

POSTTRAUMATIC GROWTH IN CAMBODIA: A MIXED METHODS STUDY

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ABSTRACT

Trauma is a fairly common experience throughout the world with about 61% of men and 51% of women experiencing at least one potentially traumatic event in their lifetime in the United States (Gray et al., 2004). Within Cambodia 90% of men and women experience at least one potentially traumatic event throughout their lifetime (Mollica et al., 2014; Schunert et al., 2012). The majority of psychological research has focused heavily on the negative outcomes of trauma and tends to ignore the positive outcomes of experiencing traumatic events. Within positive psychology stems the concept of posttraumatic growth (PTG), which was originally developed by Tedeschi and Calhoun (2004). PTG is the process of growth after trauma and has been divided into five domains: greater appreciation for life, more intimate relationships, a personal strength, recognition of new possibilities, and spiritual development (Tedeschi & Calhoun, 2004). It was originally thought that this was a culturally neutral concept, however further research have demonstrated that PTG is influenced by cultural perceptions and worldviews (Flores & Ezemenari, 2003; Tedeschi & Calhoun, 2004). This mixed methods study utilizes archival data collected in 2015-2016 at the American University of Phnom Penh to examine the experience of growth after trauma that 70 Cambodian participants faced from a quantitative and qualitative perspective. Quantitative analysis determined that the Adult Resiliency Measure (ARM) and the Posttraumatic Growth Inventory (PTGI) were considered internally reliable and valid measures when used with Cambodians. It was additionally determined that the number of traumatic events one experiences does not influence one's ability to experience PTG or resiliency and the concepts of PTG and resiliency are correlated. For the qualitative portion of this study, grounded theory was utilized to develop a theory of PTG within Cambodia. These results indicated that Cambodians experience PTG in four core categories including: personal strength, relational strength, avenues of growth and religion/spirituality. The quantitative and qualitative results illustrate that Cambodians experience PTG in a similar

manner when compared to the original PTG theory. However, there are cultural nuances that must be taken into account when exploring PTG within the Cambodian population.

Table of Contents

Chapter 1: Literature Review	1
Statement of the Problem	5
Purpose of the Study	6
Trauma	6
Prevalence of Trauma Exposure	6
Intergenerational Transmission of Trauma	7
Negative Outcomes of Trauma	10
Cultural Implications of Trauma	12
Culturally Responsive PTSD Treatments	14
Positive Psychology and Trauma Studies	21
Posttraumatic Growth	23
Related Theory to Posttraumatic Growth	26
Terms Related to Posttraumatic Growth	27
Resilience	28
Hardiness	28
Optimism	29
Sense of Coherence (SOC)	29
Measures of Posttraumatic Growth	30
PTG and Culture	32
Cambodia: A History	35
Genocide History in Cambodia	35
History of Cambodian Refugees' Migration to the U.S.	37

Current Human Rights Issues in Cambodia	41
Cambodia's Belief System and Traditional Healing	44
Mental Health in Cambodia	46
Strengths-Based Research with Cambodians	52
Summary of the Literature Review	54
Research Questions and Hypotheses	55
Quantitative Research Questions and Hypotheses	55
Qualitative Research Questions	56
Clinical and Theoretical Relevance	56
Definitions of Terms	56
Chapter 2: Methods	61
Research Design	61
Participants	61
Measures	63
Adult Resilience Measure (ARM)	64
Demographics Form	64
Life Events Checklist (LEC)	64
Posttraumatic Growth Inventory (PTGI)	65
Semi-Structured Interview	66
Provisions of Trustworthiness	67
Procedures	67
Data Analysis and Statistical Hypotheses	70
Quantitative Data Analysis	70

Qualitative Data Analysis	72
Anticipated Limitations	74
Chapter 3: Results	76
Quantitative Data Analysis	76
Demographic Analysis	76
Preliminary Analysis	78
Hypothesis Analysis	79
Qualitative Data Analysis	81
Demographics of Interviewees	82
Core Categories	82
Process of Identifying Core Categories	82
Identification of Core Categories	84
Personal Growth	84
Acceptance	85
Self-efficacy	85
Self-Actualization	86
Relational Growth	87
Increased Appreciation for Social Support	87
Developing Empathy	89
Religion/Spirituality	90
Karma	90
Shifting Ideas of Religion/Spirituality	91
Avenues of Growth	92

POSTTRAUMATIC GROWTH IN CAMBODIA	Badaracco	viii
Fear to Courage		92
Openness		93
Shifting Priorities		94
Overview of Core Categories		96
Chapter 4: Discussion		98
Quantitative Results		98
Qualitative Results		101
Qualitative Results: Critical Discussion		106
Clinical and Theoretical Implications		108
Limitations		110
Suggestions for Future Research		112
Figure 1: Mind Map		114
References		115
Appendix A		129

Posttraumatic Growth in Cambodia: A Mixed-Methods Study**CHAPTER I****LITERATURE REVIEW**

Psychology has adopted a disease-based model, meaning that researchers and clinicians tend to focus on the ailments of mankind rather than looking at the strengths and virtues of human beings. Within the psychology community there is a general consensus that resources ought to be dedicated to assisting individuals heal and grow from their weaknesses and illnesses. There is little attention paid to the importance of understanding that human beings are more than their shortcomings and illnesses, making it essential for clinicians and researchers to understand and learn how to foster feelings of happiness and contentment in their clients and participants. These feelings of happiness and contentment are feelings that all human beings will experience in their life, therefore it is necessary to understand their role in human life (Zoellner & Maercker, 2006). This is where the field of positive psychology interacts with the disease model of psychology. There are certainly benefits in studying and understanding psychopathology and the impact of negative experiences of individuals, such as trauma. In fact the study of the potentially negative outcomes after traumatic events is essential in assisting individuals to become their best selves. Positive psychology is one way to facilitate this growth for individuals seeking help (Seligman, 2011; Seligman & Csikszentmihalyi, 2000).

