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**ROLE OF GENDER IN HSB AND PTG AFTER NATURAL
DISASTER: REVIEW**

Sadaf Alamdar (a)*, Yuqing Zhang (b)
*Corresponding author

(a) Institute of Psychology, Chinese Academy of Sciences, Beijing, China, skalamdar@hotmail.com, +18519796701
(b) Institute of Psychology, Chinese Academy of Sciences, Beijing, China, zhangyq@psych.ac.cn

Abstract

Recent researches have revealed that survivors of natural disaster experience both psychological distress (PTSD) and personal growth which is known as posttraumatic growth (PTG). The author reviewed 10 studies published from 2000 to 2016 which measures Post traumatic growth and Help-seeking behaviour. Factors related to being younger, female, education, socio-economic status, exposure to disaster, acceptance, instrumental support, positive reframing, planning and use of positive religious coping is consistently linked with PTG and HSB. No study was found which directly studied help seeking behaviour and post traumatic growth; however use of coping strategy of instrumental support, social and emotional support and PTG domain of relating to others indicate the help seeking attitude. It results that help seeking behaviour is necessary for disaster victims in coping with life stresses and to experience PTG. Future studies should identify the role of different gender to engage in help seeking behaviour and experiencing post traumatic growth.

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Keywords: Coping strategies, gender differences, help seeking behaviour, natural disaster, post traumatic growth.



1. Introduction

In different regions of world millions of people are affected by natural disasters. Besides the deaths of loved one, property damage, physical injuries and deficiency of basic needs not only brings the distress but in their struggle with trauma, the survivors can also manifest positive psychological change known as post traumatic growth (Kleim & Ehlers, 2009).

2. Problem Statement

Natural disasters not only generates destruction but also change individual's perspective of his abilities to predict and control on his world (Tang, 2007). This ability to accept the traumatic event and recognition that it can't be changed is a critical factor which can lead to PTG (Calhoun, Cann, Tedeschi, & McMillan, 2000). The process of PTG starts when the distressing event shakes individual's assumptive beliefs, goals and his ability to manage emotional stress (Calhoun & Tedeschi, 2014; Tedeschi & Calhoun, 2004). The automatic cognitive thoughts which include intrusive rumination regarding the traumatic experience occur in an individual to reduce the emotional pain. After disengaging from unrealistic goals and emotional suffering, individual engage in deliberate rumination to analyze the situation, re-evaluates his experience and discover new meaning (Calhoun & Tedeschi, 2014; Tedeschi & Calhoun, 1996, 2004). This growth occur in five major domains of life, with the increase in the valuing of one's life, greater intimate relationship and increase compassion for others, increase in personal strength, identification of new paths of life and increased understanding of religious faith and existential questions (Tedeschi & Calhoun, 1996, 2004). Growth can occurs in both male and female survivors, but findings of researches are contradictory.

In the event of distress, the communication with other people to actively seek guidance for the treatment and to take general support refers to help seeking behaviour. There are two ways individual seeks help, either informally from their family and friends or formally from the trained professional such as health and mental health professional, social workers, clergy etc. With this another way to seek help is from internet where there is no direct contact with the helper (Debra Rickwood, Deane, Wilson, & Ciarrochi, 2005). HSB is considered one of the way people cope with the distress, with acknowledging the problem and try to find out the solution. Social relationship and interpersonal skills is the base of this approach style of coping (Frydenberg & Lewis, 1993).

The researches on help seeking pattern is inconsistent, however few trends are found. Young people seek help informally from their family and friends before they seek formal professional help (Benson, 1990; Boldero & Fallon, 1995; Rickwood, 1995; Schonert-Reichl & Muller, 1996). Among different genders, female identify the problem and seek more help than males, where at first male deny the problem and try to rely on their own (Rickwood & Braithwaite, 1994)

3. Research Questions

Does gender play any role in help seeking behaviour and in PTG development?

4. Purpose of the Study

There are no published researches which studied these two phenomenon in natural disaster by keeping the gender role. This is the first review article as per author knowledge to fill this literature gap. The aim of this review article is to examine the role of different gender play in HSB and developing PTG, while establishing a relationship between the two construct in natural disaster.

5. Research Methods

5.1. Inclusion Criteria

Studies which were done from the period of 2000 to 2016 were included. Furthermore, studies which were on HSB and PTG, adult population for sample and assess gender differences in natural disaster were included for the analysis. Moreover, only primary studies were included in the article whereas, reviews and met-analysis were excluded. All the researches which were on PTG and HSB and were not in the background of natural disasters excluded from search. Studies which were done on natural disaster and help seeking behaviour didn't study gender differences were also excluded from analysis.

5.2. Literature search strategy

For reviewing the literature three data base were used (Google scholar, NCBI and Psych INFO) to search the studies that have been published from 2000 to 2016. The following keywords were used to identify the relevant researches: Post traumatic growth, Natural disaster, Gender differences and Help seeking behavior. Manual search was used to search the additional studies by looking into reference list of different articles. Total 10 studies which met the criteria were selected (Table 1).

