Posttraumatic Growth, Empowerment, and Volunteering: Cultural and Religious Perspectives

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Statement of Sources

I declare that this report is my own original work and that contributions of others have been duly acknowledged.

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Kelsea Clingeleffer (15th of October, 2015)
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Abstract

While posttraumatic growth (PTG) has been demonstrated across a variety of cross-cultural contexts, the fact that expression and understanding of this construct can be affected by cultural, religious, and organisational characteristics makes it important to assess the validity of this construct for specific groups (Weiss & Berger, 2010). This study aimed to address this issue by first conducting focus group interviews to examine how Taiwanese Buddhist disaster recovery volunteers ($N=25$) interpreted their work experience and associated outcomes when working in disaster contexts. Finding that their accounts supported face validity for the Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996) and the Psychological Empowerment Instrument (Spreitzer, 1995) underpinned the conduction of exploratory factor analysis for PTG and empowerment. The EFA was based on data from 254 Taiwanese, Buddhist volunteers. A two-factor model for empowerment was found. A factor structure for the PTGI could not be established. As a result, consistent with the work of Weiss and Burger (2010) it was suggested that while these constructs may be applicable to this context the PTGI may be an inappropriate measure of PTG for this population.
In Western society natural disasters are defined in terms of their negative impact on humanity; a hazard is only considered a natural disaster once it has significantly and detrimentally impacted human lives (Centre for Research on the Epidemology of Disasters (CRED), 2015a). It would, however, be naïve to think that negative outcomes are the sole product of natural disasters; positive outcomes from traumatic events are increasingly being recognised within specific populations (Paton & Gow, 2008). For example, the Chinese term for crisis (wei jì) means both danger and opportunity (Ho & Bai, 2010). This example of cultural difference in how challenge and adversity is defined is only one illustration of many contextual elements influencing understandings of and outcomes associated with traumatic experiences. The implications of this mean that it is pertinent to consider the diverse ways that outcomes of disaster are perceived and experienced.

Growing evidence that disaster response professionals and volunteers can experience positive (e.g. posttraumatic or adversarial growth) outcomes from disaster response work, and that these may vary across contexts, has prompted interest in identifying the predictors of such adaptive results (Paton, 2005; Karanci & Acaturk, 2005; Tanridağıli, 2005; Shih, Liao, Chan, Duh, & Gau, 2002). Relatively recent shifts to positive psychology paradigms may be responsible for advances in understanding and promoting these positive outcomes as well as reinforcing the need to develop clearer understandings of what, how, and why these occur (Hefferon & Boniwell, 2011). This potential research focus should be prioritised as the number of natural disasters globally, and therefore response personnel required, continues to increase (Paton & Gow, 2008). The diffuse nature of disasters also emphasises the need to consider how personnel will
respond regardless of the context they find themselves working within (Calhoun, Cann, & Tedeschi, 2010).

Context refers to a collection of facets that alter how an individual or group understand and experience a situation; accordingly, these factors are important to understanding situational consequences (Gable & La Guardia, 2007). For example, disasters (whether man-made or natural) often result in long-term and repeated response efforts from both emergency service workers and volunteers alike (Paton, 2006). This setting provides a distinctive set of unpredictable and often uncontrollable challenges which, by their nature, exceeds human capacity to manage and therefore determine psychological outcomes (Paton & Gow, 2008; Palliyaguru, Amaratunga, & Baldry, 2014). One comment in literature states, “…it seems amazing that groups of people attending to emergency mobilisations can withstand continuing emotional and mental onslaughts that many others would consider overwhelming” (Gow, Shipley, & Pritchard, 2008, p. 127). What, therefore, contributes to this capacity? Gow et al. (2008) propose that it is resilience, described as the ability to bounce back to original states of functioning posttraumatic event. What, however, if there is evidence of substantiated change over and above this as captured by the concept of posttraumatic growth? This construct of posttraumatic growth may therefore be an important consideration within the disaster context.

**Posttraumatic Growth**

Posttraumatic growth refers to positive changes and psychological adaptation over and above the previous level of functioning as the result of a traumatic experience (Tedeschi & Calhoun, 1996). Posttraumatic growth (PTG) has been demonstrated in
humans across a variety of traumatic situations including protectives service workers, emergency department nurses, natural disasters survivors, and recovery volunteers (Paton, 2005; Shih et al., 2002; Karanci & Acaturk, 2005; Tanridağli, 2005). For example, Taiwanese nurses who assisted with the 921 earthquake recovery described experiencing professional growth and understanding, better preparedness physically and mentally for future disasters, and closer relationships with others (Shih et al., 2002).

In order to understand how PTG can be promoted one must first comprehend the construct itself. In Joseph and Linley's (2005) cognitive-emotional model of posttraumatic outcomes they propose that due to the nature of traumatic events as unpredictable and uncontrollable, such events are likely to cause cognitive disequilibrium. This occurs when an event cannot be incorporated meaningfully into an individual’s current mental models thus requiring some sort of cognitive adjustment (Paton, 2006; Janoff-Bulman, 1989). As a result, one must cognitively process the event in what is known as completion tendency through either assimilating the event into an existing mental model or accommodating the event into a new mental model (Joseph & Linley, 2005).

If one is able to successfully accomplish either of these processes, Joseph and Linley suggest that it is likely the individual will return to pre-event levels of functioning. Accommodative processes, however, are necessary for growth to occur due the requirement for new mindsets to be established. If unsuccessful at either assimilation or accommodation then posttraumatic stress (PTS) symptoms are more likely to occur (Joseph & Linley, 2005). Consequently this emphasises the need to understand contributing factors to accommodative and assimilative processes in order to promote positive adaptation. If sufficiently understood this may have important practical and
theoretical implications in the development and understanding of PTG in those who regularly experience traumatic events, such as response volunteers. One factor important to these processes may be the way individuals ascribe meaning to their experiences.

A key elements in the development of PTG or PTS is said to be the level of meaning or significance associated with the traumatic event (Janoff-Bulman, 1989). How individuals develop meaning within a specific context, influenced by factors such as cultural and religious beliefs, is therefore an important consideration. Do religions or cultures attribute different meanings to experiences of suffering as seen in the example of Chinese translations of the word crisis (see above) thus providing meaning to what might be considered by others as an incomprehensible event? Does organisational membership provide cognitive resources which facilitate meaning making processes such as empowerment and subsequently PTG? Consistent with these propositions, contexts such as response volunteering in religious charitable organisations may provide meaning which facilitates PTG (Paton & Gow, 2008). As a result this represents an ideal premise to begin investigation of such topics, starting with the role of being a volunteer.

**Volunteering**

Natural disasters often result in long-term, intensive recovery processes during which volunteers play an invaluable role (Aguirre & Bolton, 2013). Volunteers may do so for a number of reasons; a meta-analysis conducted on studies involving individuals who volunteer in crisis counselling situations identified six themes underpinning volunteer motivation, which may differ from paid employment motivators (Aguirre & Bolton, 2013). The first was internal motivation to make an external difference. This may be reinforced when helping others is ingrained within the organisational, religious
and cultural contexts in which one exists (Karanci & Acaturk, 2005). Another theme was that of lived experiences; when a natural disaster occurs it impacts a widespread area which may result in large numbers of individuals using this as a motivator. Similarly, other themes such as volunteer existentialism, internal/personal fulfilment, lack of direction and lack of support are important to consider as potential motivators within disaster recovery contexts.

Volunteering has been demonstrated to positively and significantly increase PTG (Tanridağli, 2005). This may be due to the greater social support network that volunteering provides, enhanced skill development, improved positive perceptions of self, feelings of enhanced collective efficacy or heightened levels of empowerment (Tanridağli, 2005; Karanci & Acaturk, 2005). Tanridağli’s (2005) study found moderately, but not significantly, higher levels of growth in Turkish volunteers compared to non-volunteers. Within this study, 92% of participants acknowledged experiencing growth as a result of volunteering after a natural disaster. Tanridağli concluded by suggesting that volunteering may be one of the best strategies for dealing with traumatic events, particularly in high disaster-risk areas such as Turkey.

While Tanridağli’s (2005) work appears promising in regards to the development of PTG in volunteers, it is important to consider the context in which this occurred. Culturally, Turkey provides an interesting contrast to the Western contexts in which constructs such as PTG were developed and tested, including having higher levels of collectivism, power distance, and uncertainty orientation (Hofstede, 2001). These differences may not only account for variations in meaning-making processes and interpretation of experiences but also in the motivations behind volunteering and differences in the constructs themselves. This suggestion reinforces the need to take
cultural perspectives into account in order to assess whether such findings are applicable to volunteers within a diverse range of contexts.

Culture

Culture is possibly one of the most distinct yet challenging to delineate characteristics which may influence PTG development. Culture can be defined as the culmination of different groups such as racial or religious clusters, and symbols such as language and norms which create a predominant ethos which in turn influences behaviour (Dalton, Elias, & Wandersman, 2007). Distal culture refers to patterns of thinking and behaviour reasonably consistent across large groups, such as all members of a specific country, and is often described using Hofstede’s cultural dimensions (Calhoun & Tedeschi, 2004; Hofstede, 2001). Proximal culture refers to smaller groups that an individual directly interacts with, which are not only influenced by the distal culture but also other factors such as religious and organisational contexts (Calhoun & Tedeschi, 2004).