As previously mentioned there has been a plethora of research examining the negative impact of trauma such as posttraumatic stress disorder (PTSD). PTSD is an often debilitating psychological disorder that is characterized by intrusive symptoms, avoidance, and hypervigilance (American Psychiatric Association [APA], 2013; Breslau et al., 1997; Hinton et al., 2005; Kessler, 2000; Nemeroff et al., 2006). Many individuals who have experienced,

witnessed, seen or heard about one or more traumatic events may develop PTSD or symptoms associated with this disorder (Anda et al., 2006; APA, 2013; Green, 1990; Green et al., 2000). Much of the early trauma research focused specifically on trauma stemming from armed combat and there continues to be a common belief among the general population that PTSD is a psychological disorder exclusively for individuals who have experienced armed combat (Nemeroff et al., 2006). This is a false belief as there are many other situations in which an individual can experience trauma. Some examples of trauma include physical, emotional, sexual and verbal abuse, sexual assault, natural disasters, unsafe environmental conditions, disease, and the death of a loved one (Green, 1990). This list illustrates that trauma can take various forms and is not limited to physical violence. Additionally, it is not necessary for individuals to actually experience trauma first-hand to develop symptoms of PTSD. Individuals can witness a traumatic event, and even hearing about a traumatic event can be enough to develop symptoms (APA, 2013; Green, 1990).

Experiencing a traumatic event is a fairly common phenomenon with approximately 60% of men and 51% of women in the United States having experienced at least one potentially traumatic event in their lifetime (Gray et al., 2004). Evidence indicates that this number is potentially higher with 89% of adults living in urban areas reporting exposure to at least one traumatic event (Green et al., 2000; Gray et al., 2004). Although trauma is a fairly common phenomenon it is important to note that experiencing a traumatic event does not guarantee that the individual will develop PTSD or PTSD like symptoms.

The majority of the existing research focuses on the negative outcomes of trauma like PTSD; however, this study aims to illustrate the ways an individual's struggle to cope with a traumatic experience can facilitate growth. This process of growth after trauma is called

posttraumatic growth (PTG) and was coined by Tedeschi and Calhoun (2004). PTG is the positive psychological change experienced as a result of adversity in order to rise to a higher level of functioning. During this process individuals undergo significant life-changing psychological shifts in thinking and ways of relating to the world that contribute to a personal process of change and making meaning of life (Tedeschi & Calhoun, 2004). Central to the PTG theory is the concept of schemas. A schema will be defined as a pattern of thoughts or behaviors that organize categories of information and relationships to more effectively understand the world (Janoff-Bulman, 1989; Tedeschi & Calhoun, 2004). Prior to the traumatic event the individual has a schema that does not incorporate the trauma or any potential ramifications of the trauma. Once the traumatic event has occurred the individual will be forced to evaluate the event and how the event and its impact is incorporated into their preexisting schemas.

Five domains exist within the PTG framework in which the individual must evaluate and integrate the trauma into their schemas after a traumatic event (Tedeschi & Calhoun, 2004; Zoellner & Maercker, 2006). These domains are a greater appreciation for life and changed sense of priorities, more intimate relationships, a greater sense of personal strength, recognition of new possibilities in one's life, and spiritual development (Tedeschi & Calhoun, 2004). If the individual is able to evaluate and incorporate the experience of the traumatic event they will likely achieve an enhanced quality of living and growth in these five domains. PTG may seem like an ideal solution to trauma, but this does not mean that everyone is able to achieve it. Simply because an individual achieves PTG does not mean that they will be symptom-free or that they will be able to return to their pre-trauma state. The concept of PTG states that the individual was able to grow in these five domains and through this growth they were able to attain a better quality of life.

The concept of PTG was developed in the West and has been found to be a fairly flexible concept, however it is important to understand how this concept relates to individuals in different cultural contexts as well as individuals who have experienced different forms of trauma (Flores & Ezemenari, 2003; Tedeschi & Calhoun, 2004). The Cambodian genocide is one of the least studied genocides to date and there has been comparatively little research by psychologists on this horrendous event on the Cambodian people (Chandler, 2007; Hinton, 2004; Kierman, 2008). The Cambodian genocide took place from 1975 to 1979 and was a horrific period of human rights violations. Cambodia has a history marked by war and corrupt governments. Prior to the start of the genocide in 1975, the country endured a civil war where the Pol Pot Regime came into power after a coup d'état (Chandler, 2007; Hinton, 2004; Van de Put & Eisenbruch, 2002). The Pol Pot Regime desired to return to the socialist agrarian society in which the regime believed Cambodia had been founded (Coe, 2005). The next four years marked a period where intellectuals, monks, diplomats and any individuals in powerful positions were murdered. Virtually all Cambodians living in urban areas were relocated to the countryside in an attempt to return to a traditional lifestyle, relying solely on agriculture. People were forced to work in the rice fields and were often starved to death by the regime. Children were trained to spy on their parents and notify officials if they caught their parents saying anything against the regime. People were interrogated and tortured to obtain background information regarding themselves and their community in an attempt to eradicate the intellectuals of the community (Van de Put & Eisenbruch, 2002). The entire Cambodian culture that had existed was destroyed when the majority of the Buddhist temples and monks were destroyed and executed by the regime. Approximately two million people or 25% of the population was killed during these four years of genocide (Van de Put & Eisenbruch, 2002). The only chance of survival was escaping into

Thailand or Vietnam, where it was likely that they would face persecution due to tense political relations with these countries and Cambodia.

Thirty-eight years later, the Cambodian population continues to suffer from the adverse effects of the horrific tragedies they survived. The country continues to rebuild the society and communities that were destroyed so suddenly, but the current political and human rights status is dire. Cambodia has experienced significant economic growth over the past decades, however it is difficult to maintain this growth due to the corruption within the Cambodian government (Human Rights Watch, 2017). There has been comparatively little research examining the overall wellbeing of the Cambodian people and whether they have experienced growth despite the adversities they have faced in the form of genocide, government corruption and the continued violation of human rights.