Table 01. Studies assessing PTG and HSB

Study	Design	Event	Measure
Bianchini et al., 2015	Quantitative & Cross-sectional	Earth quake	PTGI
Fergusson et al., 2015	Qualitative	Earth quake	Interview
Goto et al., 2002	Cross-sectional	Volcanic eruption	Telephonic interview
Garcia et al., 2014	Quantitative & Cross-sectional	Earthquake	PTGI-T
Jin et al., 2014	Quantitative & Cross-sectional	Earth quake	PTGI-T
Mordeno et al., 2015	Quantitative & Cross-sectional	Flood	PTGI
Naem & Anila, 2015	Quantitative & Cross-sectional	Flood	PTGI(SF)-T
Siqveland et al., 2015	Longitudinal	Tsunami	PTGI
Wu et al., 2015	Quantitative & Cross-sectional	Earthquake	PTGI-T
Xu & Liao, 2011	Quantitative & Cross-sectional	Earth quake	PTGI-T

6. Findings

6.1. PTG and gender differences in natural disaster

Gender difference is widely studied in Psychology even though very few researches have entirely focused on gender and PTG. All studies included in the review exploring PTG and gender differences were cross-sectional in nature except two (Fergusson, Boden, Horwood, & Mulder, 2015; Siqveland, Nygaard, Hussain, Tedeschi, & Heir, 2015). Only one study was qualitative in nature (Fergusson et al.,

2015). PTGI was used to investigate the prevalence of growth for all studies except two, one study used the short version of PTGI-SF (Aslam & Kamal, 2015) and another study used the interview method (Fergusson et al., 2015). Whereas, five studies used the translated version of PTGI (Aslam & Kamal, 2015; García, Páez-Rovira, Zurtia, Martel, & Reyes, 2014; Jin, Xu, & Liu, 2014; Wu, Zhang, Liu, Zhou, & Wei, 2015; Xu & Liao, 2011).

Results of PTG and gender differences were inconsistent. Out of nine studies three studies showed the significant gender difference where female reported more PTG (Fergusson et al., 2015; Jin et al., 2014; Xu & Liao, 2011), five studies demonstrate no gender difference (Aslam & Kamal, 2015; Bianchini et al., 2017; García, Páez-Rovira, Zurtia, Martel, & Reyes, 2014; Mordeno, Nalipay, Alfonso, & Cue, 2016; Siqveland et al., 2015) Only one study demonstrate the more prevalence of PTG in male (Wu et al., 2015).

Only four studies correlated the demographic variable with the PTG. Two studies reported that being younger and with higher education are the two significant demographic variables for the PTG (Aslam & Kamal, 2015; Fergusson et al., 2015). However, Garcia et al (2014) & Siqveland et al (2015) reported no effect of age on PTG.

PTG is positively associated with higher exposure to earthquake (Fergusson et al., 2015; Wu et al., 2015; Xu & Liao, 2011) but one study reported no effect of exposure to PTG (Siqveland et al., 2015) and other reported negative association of PTG with exposure (Bianchini et al., 2017). Coping strategies employed by a person after the disaster considered as a potential contributing factor related to PTG. PTG was more specifically related to acceptance coping, positive reframing, instrumental support, planning, active coping (Aslam & Kamal, 2015), positive religious coping (Aslam & Kamal, 2015; García et al., 2014) and negatively associated with substance abuse (Aslam & Kamal, 2015; Bianchini et al., 2017). Negative and positive religious coping positively correlates with domain of Life philosophy and social support is related with the domains of self-perception and interpersonal relationship (García et al., 2014)

Because there are few researches which have been done exclusively on gender differences and its influence on PTG, it is difficult to comprehend the mechanism lying development of PTG in different genders, as males usually report less distress and often neglected. These differences in researches may be due to the level of trauma and disruption in once belief in world view. However, author has tried to understand the mechanism by studying different researches on PTG in different genders.

6.2. Mechanism

The possible mediator for the gender difference could be the women predisposition to engage in ruminative thoughts more than man (Nolen-Hoeksema, Larson, & Grayson, 1999). The predisposition to ruminate on practical issue develops the insight to personal strengths with the gratitude of significance of social network (Janoff-Bulman, 2006, 2010; Tedeschi & Calhoun, 2004). Women's predisposition of rumination of any type especially insightful/thoughtful rumination help them identify more profit in their struggles to deal with the distressing event and report higher PTG. Another prospective mediator is the coping style of women to deal with the traumatic event. De Ridder, (2000) & Vingerhoets & Heck (1990) reported that women probably employ more emotion-focused coping, which led them engage in a

processes of post traumatic growth (Tedeschi & Calhoun, 2004). Consistent findings also indicated emotion focused coping was linked with post traumatic growth (Helgeson, Reynolds, & Tomich, 2006).