Hofstede’s (2001) cultural dimensions provide insight into the ways cultures vary across collectivism, masculinity, power distance, uncertainty avoidance, long-term orientation, and the later added indulgence. These dimensions interact to create a unique context which may promote or diminish the development of PTG by reinforcing particular behaviours and thoughts (Calhoun et al., 2010). For example, collectivism facilitates acting for the benefit of the group and thus reinforces the importance of others as coping mechanisms (Buse, Burker, & Bernacchio, 2013). It could therefore be argued that countries with high levels of collectivism may have greater expectations of group expressions of PTG than those with lower collectivism levels (Calhoun et al., 2010).
High levels of power distance may influence how an individual sees their role in an organisation relative to those at different hierarchical levels and will also be influential on how conflict is approached and addressed. There is increasing evidence that such cultural variations may contribute to differences in understanding and interpreting traumatic events and therefore PTG (Buse et al., 2013). Comprehending and incorporating cross-cultural variations into conceptualisations of PTG hence leads to an investigation of universality.

**The Issue of Universality**

One of the issues with research into positive outcomes such as PTG is that the constructs and measures tend to predominantly exist within Western contexts. Hofstede’s (2001) work emphasises discrepancies between the cultural dimensions of the countries from which much of the research on disaster outcomes such as PTG has originated (primarily Western, individualistic countries) and those which experience the largest number of natural disasters (primarily Asian, collectivist countries) (Calhoun et al., 2010). Despite this, there is evidence of PTG within various cultural groups including Israeli Jews, Turkish, Kosovans, German, and Netherland populations; PTG, however, may not appear the same across all these contexts (Calhoun et al., 2010; Buse et al., 2013; Weiss & Berger, 2010).

Research conducted across contexts notes variability in both interpretations and expression of PTG according to the distal and proximal cultures in which it exists (Paton & Tang, 2009; Calhoun et al., 2010). Consequently this raises the issue of generalisability of research conclusions to groups which fall outside the setting in which research has been conducted. For example, Asia has disproportionately high levels of
natural disasters compared to the rest of the world (approximately 80.7% of the world’s natural disasters in the last decade) and may also differ on a number of other characteristics (Asia-Pacific Alliance for Disaster Management [APADM], 2012; CRED, 2015b). As a result, the universality of constructs such as PTG to these contexts must be considered, particularly prior to their attempted measurement in any specific culture (Paton & Tang, 2009; Norenzayan & Heine, 2005). Cultural dimensions, however, are not the only factor which may influence the universality or otherwise of psychological constructs; religion and the organisational context in which volunteers function are also important considerations (Calhoun et al., 2010).

Religious and Spiritual Beliefs

Religion is acknowledged as an important contextual influence worth investigating when considering how people adapt to traumatic experiences (Sadati et al., 2015). While spirituality refers to a pursuit of something of sacred value, religion refers to the context in which this search takes place (Pargament, Desai, & McConnell, 2006). It is suggested that the impact of religion and spirituality on outcomes such as PTG has not been sufficiently considered (Kuo & Rodriguez-Rubio, 2014).

There are three proposed components of religion and spirituality which lead to enhancement of the individual after a traumatic event (Pargament et al., 2006). Spirituality has been demonstrated to influence the development of empowerment, thought to be due to the support that relationship with a religious figure such as God may provide (Pargament et al., 2006). Religion can also act as a meaning-making process as it provides a framework of beliefs in which to interpret unique events such as natural disasters (Pargament et al., 2006). Finally, religion may contribute to the
re prioritisation of life aims and goals. This is consistent with Tedeschi and Calhoun’s (1996) conceptualisation of PTG which includes exploration of new possibilities in life.

Consistent with these proposals it can be suggested that those with high religiosity levels are more likely to experience empowerment and re prioritisation of life aims as well as make meaning of traumatic events thus facilitating assimilation or accommodation. This is consistent with Joseph and Linley’s (2005) theory of PTG development therefore leading to the suggestion that those with higher levels of religiosity may have higher levels of PTG. On a broader scale, cultural variations in religiosity levels may reflect differences in PTG thus reinforcing the need to study both culture and religion simultaneously.

While consideration of PTG as an artefact of the positive psychology movement in the West has been fairly recent there are many religions worldwide which reflect this construct including Buddhism, Christianity, and Islam (Buse et al., 2013; Ano & Vasconcelles, 2005; Laufer & Solomon, 2010). For example, Israeli Jewish populations have demonstrated PTG across a range of traumatic events including war and sexual abuse (Laufer & Solomon, 2010). In this context, PTG was higher in those with religious beliefs consistent with ideas of growth such as forgiveness than those who did not express such beliefs, thus emphasising how religion can influence meaning-making processes and therefore PTG (Laufer & Solomon, 2010). It is therefore not surprising that religious beliefs have been shown to be positively related to adaptive outcomes following a traumatic event, and may influence the occurrence and expression of PTG within any given population (Ano & Vasconcelles, 2005; Laufer & Solomon, 2010). Consequently, the need to explore this relationship within more specific religious contexts has been realised (Jang & Wang, 2009; Buse et al., 2013).
Research further supporting the need to address religion in culturally specific contexts is that of Karanci and Acaturk’s (2005) work on Muslim volunteers. This study aimed to consider how being a volunteer within a specific religious setting impacted the development of PTG after Turkey’s Marmara earthquake. The authors found that over four years post-event, all participants reported a substantial degree of growth as a result of their disaster experiences. Using multiple regression analysis, Karanci and Acaturk found that being a neighbourhood disaster volunteer, problem solving/optimistic coping, and fatalistic coping were all significant predictors of PTG development.

Discussion highlighted the role of fatalistic coping as this drew many parallels to Muslim beliefs; such beliefs describe how God is responsible for the fate of each individual, however, the individual still bears accountability for their own actions (Karanci & Acaturk, 2005). This could therefore possibly lead to better acceptance of traumatic events and consequently PTG (Karanci & Acaturk, 2005). As a result, it was proposed that the congruence between experiences and beliefs provided opportunity for growth thus providing insight into how religious beliefs can influence PTG development.

With the above studies as precedents, there are grounds for believing that Buddhist religious beliefs could influence volunteer’s PTG development following disaster work experiences. The concepts of karma (samsara) can help create meaning during and after traumatic events (Gowans, 2015). The four noble truths themselves are centred on the origins of, experiencing, and alleviation of suffering (de Silva, 2002). This encapsulates the concept of overcoming dukkha (suffering) in order to reach Nirvana, which supports the idea that traumatic events can lead to improved states of existence (Harvey, 2000; de Silva, 2002). Likewise, the idea of the ‘socially engaged’ Buddhist – one who applies
teachings of Buddhism through either everyday life or active engagement with issues – may promote activities such as volunteering (Harvey, 2000; Gowans, 2015).

As a result, it can be argued that Buddhism as a religion may contribute to both volunteering activities and adaptive outcomes. It must therefore be considered how beliefs are transmitted – do the social structures in which this occurs also vary across contexts therefore influencing the way meaning and subsequently PTG is developed?

One way of examining this is through organisational structures and the role of empowerment in the development of PTG.

The Organisational Setting and Empowerment

Like religious beliefs, the organisational context can create environments through training and practices which facilitate (or inhibit) the development of PTG (Armstrong, Shakespeare-Finch, & Shochet, 2014). Organisational membership can be a major differentiator between those who passively experience a traumatic event and those who actively engage (thus increasing the likelihood of accommodation) (Paton, 2006). Being part of an organisation which readily activates in the response process has been thought to promote PTG due to the self-selection processes by which individuals choose to enter these environments (Armstrong et al., 2014). The construct by which organisational contexts and PTG interact could possibly be empowerment.

Empowerment as a construct may provide important insights into the role of the organisation on development of positive outcomes through workplace or volunteer experiences. Empowerment refers to the way interdependencies between people and organisations facilitate independent and collective access to and use of resources to define and resolve novel work problems, both present and future (Johnston & Paton,
This process of empowerment of the individual is a type of ‘intrinsic task motivation’ which can act as a driver of organisational behaviours (Thomas & Velthouse, 1990).

Thomas and Velthouse (1990) propose that empowerment can be conceptualised and measured using four factors - meaning, self-determination, competence and impact. *Meaning* or meaningfulness refers to how well the task values are consistent with those held by the individual who must complete the task. For example, someone who finds that the task is consistent with their religious beliefs would find the task more meaningful and may feel empowered as a result. *Self-determination* refers to one’s capability to autonomously determine either his or her own tasks and/or how these tasks should be completed, as well as the degree of responsibility bestowed upon the individual regarding consequences of such decisions. *Competence* encompasses whether the individually is skilfully capable of completing the task requested. *Impact* refers to one’s belief that their contribution is significantly influencing the completion of a set task. Empowerment has been found to facilitate both resilience and preparedness to threats including volcanic eruption, pandemic, bushfires and earthquakes (Paton et al., 2011; Paton, Okada, & Sagala, 2013).