Statement of the Problem

Posttraumatic growth (PTG) is influenced by cultural perceptions and few studies have examined cross-cultural differences of this phenomenon (Flores & Ezemenari, 2003; Splevins et al., 2010). Spelvins et al. (2010) found that the application of the PTG theory may reflect some cultural bias, which is representative of Western and individualistic cultures. Although PTG does not specify the nature of world assumptions that could be challenged by trauma, claiming cultural neutrality, it is important to realize that there is evidence of cultural bias in the assessment tools as it was created and normed in a Western society (Flores & Ezemenari, 2003; Spelvins et al., 2010). Although PTG may be culturally neutral it is important to realize that the Posttraumatic Growth Inventory (PTGI) was developed with a Western and individualistic framework and is not culturally neutral. There is a need for qualitative research as this allows for a variety of world assumptions to be incorporated into the assessment tools and theory (Flores &

Ezemenari, 2003; Spelvin et al., 2010). Trauma can be debilitating for some individuals and may lead to PTSD, substance use, or other trauma related-disorders (APA, 2013). Therefore it is essential to examine the potential trajectories for positive growth to instill hope for recovery. Additionally, understanding the cultural-soundness of the phenomenon of PTG is imperative to properly treat populations that do not prescribe to Western cultural norms, as these norms are not pertinent for the Cambodian culture. To date there are no studies examining the validity of PTG among Cambodians nor are there any studies that use the qualitative method to determine cultural differences.

Purpose of the Study

The purpose of this study is to broaden cross-cultural research in the area of PTG, specifically among Cambodians. The prevalence of PTSD among Cambodians is approximately 28% and the experience of traumatic events in their lives call for an investigation of the reliability, validity and cultural soundness of PTG among this population (de Jong et al., 2003). This mixed-methods study aims to investigate concepts of PTG and resiliency using the Posttraumatic Growth Inventory (PTGI), Adult Resiliency Measure (ARM), Life Events Checklist (LEC) and to qualitatively explore, in depth, Cambodians' perspectives on what growth after trauma means. This study is attempting to broaden the scope of the PTG literature in the hopes that there will be more culturally sensitive and effective interventions for managing populations that have endured various traumatic events.

Trauma

Prevalence of Trauma Exposure

There are many terms to describe extreme life events including traumatic events, life stressor, disaster, catastrophe, and psychologically distressing event. All of these terms attempt

to capture the essence of an extreme distressing life event, which may result in negative consequences for individuals. Due to the inconsistency with the terms that describe extreme life events, it has been difficult to determine what each term is striving to illustrate (Green, 1990). For the sake of consistency in this proposal, the term trauma will be used and defined as a serious or unnatural event to which both individuals and groups can be exposed, resulting in a psychological response that may alter the individual or group's worldview. The psychological literature focuses on military trauma, but there are a variety of traumatic events including, but not limited to (1) threat to one's life or bodily integrity, (2) severe physical harm or injury, (3) receipt of intentional injury/harm, (4) exposure to the grotesque, (5) violent/sudden loss of a loved one, (6) witnessing or learning of violence to a loved one, (7) learning of exposure to a noxious agent, and (8) causing death or severe harm to another (Green, 1990).

Gray et al. (2004) found that 61% of men and 51% of women in the United States have experienced at least one potentially traumatic event in their lifetime. It has been found that experiencing "multiple traumas is the rule rather than the exception" for the majority of the population (Green et al., 2000). Individuals, groups and communities who previously have been exposed to trauma are more likely to experience multiple traumatic events throughout their lifetime, compared to individuals, groups and communities who have not experienced any traumas. Green et al. (2000) found that 65% of women had experienced some type of trauma, with 38% of those women experiencing more than one trauma in their lifetime. These facts lead one to believe that trauma among the general population is a fairly common phenomenon in the United States.

Intergenerational Transmission of Trauma

Along with single and multiple traumatic events, there is another type of trauma that is beginning to be widely researched called intergenerational trauma. Intergenerational trauma is defined as the transmission of trauma from the first generation of trauma survivors to the offspring and consecutive generations of the survivors (Bar-On et al., 1998). Ever since the world discovered the atrocities of the Holocaust, there has been a large interest in the transmission of trauma across generations and the manner this trauma is manifested in the younger population (Bar-On et al., 1998). Intergenerational trauma warrants further examination due to the implications of experiencing trauma second hand. After a traumatic event there is the likelihood that the individual's worldview will be altered drastically. This alteration could present as believing the world is a dangerous place to believing that they can survive any adversity thrown their way. Depending on the change in one's worldview it has the possibility to create maladaptive patterns for trauma survivors, and will be evident in the ways they interact with others and their parenting style.

There are several common parenting styles that individuals adopt after experiencing trauma including role-reversing parenting, overprotective parenting and rejecting parenting (Field, Muong, & Sochanvimean, 2013). In role-reversing parenting, the parent relies on the child to have their emotional needs met, and through this the child is likely to feel a sense of responsibility for the emotional well being of their parent (Field et al., 2013). The child's sense of responsibility for the parent may interfere with his or her own attachment and emotional needs (Field, et al., 2013). Overprotective parenting is classified as traumatized parents adopting the belief that the world is an inherently dangerous place and because of this may feel an intense need to protect their family from dangers (Field, et al., 2013). However, this is likely to discourage the child's independence and has the potential to interfere with their attachment. The

final common parenting style is the rejecting parenting style. This is when the parent is unable to be emotionally present for their child and may resort to emotionally abusing or neglecting their children, leading to a great deal of stress felt by the children (Field et al., 2013). It is essential to examine the parenting style of individuals as it may lead to the transmission of trauma to later generations.

Bar-On et al. (1998) conducted a study examining the attachment styles of children of Holocaust survivors in three different countries. Children of Holocaust survivors tended to feel overprotective of their parents, and were parentified at an early age. Regardless of the parents attempts to protect their children by not sharing their traumatic experiences, the way these parents went about their lives was enough to make their children feel the need to protect them and become a parent to everyone in the family. Field et al. (2013) examined the parental styles in the intergenerational transmission of trauma with survivors of the Khmer Rouge in Cambodia. Two studies were conducted; the first being conducted in Cambodia with 46 female students aged 16-18 and their mothers, survivors of the Khmer Rouge. It was found that mothers who exhibited symptoms of PTSD, especially hyperarousal symptoms, were more likely to use role-reversing parenting and have daughters who experienced anxiety (Field et al., 2013). The second study was conducted with Cambodian-American refugees, 15 mother-child pairs where the mothers had sought out mental health treatment and 17 mother-child pairs who had not sought out mental health treatment, but recruited from school and community settings. It was found that when mothers relied on role-reversing parenting it was more likely that their children would experience trauma symptoms such as avoidance, hyperarousal and intrusive symptoms (Field et al., 2013). This finding demonstrates the impact of trauma on parenting styles, which may lead to the transmission of intergenerational trauma.