6.3. Role of Gender in HSB in Natural disaster

Only one study found on help seeking behavior was cross-sectional in design and telephonic interview method was used (Goto, Kahana, Wilson, & Slane, 2002).

The study was done on help seeking pattern after the Miyake island volcanic eruption. The demographic characteristics revealed that younger and female survivors seek more help from informal sources such as friends and family, whereas male and older survivors preferred professional help. Primary care was the most seeking source among widow and single than married couples. Survivors with higher education seek less help from health worker while survivors belong to low income group sought every possible mean of help including both formal and informal (Goto et al., 2002).

6.4. Mechanism

The amount of support a person receives is directly predicted by his willingness for seeking help, either it is from family, friends or even a stranger (Kaniasty & Norris, 2000). However, even there is availability of help, people in need often fail to receive help (Carlton & Deane, 2000; Moreira et al., 2005). Help seeking behaviour is subjective to the cultural factors and comfort for asking help (Kaniasty & Norris, 2000; Rivera, 2012). Past researches have also suggested that being young, female and belongs to medium to high socio-economic class also has influenced in one's comfort in seeking help (Fothergill & Peek, 2004; Kaniasty & Norris, 2000; Masozera, Bailey, & Kerchner, 2007; Smith, 2003). However, the significant predictor for attitude towards seeking helps was the gender differences which is moderated by the cultural background (Nam et al., 2010). Researchers have consistently found that man with different age group (Husaini, Moore, & Cain, 1994), ethnicity (Neighbors & Howard, 1987) and nationality (D'Arcy & Schmitz, 1979) seek professional help less likely for problems such as depression, physical disabilities, and stressful life events than do women (Husaini et al., 1994; McKAY, Rutherford, Cacciola, Kabasakalian-McKay, & Alterman, 1996; Padesky & Hammen, 1981; Weissman & Klerman, 1977).

7. Conclusion

There was no study which was done on HSB and PTG in natural disaster. Because of the few researches done on PTG and help seeking behaviour in the natural disaster with the context of demographic data, it is difficult to say a definite result. However, by critically reviewing the studies, it is indicated that Help seeking behaviour related with the development of PTG and they do occur in different genders after any natural disasters

Studies results are inconsistent for gender difference in PTG as most studies found no significant gender difference (Aslam & Kamal, 2015; Bianchini et al., 2017; García et al., 2014; Mordeno et al., 2016; Siqveland et al., 2015). Studies which were done on flood or tsunami did not find any gender difference even if the time of assessment was one month or after two to three years of the disaster (Aslam & Kamal, 2015; Mordeno et al., 2016; Siqveland et al., 2015). However, studies done on earth quake

showed inconsistent results for gender differences. These differences could be the result of use of methodological differences and the translated version of the instrument used for measuring growth. Most of the studies did not include demographic characteristics to evaluate its effect on the development of PTG (Bianchini et al., 2017; Jin et al., 2014; Mordeno et al., 2016; Wu et al., 2015; Xu & Liao, 2011). However, due to different methodology used and limitations across studies, the results are inconsistent about the factors related to growth and HSB and establishing link between them. Being younger, female gender, highly educated, high exposure to disaster, using coping strategies of acceptance, instrumental support, positive reframing, planning, acceptance and use of positive religious coping is consistently linked with PTG. At the same time being younger, female, low education and people belong from low income group seek more help. Moreover, even no study directly studied help seeking behaviour, factors which indicate help seeking were included. Use of coping strategy of instrumental support, social and emotional support and PTG domain of relating to others indicate the help seeking attitude. In the traumatic event, the need to continue the consequences leads to more self-disclosure which can direct the person to have appropriate support by having a chance to acting out every new behaviour to have a support. By recognizing one's vulnerability lead to utilize the social support by seeking and accepting help (Tedeschi & Calhoun, 1996).

Finally, more longitudinal studies are needed which examines both PTG and HSB in the context of natural disaster by using validated measures. Further, these studies should include minorities and participants from all socioeconomic status or educational level to see if the experiences differ because of race or ethnicity. Beside survey method researchers should incorporate small interview methods to find out the more about the responses given on the questionnaire.

7.1. Limitations of Reviewed studies

Results from these studies shows some limitations and methodological issues even they are valuable. Most of the studies included were cross-sectional in design which provides limited knowledge about the chronological order of conditions and direction of causality between the related factors. For example, it cannot be determined if there is effect of time on the development of PTG, only studies with longitudinal design can allow the researchers to predict the safe conclusion played by each factor.

The measure of PTGI even psychologically validated also has some restrictions. It does not allow the participants to express negative changes so it is difficult for a researcher to evaluate the significance and prevalence of positive change.

Another limitation is most of the studies used convenient sampling except two (Fergusson et al., 2015; Siqueland et al., 2015) which challenge the generalizability of results by under-representing the minorities and relatively homogenous sample. Furthermore, most of the studies utilize the survey method except two (Fergusson et al., 2015; Goto et al., 2002) which limits the chances for researches to understand the responses beyond the quantitative terms.

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