Empowerment can be influenced and mediated by interventions (organisational factors such as training) as well as interpretation style (influenced by cultural and religious practices) (Thomas & Velthouse, 1990). Organisational practices and training geared to specific tasks such as disaster response work may facilitate the development of the global assessment aspect of empowerment. Global assessment refers to the future-oriented application of knowledge and skill acquired through collaborative learning (and so introduces the potential to explore how collectivistic cultural practices may influence
empowerment). It is conceptualized as a process that facilitates anticipation of and learning about future (e.g., natural disaster) experiences which may in turn help individuals make meaning of and accommodate such unpredictable events (Johnston & Paton, 2003; Thomas & Velthouse, 1990).

A lack of consideration of the impact of the organisation on volunteers is an acknowledged limitation in works such as Tanrıdağlı (2005). What specific factors within the organisation lead to the development of volunteer empowerment? Research suggests there are many, however, one that requires further investigation is the religious context in which organisations function. If religious beliefs such as Buddhism are consistent with and/or reinforce components of empowerment then this may in turn facilitate the development of PTG. For example, the engaged Buddhist as discussed earlier may reflect similarities to that of an empowered individual (Harvey, 2000).

While there are different contextual influences (organisational vs. religious) to being an empowered individual or engaged Buddhist, both reflect the necessity of a structured entity that guides the individual through processes of training and practices. These organisational or religious beliefs therefore determine how well an individual feels they can actively engage with and consequently accommodate both current and future traumatic experiences.

Consistent with Joseph and Linley’s model of PTG, if empowerment provides access to and ability to use cognitive resources which would assist with the accommodation of traumatic experiences, empowerment may therefore predict PTG. Previous studies have supported this; training of mental flexibility, cognitive reframing and benefit finding (deemed cognitive resources) have been demonstrated as PTG predictors (Shakespeare-Finch, 2002; Joseph & Linley, 2005). If empowerment provides new interpretive
resources then organisational practices that support empowerment may thus influence PTG. More specifically, if individuals are empowered by finding tasks meaningful then this may be subsequently influential on the development of PTG as meaning is an important part of this growth process.

Measurement of Empowerment and Posttraumatic Growth

One method of looking at the culmination of these contextual factors is through a specific primary reference group. Calhoun and Tedeschi (2006, p. 12) discuss how primary reference groups, which are those who ‘have immediate influence over the individual’, represent how culture and religious beliefs interact to influence the way an individual responds to a traumatic event. For example, Karanci and Acaturk’s research as discussed earlier was specific to volunteers in the Turkish, Muslim context following the Marmara earthquake. Likewise, Jang and Wang’s (2009) work explores PTG development in the Hakka people of Taiwan in the aftermath of the 921 earthquake in 1999.

These studies demonstrate not only that primary reference groups should be considered as unique contexts, but also that organisational, cultural, and religious factors of these contexts interact and therefore cannot be considered independently (see Figure 1). This then reinforces the need to consider the way that culture, religion and organisational interplay simultaneously thus providing an understanding of the multi-faceted context that is the primary reference group each individual exists and functions within. Following this argument, the impact that these primary reference groups have on understandings of and expression of PTG and empowerment needs to be explored.
Most research on empowerment and PTG has been conducted in culturally individualistic Western countries where individual choice, both with regards to achieving it and providing opportunities for it, are more a function of choice (Splevins, Cohen, Bowley, & Joseph, 2010; Hofstede, 2001). By conducting this research in a highly collectivistic culture (i.e. Taiwan) where the kinds of relationship embodied in the empowerment concept are more culturally implicit, it will examine the degree to which the empowerment and PTG constructs are culturally universal (Norenzayan & Heine, 2005).

This study may also enable exploration of issues such as power distance, which may accentuate concerns surrounding lack of understanding of local areas and customs due to top-down hierarchical structures (Hofstede, 2001). Demonstrating universality
will increase the application of these concepts in countries in Asia that experience a very high incidence of disasters (APADM, 2012; Splevins et al., 2010). For example, it would help in understanding volunteer experiences following Taiwan’s 2009 Typhoon Morakot.

If one could predict the precise nature of PTG in the specific environment in which the traumatic event has occurred, PTG could be appropriately studied, promoted and developed within that primary reference group. As a result, the aims of this study were to consider the following in an exploratory manner:

1. To examine whether well-established (Western) psychological constructs – PTG and empowerment - are applicable in a highly collectivistic culture and so assess the degree to which these constructs are theoretically universal.
2. To conduct focus group interviews with Buddhist volunteers to explore experiences and perceptions of PTG and sustained ability to adapt in high demand disaster response contexts.
3. To investigate whether cultural, religious, and organisational factors empower volunteers and increase positive outcomes (PTG) in Taiwanese disaster volunteers.

Section One

Method

Consistent with Calhoun and Tedeschi (2006) and Ratner’s (1997) recommendations for culturally specific research, an exploratory sequential (quantitatively dominant) mixed methods approach was used. This type of analysis is
used when a qualitative study is initially used to guide and support development or testing of quantitatively measured constructs and instruments (Guest, MacQueen, & Namey, 2012). In section one, a qualitative approach was used to explore perceptions and experiences of PTG consistent with the recommendations made by Park and Lechner (2006). By utilising a qualitative approach initially, assumptions of uniformity in constructs (such as PTG and empowerment) were addressed by identifying which specific cultural and/or religious beliefs did or did not influence the constructs (Ratner, 1997). The qualitative analysis provided face validity for quantitative measures in section two.

The National Statement (The National Health and Medical Research Council, 2007) was adhered to throughout the current study, adapted to the appropriate ethical practice in a Taiwanese context as guided by past research and long-term researchers in the field. See Appendix A for ethical approval.

**Participants**

A total of 25 participants took part in two focus groups. There were 23 females and two males, distributed evenly across the groups. All participants were over the age of 18 and provided consent prior to commencing. Participants were identified through National Pingtung University of Science and Technology (NPUST) register of disaster volunteers within the Pingtung region (see Appendix B for NPUST letter of agreement). For this study, volunteers with the Tzu Chi Buddhist charity were approached. To ensure that recruitment was culturally appropriate, initial contact with potential participants was made by an NPUST representative with Tzu Chi. This approach was adopted to ensure that all volunteers were committed Buddhists and based their disaster volunteer work on
the application of Buddhist principles. Inclusion criteria meant that all participants had experienced Typhoon Morakot, were contributing volunteers in the aftermath of this disaster, and were still contributing volunteers living in Taiwan at the time of the study.

Materials

The interview schedule used in the focus groups consisted of a number of open ended questions (see Appendix C). These questions focussed on individual and collective experiences of volunteer work, particularly in regard to positive experiences following Typhoon Morakot. Questions also explored perceptions of religious and cultural beliefs and organisational characteristics and how these influence volunteer experiences.

Procedure

Participants were asked to read the information sheet (see Appendix D) before providing verbal consent for both focus group participation and recording of interviews. Participants were then verbally briefed as to how the focus group would progress and asked if they had any questions; all questions were addressed. Once participants were satisfied with progressing, they were asked a series of questions and given opportunity to respond and openly discuss each of these. Responses were translated between Mandarin and English in real time. The English translation of focus groups were recorded. After discussion had finished, participants were debriefed and given opportunity to ask any further questions. Once complete, the recording was transcribed for analysis purposes (see Appendix E).

Analysis was conducted using phenomenological epistemology. A phenomenological approach refers to an inductive manner of investigating the
interpretations, experiences and meanings individuals have of any given phenomena thus making this an appropriate theoretical perspective to achieve the aims described above (Reeve, Mathieu, Ayelet, & David, 2008; Howitt, 2010). Phenomenology attempts to take on the perspective of individuals and groups who have experienced the phenomena first hand, primarily through interviews, and is therefore bound to the context in which it is conducted (Reeve et al., 2008; Howitt, 2010). This makes it an ideal framework for the current study. One of the described issues, however, is that the researcher should have limited preconceptions and be aware of the impact of one’s own experiences on these; use of cross-contextual communication (between the researcher and trained researchers within the context) hoped to minimise the impact of any preconceptions before and throughout the study (Gavin, 2008).

Using the phenomenological epistemology, thematic analysis was conducted on the focus group transcripts. Thematic analysis is an approach used to actively identify consistent and meaningful themes across qualitative data (Floersch, Longhofer, Kranke, & Townsend, 2010; Braun & Clarke, 2006). Themes are identified when there is a repeated idea throughout the data that is representative of a meaningful section of information (Braun & Clarke, 2006). This can be a particularly useful tool when attempting to describe a broad range of important themes in an under-researched area as would be the case in the current study (Braun & Clarke, 2006).

Braun and Clarke (2006) provide guidance of a flexible, non-linear six-phase process through which thematic analysis occurs (see Figure 2). This includes processes of transcribing and recording, developing preliminary codes, developing themes from
these codes, assessing these against the original codes and data set, and labelling the themes.