When examining the impact of trauma, it is essential that researchers look beyond the current generation and realize the tremendous impact that trauma can play in multiple generations. Many survivors of genocide did not have the opportunity to experience secure attachments or stable parenting styles due to the chaotic nature of their childhood. This may mean that they did not have positive parental role models or individuals to model secure attachment and how to develop this with their child or how to effectively parent children, This could mean that there may be many more generations to come that are impacted by insecure attachment and parenting styles that are a result of being exposed to genocide. Intergenerational trauma is a phenomenon that can touch countless generations and is important to evaluate when understanding survivors of genocide as well as the lasting impact of genocide.

Negative Outcomes of Trauma

According to the disease model of psychology, when an individual survives a trauma it is assumed that this experience may alter their worldview and life in a negative manner (Green et al., 2000). The most common diagnosis associated with trauma is Posttraumatic Stress Disorder (PTSD). The Diagnostic and Statistical Manual – 5 (DSM-5) is a widely used psychological diagnostic tool to determine psychological disorders. According to the DSM-5 there are eight criteria that an individual older than the age of six must meet to qualify for a diagnosis of PTSD (APA, 2013). The first criterion is that the individual must experience:

exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways: 1. Directly experiencing the traumatic event(s), 2. Witnessing, in person, the event(s) as it occurred to others, 3. Learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental, 4.

Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (APA, 2013, p. 271).

The second criterion states that there must be a presence of one or more intrusive symptoms associated with the traumatic event including: recurrent, involuntary, and intrusive distressing memories or dreams of the traumatic event, flashbacks, and intense physiological reactions to internal or external cues that symbolize aspects of the traumatic event (APA, 2013). The third criterion of PTSD is the persistent avoidance of stimulus associated with the traumatic event, such as efforts to avoid and the avoidance of distressing memories, thoughts or feelings associated with the event, as well as the avoidance of external reminders that arouse distressing memories. The fourth criterion includes negative alterations in cognitions and mood associated with the trauma including the inability to remember important aspects of the trauma, persistent negative beliefs about oneself, others and the world, feelings of detachment from others, and the inability to experience positive emotions. The fifth criterion includes the alteration of arousal and reactivity associated with the trauma such as irritable behavior, hypervigilance, exaggerated startle response and sleep disturbance. According to the DSM-5 these symptoms must last for more than one month, cause significant distress, and not be attributable to physiological effects of a substance or another medical condition (APA, 2013).

Trauma can occur at any point in an individual's life, but it has been found that childhood is one of the most vulnerable times to experience trauma and can have long-lasting effects. Felitti et al. (1998) conducted a monumental study titled the Adverse Childhood Experience (ACE) regarding the enduring effects of abuse and adverse experiences in childhood. This was one of the first studies examining the lasting effects of trauma beginning in childhood. It was found that individuals who suffered more than four ACEs were more likely to experience three to four

times the amount of physical, emotional and mental issues compared to individuals who had not experienced any ACEs (Anda et al, 2006; Felitti et al., 2006). Individuals who have high ACE scores are more than three times likely to develop co-morbid disorders compared to those with low ACE scores This reflects the notion that the more traumas an individual experiences, especially at a young age, the more likely they are to develop a variety of disorders, illnesses, and maladaptive behaviors (Anda et al, 2006; Felitti et al., 2006; Green et al., 2000).

The experience of extreme stress is likely to become detrimental to one's brain, specifically the hippocampus (Anda et al., 2006; Bremner, 1998, 1999). The hippocampus is responsible for learning and memories, when there is damage to this area there may be memory deficits. Individuals who suffer from PTSD or have endured periods of extreme stress are more likely to have damage to their hippocampus, which may lead to impairments in short-term and verbal memory and is likely to worsen over time (Bremner, 1998). Memory deficiencies are likely to occur, especially with continuous stress, and can lead to difficulty recalling certain aspects of the event, as well as difficulties with retaining new information. The physical implications of extreme stress are important to note because these memory deficits may impact the manner in which individuals are able to recovery and adapt to life after stressful periods. It may be difficult to relate to one's family, friends and community as well as having difficulty learning new tasks associated with life after an extreme stressor.

Cultural implications of trauma.

The above mentioned criteria for PTSD illustrates the potential impact that a trauma can have on an individual and the manner in which their life may be altered after trauma (Berntsen & Rubin, 2006). The DSM-5 is used to diagnosis PTSD in western societies and captures the three main markers associated with psychological distress following a trauma including: intrusive

symptoms, avoidance, and hyperarousal. These markers are seen as universal markers of psychological distress, although there are cultural differences that need to be accounted for. One of the first cultural differences that exist is memory. It is fairly common for individuals to forget certain details of the trauma (Bremner, 1998). There tends to be a difference in memory retention amongst individuals living in individualistic and collectivistic cultures. An individualistic culture is defined as individuals being independent of one another and focusing on personal rights, responsibilities and success with emphasis on self-fulfillment (Oyserman et al., 2002). This is not to say that people from individualistic cultures do not have relationships or belong to groups, but they rely on the group to assist them with reaching their personal goals. This differs from collectivistic cultures which are defined as communal societies characterized by mutual obligations and expectations, that rely heavily on individuals fulfilling their prescribed social roles and restrict emotional expression to ensure group harmony (Oyserman et al., 2002). In collectivistic cultures it is more common for individuals to work harmoniously towards group goals, instead of pursuing personal goals. Jobson and O’Kearney (2006) found that traumatic memories tend to be more autonomous experiences regardless of one’s cultural orientation. Therefore, it may be difficult for individuals in a collectivistic culture to remember all of the details of the trauma they have experienced. Another cultural implication is that individuals from collectivistic cultures are less likely to hold trauma-centered views of themselves after trauma, making it more likely that they would forget aspects of the trauma (Jobson & O’Kearney, 2008). Whereas, individuals from individualistic cultures are more likely to have trauma-centered views of themselves and are likely to share these views with others.

Another common symptom and a potential cultural implication with psychological distress after a trauma is somatization. Somatization occurs when an individual’s psychological

distress is manifested through physical symptoms such as headaches, chronic pain, and sleep disturbances. These can be important markers of how the individual manages the psychological distress. It is fairly common for individuals, especially from collectivistic cultures, to manifest their posttraumatic reactions through physical symptoms because of the social acceptability of exhibiting physical symptoms within the Cambodian culture. These can be important markers of how the individual is managing psychological distress and give the researcher or clinician clues as to how to approach the issue of PTSD. Percy, Oum and Gray (2007) found that among survivors of the Khmer Rouge it is socially acceptable to display physical symptoms and is considered taboo to display psychological symptoms. This brings into consideration the notion of culture and the role that cultural norms may have on the way one displays their distress after the trauma.

