves with the people who are suffering more. In addition to it emotional support given people, plays a vital role in this growth process. The theme 'role of people' is comprised by subthemes; compare yourself with people suffering more; emotional support by people; and sharing with close ones.This finding of the present study is inline with the previous literature (Jia, Liu,Ying & Lin, 2017; Prati and Pietrantoni, 2009, Kilmer and Gil-Rivas, 2010). Comparatively fewer p articipants reported that 'people blame the victims for their sufferings'. It creates a hurdle in the process of growth. This negative role of people is not frequently reported in the data. This concept is contrary to 'emotional support' which is highly reported by the participants. They accepted that people might not provide financial support but they always support the victims in emotional way (Kilmer and Gil-Rivas, 2010; Wu et al., 2016)

Another theme 'Responsibility' is significantly reported in qualitative data of the present study. Participants reported that as a result of traumatic event, sense of responsibility developed in them. This sense of responsibility played a vital role in PTG. This theme is actually having further subthemes 'owning responsibility' and 'responsibility gives strength'. These subthemes are well reported by participants in this study. This finding is also supported by previous literature (Tepcu, 2016) by the literature to find out this relationship is really insufficient.

A very important theme i.e, 'Time' is highly reported in the current study in relation to Posttraumatic growth. In present study it was found that process of PTG takes time; time is characterized by the healing feature. It was evident in the findings that level of growth increases with the passageof time. The current study is inline with the previous studies are supporting the relationship between PTG and time (Linely and Joseph, 2004; Jia, Liu,Ying& Lin, 2017). These previous studies show that growth is a long lasting process. An individual may take 2 weeks to six months to grow after suffering from traumatic event.

Last main theme of the qualitative part of the study is 'Vision of life'. The participants of the present study reported this theme in a way that facing the traumatic event of vision, perspective or aim about life. It was found in the verbatim of participants of the present study that changes in activities/priorities and relationships were primarily positive, whereas changes in views of the self, the world, and the future were affectively mixed. Active coping was associated with positive belief changes, as was use of multiple coping methods. This concept is well supported by the previous literature (Collins, Taylor & Skokan, 1990).

Implications of the Study

1. The present study is a first step to overcome the lack of comparative studies on post traumatic growth because still there is no study in the previous literature in which the process of post traumatic growth is intended to find out both in man-made disasters and natural disasters as well at a time. The present study will fill the gap of knowledge.
2. There are very few researches conducted in Pakistan in the area of PTG so the present study is helpful to approach the Pakistani culture and its religion with the perspective of Post traumatic growth. The present study explains factors helpful in trauma victims to grow either they are suffering from man-made disaster or natural disaster.

3. Finding out the post traumatic growth will be beneficial for therapists to help their clients identify and maximize the positive impacts that adverse life experiences may have had on them.
4. The findings of this study can be incorporated into existing impact of traumas and trauma treatments.
5. In this way, the present study would be helpful for planning an intervention for trauma sufferers within the context of Pakistani culture.
6. Process of posttraumatic growth evolved out of the findings of the present study will be helpful for the Governmental and non-governmental organizations (NGO's) who are working for the rehabilitation of trauma victims of man-made and natural disasters.
7. In short, the findings of the present study will be helpful for rescue workers, health professionals, rehabilitation service providers, direct or indirect informants of trauma who has either directly faced the trauma or just heard or seen such disaster through media. The readers of this study can get benefit from findings of the study if they have faced any type of trauma themselves or got disturbed due to indirect trauma exposure.

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