Figure 2. Summary of Braun and Clarke’s (2006) six phase process of thematic analysis

Results

From the thematic analysis, 184 unique codes were elicited. Each of these codes represented a unique idea within the transcripts. Consistent with procedures outlined by Braun and Clarke (2006), these codes were then sorted according to their underlying themes thus leading to condensation into seven major themes. For an overview of the allocation of codes to themes see Figure 3.
Figure 3. Summary of codes and relevant themes as derived from thematic analysis.
The major themes were as follows:

**Connectedness/allegiance to the organisation.** Volunteers expressed high levels of allegiance towards the organisation they belonged to with many having organisational membership in excess of 10 to 20 years. Reasons cited for this allegiance included inspirational leaders and high levels of connectedness between organisational members. For example, participants described how being part of the organisation gave purpose. One volunteer quoted, “my life goal is to seek for excellence…I have been looking for that for my entire life…after I joined then I experienced that”. Other reasons for allegiance included inspirational leaders within the organisation: “so I just look at her and then she is so old but she is still doing so many things and how can I say I don’t want to do it”. While this connectedness/allegiance to the organisation did not appear to map onto a specific empowerment or PTGI subscale it may be representative, or influential on, the development of empowerment overall.

**Organisational practice.** This theme referred to neutral activities and practices within the organisational context that were not linked specifically to negative or positive outcomes but may be indirectly influential on outcomes. This theme included intra- and inter-organisational interactions, training practices, and whether focus was on local or international aid. For example, daily training is an essential part of many volunteers experience: “every single morning, Master Cheng Yen have [sic] that special time when [she] will teach them …so you need to practice every day.” It was therefore expected that organisational practice mapped both onto competence and empowerment overall.
**Conflict between capacity and expectations.** Volunteers recounted negative experiences resulting from a conflict between one’s capacity and expectations. These negative experiences occurred across three levels: personal expectations, community expectations, and organisational expectations. Personal expectations surrounded one’s own emotional responses which were perceived as unwarranted. For example, one participant described the unsettling experience in which she arrived home after volunteering and began to cry but “she didn’t find a reason why she was crying”.

Community expectations surrounded resource distribution and waste as well as resistance towards volunteer activities. For example, participants expressed negative emotions towards being unable to provide the community with the resources they required: “some people didn’t get [the resources] until the following day because it was so hot, Taiwan was very hot here during that time so it was already spoiled…I am not happy with this”.

Organisational expectations that conflicted with personal capacity included organisational activities that could not be achieved in proposed time frames and with information provided, and conflict between lower and higher levels of the organisation. When discussing how smaller branches of the organisation were treated during Typhoon Morakot, one of the participants described how “someone was forcing her to do something when they didn’t even know about the local [conditions]…now even though they think about those events…they still feel uncomfortable. She say ‘you know what, I know I am not supposed to feel this way, but in reality, I really feel this way”.

These codes were expected to map negatively onto the ‘competence’ subscale of the PEI as it reflected a lack of empowerment due to perceived incompetence.
Perceived significance of contribution. This theme reflected the perceived impact of the individual and whether they would be able to meaningfully contribute to both current and future events. Experiences included hopelessness due to the widespread scale of the disaster and feelings of insignificance of the individual within the organisation and community. As one volunteer reflected, “personally I’m not an important person, I’m not important to my community because even though without me, without my service, the sun still comes up the following day. The day or people’s life [sic] won’t be changed without me.” This is thought to map onto the ‘impact’ scale of the PEI. There were, however, exceptions to this in which the organisation supported self-empowerment of individuals; this manifested through examples such as proactive information gathering and suggestions that whatever one thinks is right should be done. These experiences may be perceived more as ‘competence’ and ‘self-determination’ rather than impact because it describes the way the individual can demonstrate autonomy.

Influential beliefs. Beliefs were separated into four subthemes:

Influential beliefs of a religious origin. These were beliefs explicitly described as being of Buddhist origin. Beliefs included karma, religion as a source of meaning and coping, beliefs regarding one’s role in life, and how emotion should be appropriately dealt with. For example, in regards to recovery after Typhoon Morakot, one volunteer stated, “…when we went to the affected areas, we were thinking ‘wow, how come some people who were experiencing such great disaster, everyone experience different things in their life?’ so when we see [sic] those things we were pondering ‘why, why [do] we need to experience suffering and death …what are [sic]
the purpose of those suffering?’. Then we start learning because it’s more like a reincarnation, that concept that if I don’t do good [sic] in this life, next life I may suffer”. These beliefs do not map onto a specific subscale of the PTGI but may be a determinant of PTG overall; they may, however, map onto the ‘meaning’ subscale of the PEI and emphasise the role of religion as a contributing factor to meaning making.

**Influential beliefs of an organisational origin.** These were beliefs described explicitly as being from the organisational context, often transmitted through organisational practices and/or organisational leaders. It is important to note that as organisations existed within a Buddhist context, these beliefs may be influenced by Buddhist beliefs and practices. Examples of codes within this theme include beliefs surrounding flexibility, love, self-awareness, how traumatic events can lead to fullness and wisdom, interconnectedness with the earth, and kindness. For example, in regards to having four key elements of the organisation, one volunteer stated that “when we talk about the disaster relief work…we have these four elements. When we do the work, if we have these four elements, then we can reach the fullness, their ultimate goal”. These are thought to have similar impacts, and therefore can be measured in the same way, as influential beliefs of religious origin described above.

**Satisfaction/gratitude.** Satisfaction and gratitude were a key theme throughout all focus groups. Codes included gratitude through comparison to others affected, expectation of satisfaction and gratitude leading to positive outcomes, and gratefulness for opportunities to grow. Statements such as “I can be the richest person if I am satisfied with what I have” and “just thinking about if you can help other people, that means you have more energy, you are in a better condition that those people, so when
you think about this you already have enough reason to be grateful, to be happy about” emphasise this. This theme is thought to map onto the ‘meaning’ subscale of the PEI and the ‘appreciation for life’ subscale of the PTGI.

**Expectation of growth.** Volunteers discussed aiming towards “fullness” and how events can be used to move towards this fullness state. Likewise, the idea that challenges provide opportunity for growth was explored. This theme is backed up by the following quote from an organisational text: “Spiritual wisdom is cultivated in the interplay of people, objects and events. To escape from reality, to keep away from people and events, provides no means to nurture wisdom” (Shih Cheng, 2005, p. 33).

**Changes due to traumatic event.** Changes included four subthemes:

**Lessons learned from experience.** Lessons focused on how future events would be addressed differently as a result of past experiences. For example, volunteers discussed the requirement for improved information dissemination and resources distribution. This subtheme did not map onto a specific subscale but could be influential on empowerment overall.

**Changes in relationships.** Volunteers discussed increased interdependency with neighbours during and after Typhoon Morakot as well as improved relationships with family and other community members. This subtheme may map onto the ‘relating to others’ PTGI subscale.

**Positive changes.** Volunteer discussed a range of positive changes resulting from their experiences. For example, one volunteer quoted, “during the regular situation you probably won’t find that kind of energy or power to do certain things but under the
great pressure she found this special energy”. This was thought to map onto ‘personal strength’ and ‘appreciation for life’ PTGI subscales.

**Negative changes.** Volunteers also described negative changes including loss of possessions, changes in community attitudes, and difficult working conditions. For example, volunteers described how a nearby area “experienced big change - before the disaster…they were okay people. But after disaster, when you look at them their skin was darkened…like a hardworking people…everything is very different”. This was thought to not map onto a specific subscale but may map negatively across PTGI.

**Inclusivity/connectedness of people.** This theme referred to beliefs and activities directed at interpersonal relationships and how this contributed to volunteer experiences: “I think the most meaningful to me is when we help clients or those who are survivors”. Interconnectedness beliefs included inclusive love for all people, altruism, and helping as important. Specifically, volunteers expressed how relieving other’s stress was a source of personal PTG. This theme appears to map onto the ‘relating to others’ PTGI subscale.

The above thematic analysis emphasises that PTG appears to be a relevant construct within the Taiwanese, Buddhist context as volunteers described experiences which contributed to the development and experience of PTG. Empowerment also appears to be applicable within this context, linking both to the themes and to PTG itself. The applicability of these constructs is further emphasised by mapping themes onto subscales of the PTGI and PEI thus supporting the use of these scales for assessment of PTG and empowerment in this context. For example, satisfaction/gratitude could map onto both the meaning subscale of the PEI and
appreciation for life subscale of the PTGI. Other themes did not map directly onto a subscale but may be influential on the construct as a whole. For example, the global assessment component of empowerment reflects perceptions of how one will apply problem-solving and resources developed in the empowerment process across situations and time (Thomas & Velthouse, 1990). Some volunteers described experiences of disempowerment through a lack of learning for future events while others proposed the opposite thus suggesting that global assessment (not directly measured by a subscale but by the empowerment scale overall) is still an important consideration. For a full summary of the mapping of themes onto subscales, see Table 1.