Another symptom associated with psychological distress after trauma is maladaptive attachment with others. It is common for individuals who have experienced trauma, especially repetitive traumas such as genocide, to have insecure-ambivalent attachment styles with their significant others and children (Bar-On et al., 1998). Insecure-ambivalent attachment is typically defined as an individual who is resistant to exploring their situation and tends to be wary of strangers (Bar-On et al., 1998). These individuals have difficulty trusting others, and forming deep, meaningful relationships. This type of attachment style is particularly prevalent with individuals who have experienced multiple traumas, and can be related to intergenerational trauma as it is fairly common for parents to pass on feelings of mistrust and avoidance that were learned during the stressful period (Bar-On et al., 1998).

Culturally responsive PTSD treatments.

The psychological distress associated with life after trauma can be difficult to manage; however, there are effective treatments for treating PTSD and symptoms associated with trauma that have been proven effective with collectivistic and individualistic societies. For any therapy to be effective it must be culturally sensitive, which is an important consideration especially when working with diverse individuals who were not taken into account when the evidence-based practices were originally developed. One of the most widely utilized evidenced based practices for treating PTSD is Cognitive Behavioral Therapy (CBT). Pityaratstian et al. (2014) conducted a study utilizing CBT with 36 children, ten male and 26 females between the ages of 10 and 15, survivors of the devastating tsunami in Thailand in 2004. These children were divided into two groups, one group received CBT and the other group was placed on a waitlist. All participants were given the Children Revised Impact of Events Scale (CRIES) and the UCLA PTSD Reaction Index (PTSD-RI) pre-treatment, post-treatment and at a one-month follow up (Pityaratstian et al., 2014). The participants in the CBT group received three days of two-hour daily group sessions, with daily homework and were followed up with one month post-treatment. The treatment was manual-based and adapted from the Teaching Recovery Techniques (TRT), which is an evidence based psycho-social-educational manual designed to increase children's coping strategies after experiencing traumas such as war or natural disasters (Pityaratstian et al., 2014). The first day included psychoeducation, breathing exercises, establishing safe places, distraction and imagery techniques which included projecting images and dual attention tasks. The second day of treatment included coping self-statement, introducing graded exposure as well as grading traumatic reminders, imaginal exposure and dream work. The first two days were conducted in a school, however the third and final day was conducted on the beach as part of an exposure component to TRT (Pityaratstian et al., 2014). This required participants to relive the

trauma through story telling and drawing as well as cognitive restructuring involving issues such as loss and guilt, and ending with a fun beach activities. After the three days individuals were asked to complete daily homework that monitored the participants symptoms and promoted the use of the learned techniques and return it to their school nurse (Pityaratstian et al., 2014). . Although it was a brief intervention of three days, it was found that after one-month children showed a significant decrease in PTSD symptoms (Pityaratstian et al., 2014). This was a remarkable study, considering these children had been experiencing symptoms of PTSD for five years, as the study was conducted from August to October 2009, five years after the tsunami. Through the adaptation of the length of the therapy, culturally competent therapists, culturally sensitive assessment tools and the use of culturally relevant imagery. Pityaratstian et al. (2014) were able to demonstrate the importance of culturally adapting CBT interventions in reducing symptomology.

Additionally, Hinton et al. (2005) culturally adapted CBT for 40 Cambodian refugees in the United States who experienced treatment-resistant PTSD and panic attacks, and found that these individuals were more likely to have severe neck pain, and panic attacks which were associated with flashbacks. The culturally adapted CBT focused on mindfulness including aspects of Buddhism, cognitive restructuring and homework assignments. It was found that these individuals experienced an improvement in their symptoms including a decrease in panic attacks, flashbacks and neck pain (Hinton et al., 2005). This twelve week long culturally adapted CBT intervention was found to have an improvement in symptoms after the twelve weeks and the follow up period, twelve weeks after the completion of the treatment, and eventually lead to participants no longer meeting criteria for PTSD.

Along with CBT, Eye Movement Desensitization and Reprocessing (EMDR) is an effective and efficient treatment for PTSD (Acarturk et al., 2016; Shapiro & Maxfield, 2002). EMDR was originally developed in 1989 as a structured treatment approach and was developed using the information processing model (Shapiro & Maxfield, 2002). It is an integration of various types of psychotherapies including psychodynamic, cognitive-behavioral and person-centered therapies. This combination of therapies was standardized into a specific set of clinical procedures and protocols. EMDR is structured in eight phases and assists individuals with the development of coping skills that tolerate negative affect associated with the activation of distressing memories. Essentially EMDR is used to assist individuals develop skills and behaviors required for a healthy and functional life. This is done by educating the individual about their symptoms, learning self-calming techniques, the assessment of sensory, cognitive and affective components of the targeted distressing memory, which will eventually lead to the access of these memories without distressing the individual. The individual will access the traumatic memory while at the same time focusing on external stimuli by moving one's eyes back and forth, and utilizing calming techniques throughout the session, in an attempt to reduce the distressing emotions and physiological reactions to the distressing event (Shapiro & Maxfield, 2002). EMDR processing is considered complete when the individual is able to think of the distressing memory without feeling any significant body tension (Shapiro & Maxfield, 2002). However, there is some controversy regarding the validity and efficacy of EMDR as an effective treatment for psychological disorders. One of the main critiques of EMDR is that Shapiro is hesitant to discuss any of the treatment's weaknesses. Many have speculated that the continual avoidance of EMDR's weaknesses could be due to financial motivation (Davidson & Parker, 2001). Additionally, there is some critique on whether the eye movement is necessary for

the individual to gain benefits from this method. Davidson and Parker (2001) found that eye movement or finger tapping does not impact the outcome measures and it can be thought of as an imaginal exposure technique. Regardless of the controversial research and thoughts regarding EMDR, it has been found to be a more effective treatment than no treatment at all or nonspecific treatments (Davidson & Parker, 2001).