<table>
<thead>
<tr>
<th>Scale</th>
<th>Subscale</th>
<th>Supporting themes/subthemes</th>
<th>Themes which supported overall scale use</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTGI</td>
<td>Relating to others</td>
<td>• Inclusivity/equality (Buddhist origin)</td>
<td>• Expectation of growth</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Inclusivity/equality (organisational origin)</td>
<td>• Influential beliefs (Buddhist)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Changes in relationships</td>
<td>• Influential beliefs (organisational)</td>
</tr>
<tr>
<td></td>
<td>Personal strength</td>
<td>• Expectation of growth</td>
<td>• Negative changes (unspecified)</td>
</tr>
<tr>
<td></td>
<td>Spiritual change</td>
<td>• N/A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>New possibilities</td>
<td>• N/A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Appreciation for life</td>
<td>• Satisfaction/gratitude</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Positive change (unspecified)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meaning</td>
<td>• Satisfaction/gratitude</td>
<td>• Connectedness/allegiance to organisation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Influential beliefs (Buddhist)</td>
<td>• Organisational practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Influential beliefs (organisational)</td>
<td>• Learning from experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Expectation of growth</td>
<td></td>
</tr>
<tr>
<td>PEI (Spreitzer,</td>
<td>Competence</td>
<td>• Conflict between personal capability and community expectation</td>
<td></td>
</tr>
<tr>
<td>1995)</td>
<td></td>
<td>• Conflict between personal capability and organisational expectation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Conflict between personal capability and personal expectation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Impact</td>
<td>• Perceived significance of contribution (both as single entity and group)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-determination</td>
<td>• N/A</td>
<td></td>
</tr>
</tbody>
</table>
Section two

The results from section one support the idea that PTG, in some format, appears to be represented in the Taiwanese, Buddhist context. The aims of section two of the study, consistent with the exploratory sequential methodology, are therefore as follows:

- To explore the structure of PTG as measured by Tedeschi and Calhoun’s (1996) PTGI in the Taiwanese, Buddhist context.
- To explore the structure of empowerment as measured by Spreitzer’s (1995) PEI in the Taiwanese, Buddhist context.

Method

Participants

Two hundred and fifty four (254) Taiwanese Buddhist volunteers participated in the questionnaire stage of the research. Criteria for participation were the same as section one of the study. There were 69 males and 183 females in the study as well as two participants who did not specify sex; all were over 18 years of age.

Materials

Quantitative data was collected using a 33-item questionnaire presented in paper-and-pen format. The questionnaire consisted of Spreitzer’s (1995) 12-item empowerment scale, measured on a Likert scale of 0-5 (0 = I did not experience this change as a result of the Typhoon Morakot through to 5 = I experienced this change to a very great degree as a result of the Typhoon Morakot). This scale was translated using a committee approach of two bilingual translators familiar with both the context under
investigation and the content area (see Appendix F for translation). English back-translation was checked throughout in order to ensure linguistic equivalence and translation quality, consistent with recommendations by Weiner et al. (2010). Jang’s (2008) Mandarin translation of Tedeschi and Calhoun’s 21-item Posttraumatic Growth Inventory (PTGI) was also used with responses measured on the same Likert scale described above. Scales were assessed for face validity and found to be satisfactory. The Ways of Coping Scale (Karanci, Alkan, Aksit, Sucioglu, & Balta, 1999) was dropped from analysis due to the lack of thematic support for this within section one. Mplus was used for analysis purposes.

**Procedure**

A trained researcher visited local branches of the organisation and discussed the study with participants, consistent with local culture. Participants were asked to read an information sheet (see Appendix G) regarding participation before completing the questionnaire and returning this to researchers via a return envelope. The questionnaire requested participants to circle the most correct answer to each statement in reference to their volunteering experience. Consent was implied through return of the completed questionnaire. Analysis using exploratory factor analysis (EFA), consistent with the recommendations for cross-cultural construct research by Ho and Cheung (2007), was conducted using MPlus.

**Results**

Factor analysis using maximum likelihood extraction was conducted on the 12 items of the PEI scale. An oblique (oblimin) rotation was applied as the factors were assumed to be theoretically related. A two-factor structure was identified, with the
model fitting well to the data, $\chi^2(43) = 272.73, p < .001$. This is a significant improvement in fit over a one-factor model, $p < .001$. RMSEA values support the use of this model, RMSEA = 0.145, 95% CI [0.129, 0.162], $p < .001$, as do other model fit statistics, CFI = 0.97, TLI = 0.96, SRMR = 0.046. Table 2 displays factor loadings following oblique rotation. Items that cluster together on the same factor suggest that the factors could appropriately be labelled \textit{intrinsic motivation} and \textit{impact}. Intrinsic motivation reflected beliefs around capability and independence which act as intrinsic driving factors to promote engagement with current and future organisational activity. Impact reflected a belief of whether one’s participation in such an activity is likely to make a difference in regards to others, consistent with Spreitzer’s (1995) conceptualisation of impact.

Factor analysis using maximum likelihood extraction was conducted on the 21 items of the PTGI scale. An oblique (oblimin) rotation was applied as the factors were assumed to be theoretically related. While there was thematic support for the inclusion of the PTGI as a PTG measure, an appropriate factor structure could not be extracted. Assumptions of factor analysis were met and individual items were appropriate for an EFA to be conducted. The model, however, was not a sufficient fit to the data using either 1, 2, 3, 4, or 5-factor structures. See Table 3 for a summary of model fit data. Models with 6 or more factors were not theoretically viable. Models with 5 or fewer factors had large amounts of cross-loading and factors were not theoretically viable.

The original proposal stated that, if supported by the factor analyses, the relationship between empowerment and PTG would be examined. The multiple
regression was dropped from the analysis due to failure to establish an appropriate factor structure for PTG.

Table 2

*Factor loadings for Exploratory Factor Analysis with Oblimin Rotation on the Psychological Empowerment Instrument*

<table>
<thead>
<tr>
<th></th>
<th>Intrinsic Motivation</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am confident in my ability to do my job</td>
<td>.80</td>
<td>.02</td>
</tr>
<tr>
<td>My impact on what happens in my department is large</td>
<td>.29</td>
<td>.58</td>
</tr>
<tr>
<td>I have considerable opportunity for independence and freedom in how I do my job</td>
<td>.68</td>
<td>.37</td>
</tr>
<tr>
<td>I have significant autonomy in determining how I do my job</td>
<td>.69</td>
<td>.31</td>
</tr>
<tr>
<td>The work I do is meaningful</td>
<td>.92</td>
<td>-.18</td>
</tr>
<tr>
<td>I have mastered the skills necessary for my job</td>
<td>.68</td>
<td>.22</td>
</tr>
<tr>
<td>My job activities are personally meaningful to me</td>
<td>.91</td>
<td>-.17</td>
</tr>
<tr>
<td>I have a great deal of control over what happens in my department</td>
<td>-.05</td>
<td>.92</td>
</tr>
<tr>
<td>The work I do is very important to me</td>
<td>.85</td>
<td>-.12</td>
</tr>
<tr>
<td>I can decide on my own how to go about doing my work</td>
<td>.69</td>
<td>.22</td>
</tr>
<tr>
<td>I have significant influence over what happens in my department</td>
<td>.05</td>
<td>.90</td>
</tr>
<tr>
<td>I am self-assured about my capability to perform my work</td>
<td>.69</td>
<td>.27</td>
</tr>
</tbody>
</table>
Table 3

*Model Fit Indices for the Exploratory Factor Analysis of the Posttraumatic Growth Inventory*

<table>
<thead>
<tr>
<th>Statistic</th>
<th>1 Factor</th>
<th>2 Factors</th>
<th>3 Factors</th>
<th>4 Factors</th>
<th>5 Factors</th>
<th>6 Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square ($df$)</td>
<td>738.90 (189)</td>
<td>593.32 (169)</td>
<td>482.97 (150)</td>
<td>399.50 (132)</td>
<td>297.93 (115)</td>
<td>242.57 (99)</td>
</tr>
<tr>
<td>$p$ (chi-square)</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Improvement in fit</td>
<td>-</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>RMSEA (90%CI)</td>
<td>.11 [.10, .12]</td>
<td>.10 [.09, .11]</td>
<td>.10 [.08, .10]</td>
<td>.09 [.08, .10]</td>
<td>.08 [.07, .09]</td>
<td>.08 [.06, .09]</td>
</tr>
<tr>
<td>$p$ (RMSEA $\leq 0.05$)</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>CFI</td>
<td>.96</td>
<td>.97</td>
<td>.97</td>
<td>.98</td>
<td>.99</td>
<td>.99</td>
</tr>
<tr>
<td>TLI</td>
<td>.95</td>
<td>.96</td>
<td>.96</td>
<td>.97</td>
<td>.98</td>
<td>.98</td>
</tr>
<tr>
<td>SRMR</td>
<td>.06</td>
<td>.05</td>
<td>.04</td>
<td>.03</td>
<td>.03</td>
<td>.02</td>
</tr>
</tbody>
</table>
Discussion

This study had three aims. The first was to investigate whether Western constructs PTG and empowerment were applicable within a Taiwanese, Buddhist context. The second was to explore volunteer perceptions and experiences of PTG. The final aim was to examine whether cultural, religious and organisational factors influenced the development of PTG in Taiwanese, Buddhist volunteers.

Aim 1: Universality of Posttraumatic Growth and Empowerment

The first aim of the study was to assess the universality of Western PTG and empowerment conceptualisations. As described in section one, Taiwanese, Buddhist volunteers appeared to experience positive growth as a result of their volunteering. This, however, was not reflected in section two; EFA failed to replicate westernised factor structures of PTG and no alternatives were viable. Conclusion could then be drawn that Tedeschi and Calhoun’s (1996) conceptualisation of PTG was not applicable within this context, however, this may not be completely accurate. There are a number of possible reasons which could explain the inability to find a factor structure for the PTGI. These include:

1. The construct of PTG is not applicable to this primary reference group. Ho and Cheung (2007) acknowledge this in their work on developing cross-cultural scales, suggesting that a key issue is the irrelevance of constructs across contexts. Arguments against this, however, include that in section one volunteers acknowledged positive adaptation over and above previous levels of functioning as a result of their experiences, consistent with Tedeschi and Calhoun’s (1995) definition of PTG. This argument is also inconsistent with work by Weiss and
Burger (2010) which emphasised that the idea of PTG is universal, but may have culturally specific expressions and dimensions.

2. The PTGI scale is not appropriate for the context. Lack of validity across populations and in assessing unique aspects of growth is an acknowledged limitation of many current PTG scales including the PTGI (Park & Lechner, 2006). The PTGI was developed in the U.S.A, a country with high individualism levels and low power distance levels compared to Taiwan (Calhoun et al., 2010; Park & Lechner, 2006; Hofstede, 2001). Despite face validity assessment of scales, there are still a number of issues which occur when attempting to adapt measures including that they may not be valid or applicable across contexts (Ho & Cheung, 2007). For example, the level of religiosity in a culture has been shown to influence responses to questions of a religious nature (Calhoun et al., 2010). This is particularly prevalent in highly atheistic countries as participants were less likely to respond highly on Spiritual Change questions (Calhoun et al., 2010). The opposite could also be argued – if religion is fundamentally embedded in the everyday experience, does it lose salience therefore resulting in the same outcomes as highly atheistic cultures? Regardless, it can be concluded that while PTG may be present within this specific context, there are currently insufficient methods of measuring and understanding the culturally specific nature of this construct.

3. PTG may be implicitly experienced by volunteers. Volunteer’s experiences demonstrated they were functioning within a unique context that included high levels of organisational allegiance, regular religious teaching and practice, and expectations of growth. Consequently, experiences of PTG may be embedded
within the cultural, religious and organisational components of the context therefore reducing experience salience as they are considered a ‘way of life’. If this proposition is so, it may be due to use of assimilative rather than accommodative processes; expectations of growth mean that frameworks which account for traumatic events have previously been established through the organisation, religion, and culture. As a result, it could be expected that volunteers would more readily recognise something that did not fit within these schemas as evidenced through the issues of incompatibility between expectations and personal capabilities which led to emotional dissatisfaction and distress.

The universality of empowerment also needed to be considered. This should not be thought of as a primary aim but secondary, essential for understanding the organisational context as emphasised in section one. Results of the EFA showed a two-factor structure for empowerment. While Spreitzer’s (1995) conceptualisation of empowerment consisted of a four-factor structure, items traditionally loading onto meaning, self-determination and competence loaded primarily onto the singular factor of intrinsic motivation. This factor structure could be influenced by organisational/religious beliefs; in section one volunteers described the “fullness” of experiences thus leading to singular factor loading compared to compartmentalised westernised experiences. Impact represented the perceived effect of volunteer’s actions on others (represented in the theme ‘perceived significance of contribution’) thus demonstrating an extrinsic representation of volunteer experiences. This factor structure demonstrates that while empowerment may be experienced differently in this context
compared to westernised areas such as Australia or the U.S.A, the present analysis supports that it is a valid construct for Taiwanese, Buddhist volunteers.

**Aim 2: To Investigate Perceptions and Experiences of Posttraumatic Growth in Taiwanese, Buddhist Volunteers**

The second aim of the study was to explore experiences and perceptions of PTG and sustained ability to adapt in high demand disaster response contexts in Taiwanese, Buddhist volunteers. This aim was completed by conducting focus groups which enabled an understanding of group experiences (consistent with collectivist cultural principles) followed by thematic analysis. The thematic analysis provided insight into seven themes essential to the volunteer experience, many of which related to PTG. For example, volunteers described improved relationships with others as well as an increased unity between members of one's own families and community under the theme ‘changes due to traumatic event’. Tedeschi and Calhoun’s (1996) conceptualisation of PTG represents this as a ‘relating to others’ domain, in which PTG can manifest as increased compassion, closeness and connection between people.

Volunteer experiences also reflected religious, cultural and organisational factors and their interactions as important to the development of PTG.

**Religious factors.** Consistent with Pargament et al.’s (2006) work on spirituality and Joseph and Linley’s (2005) conceptualisation of PTG, religious beliefs determined how a volunteer was likely to interpret an event by providing a framework for meaning-making and therefore assimilative and accommodative processes. The impact of religion as important to the volunteer experience was found in themes such as ‘influential beliefs’ however, like the issue with PTG above, religion may be less salient
across other themes due to the embeddedness of the volunteer within the religious context.

**Cultural factors.** Many of the themes had clear links to the cultural dimensions of the contexts in which volunteers functioned. For example, the themes ‘connectedness/allegiance to the organisation’, ‘perceived significance of individual’, and ‘inclusivity/connectedness’ reflected collectivistic beliefs and practices. Similarly, the theme ‘conflict between personal capacity and expectations’ reflected power distance as many of the outcomes experienced may have been contributed to by top-down hierarchies. This is consistent with Buse et al.’s (2013) suggestion that cultural factors play an important part in the development and expression of PTG.

**Organisational factors.** Like religious and cultural beliefs, organisational practices were important to volunteer’s perceived development and experience of PTG, consistent with the findings of Armstrong et al. (2014). For example, opportunities for learning through daily teachings led to increased likelihood of empowerment which in turn may lead to PTG. One quote from an organisational text demonstrates the frameworks which would assist volunteers in making meaning of, and therefore experiencing PTG due to, traumatic events: ‘When life is safe and smooth, we can easily lose our direction. Yet even a small setback or misfortune can awaken our conscience, and nurture the seeds of kindness’ (Shih Cheng, 2005, p. 169).

**The relationship between religious, organisational, and cultural factors.** The themes indicated relationships between religious, cultural, and organisational factors. This premise is consistent with the ideas of proximal culture in which a primary reference group exists - a combination of beliefs that, combined, influence an
individual and their journey post-trauma (Calhoun & Tedeschi, 2006). One participant quoted, “actually her [organisational leader’s] teaching is about Buddha, so it’s based around Buddha’s teaching, but the way she say it is more like, she is using our language to help us to have the better understanding of Buddha’s concepts and Buddha’s teaching”. This reinforces the impossibility of distinctively separating the organisation from the cultural and religious contexts in which it exists (see Figure 4).

One example of this multi-faceted relationship was the interdependency required for in PTG development. Volunteers described how one’s own growth was developed and reinforced through alleviation of other’s stress; likewise, negative outcomes were experienced when one could not alleviate other’s stress. Volunteers described (paraphrased), ‘if you are suffering and I can help, I have an increased likelihood of experience PTG; if you are suffering and I cannot help, I have an increased likelihood of experiencing challenges’. This tended to dominate over themes of one’s own experience leading to personal growth, consistent with Buddhist ethics of how helping others results in helping oneself (Harvey, 2000). “Engaged Buddhists appeal to interdependence…socially engaged Buddhists often maintain that spiritual development and social activism go hand-in-hand and should be combined: pursuit of enlightenment (for example, by following the Eightfold Path or the Six Perfections) without active compassion for others is misguided” (Gowans, 2015, p. 233). Not only does this quote clearly demonstrate religious beliefs, this interdependency reflects collectivistic patterns of behaviours which emphasise interlinked group relationships over the individual as a stand-alone entity (Splevins et al., 2010). Finally, the organisational practices through which this social activism occurs emphasises that
these factors should be considered as mutually dependent factors influencing the development of PTG.

Figure 4. Visual representation of themes and relationships as derived from thematic analysis

Aim 3: To Investigate which Cultural, Religious and Organisational Factors Influence Development of Posttraumatic Growth in Taiwanese, Buddhist Volunteers

Aim 3 was partially supported. Through the thematic analysis as described above it became apparent that religious, cultural, and organisational factors play a key role in the development or otherwise of positive outcomes such as PTG. Such findings are consistent with the work of Karanci and Acaturk (2005), Tanridağli (2005), Jang and Wang (2009), and Paton et al. (2011). If a multiple regression had been conducted, it
would have been possible to empirically assess the relationship between empowerment and PTG more clearly.