EMDR was used with 37 Syrian refugees living in Kilis Refugee Camp at the Turkish-Syrian border to determine if it was helpful with managing symptoms of depression and PTSD (Acarturk et al., 2016). This is a society where mental health issues are taboo, making it challenging to obtain willing participants. Thus cultural adaptation was necessary, some of these adaptations included using the local language in all interviews, providing psychoeducation related to trauma, PTSD and EMDR, introducing the study to key members of the camp, scheduling sessions in the late afternoon as Syrians prefer to stay up late, and placing the clinic at the kindergarten so as to avoid the individuals being labeled as insane (Acarturk et al., 2016). Additionally, there was an attempt to ensure gender matching between clinicians, interpreters and participants (Acarturk et al., 2016). Regardless of the social stigma of participating in a psychological research study, it was found that EMDR was a successful treatment for the Syrian refugees and reduced symptoms of PTSD and depression (Acarturk et al., 2016).

Narrative Exposure Therapy (NET) has been shown to be an effective short-term treatment for individuals experiencing symptoms of PTSD after acute trauma (Neuner, Schauer, & Elbert, 2002; Schaal, Elbert, & Neuner, 2009). NET is a short-term therapy that was derived from CBT and Testimony therapy. There are several essential psychotherapeutic elements to NET including prolonged exposure and repeated imaginative reliving of the traumatic event, active reconstruction of the shattered autobiographical memories of the trauma, and cognitive re-

evaluation and re-interpretation (Neuner et al., 2002). Individuals create a chronological narrative of their life focusing on the traumatic events that have shattered their current autobiographical narrative (Neuner et al., 2002). The idea behind this is to contextualize the particular emotional, physical, and cognitive memories of the trauma to help the individual begin to process, create meaning and reintegrate the trauma into their lives (Neuner et al., 2002; Schaal et al., 2009). Twenty-six youth living in either child-headed households or in orphanages in Kigali who had survived the Rwandan genocide participated in NET experienced a reduction in their PTSD symptoms. The sample was a group of highly traumatized children who had experienced an average of 11.2 traumatic events (Schaal et al., 2009). NET was adapted for this particular group of youths by incorporating a grief module, due to the high number of losses of these participants. At the six-month follow up, only 25% of those who participated in NET still met criteria for PTSD, showing a significant decrease in symptomology. This demonstrated the power of exposure therapy and its efficacy in decreasing symptoms associated with PTSD.

Nemeroff et al. (2006) found that the best treatment for PTSD is a combination of psychotherapy and medication. Individuals who participated in a combination of psychotherapy and medication had the best improvement of symptoms over time. The use of medication to manage brain chemistry and return toward a base line level of functioning leads individuals to participate more effectively in psychotherapy and address underlying emotions (Nemeroff et al., 2006). This study suggested that prolonged exposure is the best type of psychotherapy, followed by cognitive behavioral therapy. As previously mentioned all forms of therapy must be culturally sensitive, especially when working with diverse individuals who were not a part of the population used to develop the evidence-based practices used today. Therefore, it is important to know whether or not patients are open to psychotherapy and medication, as there are many

cultures and societies that frown upon the use of these Western practices (Acarturk et al., 2016; Hinton et al., 2005; Pityaratstian et al., 2014; Schaal et al., 2009).

Along with Western medicine such as psychiatric medications and psychotherapy, there are a variety of complementary and alternative medicine (CAM) approaches to treating PTSD. CAM has been used interchangeably with traditional medicine for years and will be defined as “practices and products that people choose as adjuncts to or as alternative to Western medical approaches” (Debas, Laxminarayan, & Straus, 2006, p. 1281). One CAM approach that is beginning to receive more attention in the psychological literature is massage therapy (MT). MT has been utilized for thousands of years across the globe and is believed to date back to ancient civilizations such as Egypt, China, Greece, Australia, the Pacific Islands and North, Central and South America (Rich, 2013). Although there is little empirical research on the effects of MT on PTSD it has been found that MT reduces anxiety and depression scores as well as promotes self-care practices (Rich, 2013). Acupuncture is another commonly recognized CAM therapy and is defined as the “practice of inserting a needle or needles into certain points in the body, known as meridian acupuncture points, for therapeutic or preventive purposes” (Kim, Heo, Shin, Crawford, Kang, & Lim, 2012, p. 2). There has been little empirical research on the effectiveness of acupuncture and its impact on PTSD. However, the few randomized controlled trials that do exist suggest that acupuncture has statistically significant effects when compared with a waitlist control condition. There was no significant difference found between acupuncture and cognitive behavior (Kim et al., 2012). Finally, it was found that acupuncture coupled with moxibustion therapy, consisting of burning dried mugwort on particular points of the body, has greater effects than an oral SSRI for PTSD (Kim et al., 2012). There are many different CAM approaches to

treating PTSD, however these are the two most widely used CAM treatments for managing PTSD.

Positive Psychology and Trauma Studies

The majority of trauma research places an emphasis on the negative outcomes in regards to mental health. The research tends to deny any potential for human strength, virtue and growth. Psychology is based on the disease model, meaning that psychological research is heavily skewed towards examining people's illnesses and deficits. The individual is seen as having some sort of psychological issue that needs to be fixed and is not seen as having the strengths to overcome trauma (Linley & Joseph, 2006). This is where positive psychology can make contributions. Evidence suggests that themes related to modern positive psychology dates back to William James and Abraham Maslow, however it was never explicitly outlined or brought to the forefront of the psychological research until the 1990s (Froh, 2004; Linley & Joseph, 2006; Seligman, 2011; Seligman & Csikszentmihalyi, 2000). The term positive psychology first appeared in Maslow's book *Motivation and Personality* in 1954 with a chapter title called "Toward a Positive Psychology" (Linley & Joseph, 2006). In his book, Maslow stated that the science of psychology had so far been successful at identifying the shortcomings of man including all of his illnesses and demons. However, there were few studies that focused on "his potentialities, his virtues, his achievable aspirations, or his full psychological height" (Froh, 2004, p. 19).