Implications

There are both theoretical and practical implications for the above findings. Theoretically, such work provides support for research acknowledging that PTG in itself may be universal, however, its manifestation and factor structure may vary cross-culturally (Weiss & Berger, 2010). Understanding the cross-cultural application of such constructs can be an important part of developing and applying assessment and treatment tools as well as decision and policy making within specific primary reference groups or contexts (Weiner, Graham, & Naglieri, 2013). This study also contributes to reducing previously identified gaps in the literature pertaining to the impact of religious and cultural beliefs on volunteers and PTG more generally.

This study also represents real-world applications. Taiwan is known as a high-risk disaster area therefore future traumatic events are likely (Jang & Wang, 2009). In 2014 alone, natural disasters implicated 140.7 million victims therefore emphasising the need for sufficient local and international response volunteers (CRED, 2015a). It is therefore important to know not only how to promote PTG through the policies, training, and support provided to response volunteers from within a context, but also to volunteers entering this context from other contexts. For example, policies which allow further self-determination and information gathering within local organisational branches would alleviate some negative outcomes experienced as a result of hierarchical top-down structures. Such knowledge would also be beneficial to trans-national aid organisations such as Asia Pacific Alliance for Disaster Management as understandings
of cultural specificities would enable facilitation of effective and efficient cross-cultural assistance (APADM, 2012).

**Limitations and Future Directions**

One limitation was that due to inability to factorise the PTGI a multiple regression analysis could not be run. While there is theoretical and thematic support that volunteers perceived cultural, religious, and organisational impacts on PTG, there is no operationalised measure regarding which of these is most influential for this population. This shortcoming therefore represents an area for future research, particularly once an appropriate validated and reliable measure of PTG in this context has been developed.

Differences between Western and Chinese cultures call for more research into empowerment in the Buddhist, Taiwanese context. For example, cultural dimensions such as power distance vary substantially across these cultures, which may influence the development of empowerment. As the Chinese translation of the PEI scale had not been validated, this may therefore have resulted in a misrepresentation of the empowerment within this context.

Regardless of face validity, translations are not always equivalent across countries, cultures and populations and should be adequately validated before use (Ho & Cheung, 2007; Weiner, Graham, & Naglieri, 2013; Geisinger, 1994). While translation and back-translation for the PEI was completed, the full process including field-testing and standardisation required for test adaptation and validation as recommended by Geisinger (1994) could not be completed due to the time constraints of the study. Likewise, it was not possible use other validated Chinese adaptations due to insufficient face validity for application to the current context. Future studies should
aim for validation of the PEI scale prior to its use in similar research consistent with the procedures proposed by Geisinger (1994).

A final limitation was the relationship between the researchers and volunteers. An etic approach was used for the current study; while both etic and emic approaches have strengths and weaknesses, as a researcher outside the primary reference group, cultural and language nuances may lead to systematic errors within the analysis and issues with interpretive validity (Ho & Cheung, 2007; Ho & Bai, 2010; Ratner, 1997). Use of thematic analysis further compounds this due to the need to identify which ideas and themes within the data are most important, thus the approach taken may have resulted in inaccurate representation of true themes (Braun & Clarke, 2006). While continual consultation with those in the primary reference group was utilised to attempt to avoid such issues, it is virtually impossible for researchers outside the context to create a completely successful representation of the group of consideration. Future studies could aim to address this by taking a more ethnographic approach to the study or alternatively using a combined etic-emic approach as recommended by Ho and Cheung (2007), in which validated scales are assessed in the context of the population and items modified to suit culture-specific features.

This etic-emic approach leads to the final future direction - development of a valid PTG measure in order to gain a clearer understanding of the structure of PTG within this context. As discussed earlier, test adaptations do not always have equivalence across contexts, therefore qualitative analysis could be extended in order to provide a basis for the development of an appropriate measure (Weiner, Graham, & Naglieri, 2013). If an appropriate measure could be developed, use in a longitudinal
design in order to gain a more comprehensive understanding of changes that occur as the result of both singular and accumulated traumatic experiences may be beneficial (Park & Lechner, 2006; Laufer & Solomon, 2010; Karanci & Acaturk, 2005).

**Conclusions**

The development of PTG is an important consideration for anyone who experiences a traumatic event. Conclusions of this study draw to the fact that cultural, religious, and organisational factors may play a part in the development or otherwise of PTG in Taiwanese, Buddhist response volunteers. There are, however, a number of limitations and future directions which should be explored in order to advance to a fuller understanding of this construct and how it is best promoted within this context.
References


(Eds.), *Oxford Handbook of Methods in Positive Psychology* (pp. 576-590).

Oxford: Oxford University Press.


London: SAGE Publications Ltd.


A. D. Ong, & M. H. van Dulmen (Eds.), *Oxford Handbook of Methods in Positive Psychology* (pp. 139-152). Oxford: Oxford University Press.


Appendices

Appendix A
University of Tasmania Ethics Approval

26 May 2015

Professor Douglas Paton
Psychology
Locked Bag 1342

Student Researcher: Kelsey Cingeleff
Sent via email

Dear Professor Paton

Re: FULL ETHICS APPLICATION APPROVAL
Ethics Ref: H0014838 - Empowerment, posttraumatic growth and volunteering: Cultural and spiritual perspectives

We are pleased to advise that the Tasmania Social Sciences Human Research Ethics Committee approved the above project on 25 May 2015.

This approval constitutes ethical clearance by the Tasmania Social Sciences Human Research Ethics Committee. The decision and authority to commence the associated research may be dependent on factors beyond the remit of the ethics review process. For example, your research may need ethics clearance from other organisations or review by your research governance coordinator or Head of Department. It is your responsibility to find out if the approval of other bodies or authorities is required. It is recommended that the proposed research should not commence until you have satisfied these requirements.

Please note that this approval is for four years and is conditional upon receipt of an annual Progress Report. Ethics approval for this project will lapse if a Progress Report is not submitted.

The following conditions apply to this approval. Failure to abide by these conditions may result in suspension or discontinuation of approval.

1. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval, to ensure the project is conducted as approved by the Ethics Committee, and to notify the Committee if any investigators are added to, or cease involvement with, the project.

A PARTNERSHIP PROGRAM IN CONJUNCTION WITH THE DEPARTMENT OF HEALTH AND HUMAN SERVICES
2. **Complaints:** If any complaints are received or ethical issues arise during the course of the project, investigators should advise the Executive Officer of the Ethics Committee on 03 6226 7479 or human.ethics@utas.edu.au.

3. **Incidents or adverse effects:** Investigators should notify the Ethics Committee immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.

4. **Amendments to Project:** Modifications to the project must not proceed until approval is obtained from the Ethics Committee. Please submit an Amendment Form (available on our website) to notify the Ethics Committee of the proposed modifications.

5. **Annual Report:** Continued approval for this project is dependent on the submission of a Progress Report by the anniversary date of your approval. You will be sent a courtesy reminder closer to this date. Failure to submit a Progress Report will mean that ethics approval for this project will lapse.

6. **Final Report:** A Final Report and a copy of any published material arising from the project, either in full or abstract, must be provided at the end of the project.

Yours sincerely

Katherine Shaw
Executive Officer
Tasmania Social Sciences HREC
March 30, 2015
Dr. Li-ju Jang  
Director of Student Counseling Center,  
NPUST  
1, Shuefu Road, Neipu, Pingtung 912,  
Taiwan  
Tel: +886-8-7703202 ext 7736  
E-mail: ljjang@mail.npust.edu.tw

Prof. Paula Swatman  
Chair, Social Science HREC  
University of Tasmania

Dear Professor Swatman,

I am writing to confirm the following arrangements in support of Miss Clingeleffer’s Honours research project. I will assist with the data collection, translation and conduct of the study.

This project is being conducted by the Department of Social Work at National Pingtung University of Science and Technology (NPUST). We are pleased to be able to involve Miss Clingeleffer’s and the University of Tasmania in the project.

Disaster volunteer participants for the study will be recruited through the networks linked to. Questionnaires will be distributed to volunteer group meetings throughout the Pingtung area over the coming weeks. I selected this area as it includes all volunteer groups who were involved in the Typhoon Merakot response and recovery efforts. The questionnaire package will include the questionnaire, information sheets and consent form and a return envelope. I will contact those who indicate interest in participating in the focus groups to arrange a time and place for the meetings to take place.

I will provide translation services and analytical support for the project. This will ensure that all data collection and analysis remains within the research team.

With regard to any mental health issues that might arise, procedures are in place for this. I am the Head of the NPUST Student Counseling Center. In this capacity, I will be available during the period of data collection, during the focus group sessions and after the focus group sessions to offer support and, if necessary, counseling for any participant who requests support or assistance.

Yours sincerely

Dr Li-ju Jang
Appendix C
Interview Schedule

1. Can you please describe your experience of being a volunteer after a natural disaster? How has this affected you and your community?

2. How have your beliefs (or the beliefs of your community) helped you and your community grow after Typhoon Morakot?

3. How has volunteering/being part of an organisation impacted you and your community after Typhoon Morakot?

4. How do you think that your experiences of Typhoon Morakot will help you deal with future disasters and other events? What sort of events would you be able to apply this to?

5. A number of years have passed since Typhoon Morakot. Do many of the changes you mentioned above still influence your everyday life, and if so, how?
Appendix D
Information Sheet for Focus Group Participants

Posttraumatic growth, empowerment and volunteering: Cultural and religious perspectives

This information sheet is for anyone interested in participating in the FOCUS GROUP section of this study.

Invitation
You are invited to participate in a research project considering the positive outcomes of being a volunteer after a natural disaster.
This study is an Honours project. The student investigator is Miss Kelsea Clingeleffer from Psychology department at the University of Tasmania, who will be supervised by Professor Douglas Paton (PhD) from the Psychology department at the University of Tasmania and Associate Professor Li-Ju Jang (PhD) from the National Pingtung University of Science and Technology (NPUST).

Purpose of the Study
The purpose of this study is to look at the cultural, religious and organisational factors which could influence positive outcomes after a traumatic event such as Typhoon Morakot. Consistent with past research (e.g. Karanci & Acaturk, 2005, who investigated positive outcomes in volunteers in Turkey) there is reason to believe that these factors could alter positive outcomes. This work also suggests that there may be differences in these outcomes across countries, therefore this study also aims to investigate how these positive outcomes are similar or different in a Taiwanese culture compared to Western culture.

Eligibility
You have been asked to participate in this study as you are over 18 years of age, were an active volunteer involved in the response and recovery phases of Typhoon Morakot, and are still an active volunteer.
You have been identified for this study through your registration via NPUST as a volunteer. Your participation is entirely voluntary and you have the right to not answer any question. There will be no consequences for not taking part in the study. As data is completely unidentifiable, you will be unable to withdraw your data once the focus group is complete.

What does this study involve?
If you wish to participate in the focus group discussion of volunteer experiences, please read the information sheet provided and speak to the representative if you have any concerns and/or wish to participate. Dr. Jang will then contact you with the time and place
of the interviews. As part of the focus group, you will be asked a series of questions in Mandarin or Taiwanese. You do not have to answer questions if you do not wish to. With the permission of all focus group participants, the interview will be recorded on a handheld device for subsequent transcription.

**Are there any possible benefits from participating in the study?**
This research will assist the student researcher with developing research skills, as well as create understanding about how natural disasters positively impact volunteers. You may personally gain a better understanding of your experiences following Typhoon Morakot as a result of participating in this study.

**Are there any possible risks from participating in the study?**
There is the potential that you may remember or feel anxiety or discomfort during the focus group. If this does happen, please inform the researchers. Dr. Jang is a qualified counsellor (as Head of NPUST Student Counselling Services) who will be able to help you at any time during and after your participation.
Alternatively, you can access support services at the following locations:
- Ping A Hospital: 886-8-7622670
- Jia Le Hospital: 886-8-7981511
- Pingtung Christian Hospital: 886-8-7368686

Your participation in the study can finish at any time if you no longer want to participate, please just inform the researchers.

**What will happen to the data when the study is over?**
While in Taiwan, data will be stored on Dr. Paton’s password protected laptop as well as on a secured, password protected data storage system known as MySite. Data will then be transferred and stored in electronic format on a password protected computer system at the University of Tasmania, accessible only by researchers. Any paper files will be stored in a locked filing cabinet in the department of Psychology at the University of Tasmania. Data will be stored as required for a period of five (5) years and then securely destroyed. Confidentiality will be maintained throughout the study, as well as during publication of the results. This means that you will not be identifiable by any of the information within the study. In focus groups, all participants will be asked to maintain confidentiality however this cannot be guaranteed.

**How will the results of this study be published?**
The results of this study will be published in an honours thesis. There is potential that this will lead to future publication. Findings of the study will also be posted on the NPUST website after completion of the study (November 2015).
What if I have any questions about this study?
If you have any further questions or queries, please feel free to contact the researchers at the details below.

Kelsea Clingeleffer  kelseac@utas.edu.au
Douglas Paton  Douglas.Paton@utas.edu.au
Li-Ju Jang  ljthird@gmail.com  +886-8-7703202 ex 7736

“This study has been approved by the Tasmanian Social Sciences Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study, please contact the Executive Officer of the HREC (Tasmania) Network on +61 3 6226 6254 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. Please quote ethics reference number H14838.”

The letter is for you to keep. After reading this information sheet you will need to complete a consent form if you wish to participate in the study. Thank you for your time.
Appendix E
Electronic Copy of Focus Group Transcripts

Please see attached CD for electronic versions of the focus group transcripts.
三、心理培力量表

<table>
<thead>
<tr>
<th>序号</th>
<th>项目内容</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>我对自己执行志工工作的能力有自信。</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>我对所属分会内的事情有重大的影响力。</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>我有很多独立自由思考如何执行志工工作的机会。</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
<td>我有相当大的自主性去决定该如何做志工工作。</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>参与救更工作对我来说是很有意义的。</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>我有足够的知识与技能来做志工工作。</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7.</td>
<td>端志工可以提升我的生命价值。</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8.</td>
<td>我对所属分会的运作有重大的掌控权。</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9.</td>
<td>志工工作对我来说很重要。</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10.</td>
<td>我可以自己决定如何做志工工作。</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11.</td>
<td>我的志工工作对所属分会有重大的影响力。</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12.</td>
<td>我相信自己有能能力执行志工工作。</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

问卷到此结束，非常感谢您的协助！
Appendix G
Information Sheet for Questionnaire Participants

**Posttraumatic growth, empowerment and volunteering: Cultural and religious perspectives**

This information sheet is for anyone interested in participating in the QUESTIONNAIRE section of this study.

**Invitation**
You are invited to participate in a research project considering the positive outcomes of being a volunteer after a natural disaster. This study is an Honours project. The student investigator is Miss Kelsea Clingeleffer from Psychology department at the University of Tasmania, who will be supervised by Professor Douglas Paton (PhD) from the Psychology department at University of Tasmania and Associate Professor Li-Ju Jang (PhD) from the National Pingtung University of Science and Technology (NPUST).

**Purpose of the Study**
The purpose of this study is to look at the cultural, religious and organisational factors which could influence positive outcomes after a traumatic event such as Typhoon Morakot. Consistent with past research (e.g. Karanci & Acaturk, 2005, who investigated positive outcomes in volunteers in Turkey) there is reason to believe that these factors could impact positive outcomes. Karanci and Acaturk’s work also suggests that there may be differences in these outcomes across countries, therefore this study also aims to investigate how these positive outcomes are similar or different in a Taiwanese culture compared to Western culture.

**Eligibility**
You have been asked to participate in this study as you are over 18 years of age, were an active volunteer involved in the response and recovery phases of Typhoon Morakot, and are still an active volunteer.
You have been identified for this study through your registration via NPUST as a volunteer. Your participation is entirely voluntary and you have the right to not answer any question. There will be no consequences for not taking part in the study. As data is completely unidentifiable, you will be unable to withdraw your data once you have returned the questionnaire.

**What does this study involve?**
Once you have read this information sheet, you may complete the questionnaire regarding three aspects: your experiences of volunteering, positive changes following Typhoon Morakot, and cultural and religious factors that may have influenced these positive changes. Instructions for each section of the questionnaire will be clearly stated at the top of the page. The questionnaire will take approximately 20 minutes to complete.

Once you have completed the questionnaire, please place it in the return envelope and send it back to the researcher. Consent to participate will be implied by the return of the questionnaire.

Are there any possible benefits from participating in the study?
This research will assist the student researcher with developing research skills, as well as create understanding about how natural disasters positively impact volunteers. You may personally gain a better understanding of your experiences following Typhoon Morakot as a result of participating in this study.

Are there any possible risks from participating in the study?
There is the potential that you may remember or feel anxiety or discomfort during the questionnaire. If this does happen, please inform the researchers. Dr. Jang is a qualified counsellor (as Head of NPUST Student Counselling Services) who will be able to help you at any time during and after your participation. Alternatively, you can access support services at the following locations:

- Ping A Hospital: 886-8-7622670
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- Pingtung Christian Hospital: 886-8-7368686

Your participation in the study can finish at any time if you no longer want to participate, please just inform the researchers.

What will happen to the data when the study is over?
While in Taiwan, data will be stored on Dr. Paton’s password protected laptop, as well as on a secured, password protected data storage system known as MySite. Questionnaires will be sent directly via post to the University of Tasmania. Data will be stored in electronic format on a password protected computer system at the University of Tasmania, accessible only by researchers. Any paper files will be stored in a locked filing cabinet in the department of Psychology at the University of Tasmania. Data will be stored as required for a period of five (5) years and then securely destroyed. Confidentiality will be maintained throughout the study, as well as during publication of the results. This means that you will not be identifiable by any of the information within the study.
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What if I have any questions about this study?
If you have any further questions or queries, please feel free to contact the researchers at the details below.

Kelsea Clingeleffer   kelseac@utas.edu.au
Douglas Paton        Douglas.Paton@utas.edu.au
Li-Ju Jang           ljthird@gmail.com  +886-8-7703202 ex 7736

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The letter is for you to keep. Thank you for your time.