It was not until Martin Seligman gave his first APA presidential address in 1998 that positive psychology was formally introduced (Froh, 2004; Linley & Joseph, 2006; Seligman, 2011; Seligman & Csikszentmihalyi, 2000). Seligman left out the accomplishments of James and Maslow, but this marked an important shift in psychology, as it was the first time positive

psychology was brought to the forefront of psychology (Linley & Joseph, 2006). Seligman defined positive psychology as the “study of how human beings prosper in the face of adversity” (Froh, 2004, p. 18). Some of the major goals of positive psychology include identifying and enhancing human strengths and virtues that make life fulfilling and allow individuals and communities to thrive (Froh, 2004; Linley & Joseph, 2006). Positive psychology focuses on the importance of studying the ways human beings grow and thrive, and strives to create a balance in the psychological research as well as integrating the positive and negative aspects of an individual.

The foundation of positive psychology is the assumption that all human beings will experience positive feelings, such as happiness or contentment. Whereas, there is a much smaller percentage of individuals who will suffer from Major Depressive Disorder (MDD), Schizophrenia or another psychological disorder (Linley & Joseph, 2006). Therefore, it is essential to focus on comprehending and learning how to effectively work with the majority of the population. In addition, carefully examining persons who are thriving can help psychologists better understand how to develop interventions and treatments to assist person who are languishing or otherwise not reaching their full potential. There seems to be interdisciplinary interests in humans’ overall wellbeing as evidenced by governments desire to know and understand their citizens’ satisfaction with living in their country (Linley & Joseph, 2006). This has given the field of positive psychology the opportunity to work interdisciplinarily with fields such as economics, business, health care and politics to investigate human strengths and abilities (McDermott, Wernimont, & Koopman, 2011). This collaborative effort gives the field of psychology the power to have a broader impact on the world and promotes the notion of overall wellbeing and happiness.

A critique of positive psychology is its similarities with humanistic psychology. Humanistic psychology is known to lack empirically supported research, which is something from which positive psychologists have tried to stay away. Seligman pointed out in his presidential address that the field of positive psychology was striving to create a basis of empirically supported research (Froh, 2004; Rich, 2014, 2016a, 2017). He believed that for positive psychology to be truly accepted and understood within the psychological community, researchers and clinicians had to integrate the positive and negative aspects of individual's lives and produce empirically sound research (Linley & Joseph, 2006). Most positive psychologists believed that quantitative, empirically supported research was the best or even only way that could legitimize positive psychology and make it a credible and reliable field of study (Froh, 2004; Rich, 2014, 2016a, 2017).

Posttraumatic growth.

Out of developments related to positive psychology grew the concept of Posttraumatic Growth. Like any theory there are various takes on how PTG is conceptualized, but for the purposes of this paper PTG will be defined as the positive psychological change experienced as a result of adversity to rise to a higher level of functioning (Tedeschi & Calhoun, 2004). Tedeschi and Calhoun originally coined the term PTG in 1994 when they created the theory of PTG and developed the Posttraumatic Growth Inventory, which measures the phenomenon of PTG (Tedeschi & Calhoun, 1994, 2004). This was the first time that researchers attempted to theorize and understand how PTG works. PTG was broken down into five specific domains including: (1) greater appreciation for life and changed sense of priorities, (2) more intimate relationships with others, (3) greater sense of personal strength, (4) recognition of new possibilities in one's life, and (5) spiritual development (Tedeschi & Calhoun, 2004). The first domain of a deepened

appreciation for life is an aspect that many experience after a traumatic event. It is fairly common for individuals to feel as though they have been lucky, and is a time when people experience a change in priorities that align with their new appreciation for life. Forming more intimate and meaningful relationships with others is the second domain of PTG. This is when people discover truly meaningful relationships and begin to cherish the people that they have in their lives. A greater sense of personal strength, the third domain of PTG, is when individuals feel they can effectively deal with whatever life presents. It is common for there to be a realization that there are negative events that occur in life, but that they can be handled effectively. The fourth domain of PTG is being able to recognize new life possibilities or paths. People are more willing to change their life after a drastic event that is more in line with their newfound beliefs. The last domain is spiritual development, which can be presented in a variety of ways such as a stronger connection with one's religion or more engagement with existential questions (Tedeschi & Calhoun, 2004).

PTG can manifest itself in a variety of ways and because an individual experiences a traumatic event does not mean that they will experience PTG or PTSD (Tedeschi & Calhoun, 2004). People's reactions to trauma vary greatly and it would be unwise to assume that everyone will develop PTSD or PTG after such an event. However, it has been found that the majority of individuals who do experience trauma will experience growth versus psychological disorders (Tedeschi & Calhoun, 2004). Individuals who experience trauma are not intending to grow from the event, but are simply attempting to survive, meaning that clinicians and researchers should not assume that growth will occur (McMillen, 1999; Tedeschi & Calhoun, 2004). The PTGI attempts to measure the phenomenon of PTG, however it is important to highlight that the PTGI utilizes an individual's self-perception of growth, and to date there are no measures or

assessment tools quantifying PTG in a manner that does not rely on self-perception and self-report (Zoellner & Maercker, 2006).

With the understanding of the five major domains of PTG and how it is measured, it is necessary to understand the process by which PTG occurs. According to Tedeschi and Calhoun (2004), everyone has a set of assumptions about the world. There are several basic assumptions about the world that are commonly held including the feeling of benevolence toward the world, benevolence of people, justice, controllability, randomness, self-worth, self-controllability and luck (Janoff-Bulman, 1989). These basic assumptions allow the individual to have some control and understanding over their world (Janoff-Bulman, 1989). Tedeschi and Calhoun (2004) termed these world assumptions schemas that are defined as a pattern of thoughts or behaviors that organize categories of information and relationships to more effectively understand the world. The traumatic event challenges the individual's schemas to the point where they struggle to incorporate the event into their worldview (Janoff-Bulman, 1989). At this point the individual uses rumination and cognitive rebuilding processes to manage the new distressing information that was gained during the trauma. Rumination and cognitive rebuilding require that the individual rewrite their life narrative and develop a new schema that incorporates the trauma (Tedeschi & Calhoun, 2004). Once the schema has been adjusted to incorporate the trauma, the individual will begin to experience PTG in the five domains mentioned above.

There are several factors that facilitate the process of PTG including the individual's ease with rumination, and satisfactory social support with whom they feel comfortable disclosing their cognitive processes (Tedeschi & Calhoun, 2004). One of the key factors leading to PTG is having satisfactory social support after trauma (Jieling & Xinchun, 2016; Kimhi & Shamai, 2004; Lev-Wiesel & Amir, 2003; Linley & Joseph, 2004). Satisfactory social support facilitates

rumination and the cognitive rebuilding processes beginning the process of PTG (Lev-Wiesel & Amir, 2003; Linley & Joseph, 2004). Essentially when an individual is able to ruminate and has social support they are able to facilitate the process of altering worldviews and schemas. This is considered to be the cognitive rebuilding process (Linley & Joseph, 2004). Although it is possible for rumination to occur without satisfactory social support, support promotes rumination and cognitive rebuilding within individuals and is likely to result in PTG. Some personality characteristics that facilitate the process of PTG include extraversion and openness to experience, because they allow the individual to have more flexibility over their schemas, which assist with the rewriting of their schemas (Tedeschi & Calhoun, 2004).

Related theory to posttraumatic growth.

There are various ways in which PTG is understood, although the Tedeschi and Calhoun (2004) model of PTG is the most well known and accepted model to date. Another way of conceptualizing PTG is the Organismic Valuing Theory (OVT; Joseph & Linley, 2005). OVT includes the role of intrinsic motivation for growth, which has positive and negative effects on an individual after they experience trauma. The theory proposes three possible outcomes of the cognitive-emotional processing that occurs after trauma. The first is assimilation of the experience, where the individual will return to pre-trauma baseline. Meaning that they will not have any dramatic shifts in their schemas or worldviews. The pre-trauma baseline means that there have been very little if any changes in the individual's schemas after a trauma. The second outcome is the accommodation of the trauma in a negative light, which may result in psychopathology, such as PTSD (Joseph & Linley, 2005). This outcome is in line with the majority of the psychological research regarding the impact of trauma. The third outcome is accommodating the experience in a positive manner where the individual has challenged their

schemas and eventually experiences growth. Joseph and Linley (2005) believed that people are intrinsically motivated towards growth, and therefore a larger population will experience the third result of PTG. It was noted that the social environment plays a major role in whether the individual experiences self-actualization, which inevitably results in PTG (Joseph & Linley, 2005).

For the purposes of this study the Tedeschi and Calhoun (2004) model of PTG will be utilized. As previously mentioned the concept of PTG does not have much empirical support, due to the majority of the PTG studies being qualitative. Seeing as the field of positive psychology prefers to rely on empirical data it is necessary that more empirically based studies are conducted to determine the validity of PTG (Zoellner & Maercker, 2006). Though some research found that the concept of PTG is cultural neutral, the tools that measure PTG reflect more of the western understanding of PTG (Spelvins et al., 2010). Regardless of the fact that the concept of PTG is culturally neutral, it is essential to realize the extent of which the western cultural biases have impacted the empirical research and psychometric tools used to measure PTG (Flores & Ezemenari, 2003; Spelvins et al., 2010). When researching PTG in non-Western cultures the assessment tools and conceptualizations must be culturally adapted.

Terms related to posttraumatic growth.

Over the years there have been various terms that have attempted to capture the meaning of PTG. None of these terms quite encompass the entire process of PTG, and therefore are not interchangeable with the term PTG. The concepts that will be distinguished from PTG include resilience, hardiness, optimism, and sense of coherence. All of these concepts describe specific characteristics that allow people to manage adversity in a positive and healthy manner. In contrast, PTG is a concept that refers to change in people that are going above and beyond one's

ability to resist and not have the traumatic event take over their life in a negative manner. It incorporates an aspect of transformation and change in functioning that is not captured by the above mentioned terms (Tedeschi & Calhoun, 2004). PTG captures the notion of a dramatic schematic change that is not captured by resilience, hardiness, optimism or sense of coherence.

Resilience.

Resilience is seen as the process by which individuals are able to positively adapt and utilize effective coping skills when faced with an adverse event (Allen et al., 2011; Southwick et al., 2014; Tedeschi & Calhoun, 2004). Research has found that resilience can be defined as a process, trait or an outcome after adversity. But in many regards resilience can be thought of on a continuum (Southwick et al., 2014). It is believed that resilience is influenced by early life experiences and requires that the individual be motivated by social or material resources to stay strong in the face of adversity (Almedom, 2005; Anda et al., 2006; Southwick et al., 2014; Tedeschi & Calhoun, 2004). The strength that is a result of this motivation tends to increase the individual's energy for goal-directed behaviors to cope and rebound from the adverse event (Almedom, 2005; Kimhi & Shamai, 2004). There is a common belief that resilience is a precursor to PTG, meaning that an individual is only capable of recovery from the trauma if they possess resilient characteristics (Steele & Kuban, 2011). Resilience is looking at the individual's ability to recover, whereas PTG is looking at the individual's ability to thrive after adversity and taking a deeper look into the positive changes occurring in the five domains of functioning (Steele & Kuban, 2011).

Hardiness.

The concept of hardiness will be defined as one's tendency towards an internal locus of control, commitment and challenge in response to a traumatic life event (Kobasa, Maddi, &

Kahn, 1982; Tedeschi & Calhoun, 2004). Hardiness was built upon theories of existential psychologists who examined the strenuousness of living an authentic life (Kobasa, 1979). Individuals who possess hardy personalities generally exhibit three characteristics including control, commitment and challenge (Kobasa, 1979; Kobasa et al., 1982). These individuals have a strong commitment to self, attitude of vigorousness toward their environment, sense of meaningfulness and an internal locus of control (Almedom, 2005; Kobasa, 1979). They are curious, active and expect that life will present challenges fostering opportunities for personal development (Almedom, 2005). Individuals with hardy personalities are thought to be capable of effectively managing stressful events without allowing the stress to change who they are fundamentally (Kobasa, 1979; Kobasa et al., 1982). Hardiness does not encompass the notion of thriving after stressful events, but is seen as more of a personality trait.

Optimism.

The concept of optimism includes the tendency to expect positive outcomes to events (Scheier & Carver, 1985; Tedeschi & Calhoun, 2004). Individuals who are considered tend to have a positive outlook on the world and believe that generally good things will happen to them (Scheier & Carver, 1985). Optimism is a relatively stable personality trait and optimistic individuals are seen as being optimist across a variety of settings. However, this trait may play a role in the manner in which individuals monitor their actions (Scheier & Carver, 1985). The term optimism illustrates the notion of seeing the world in a positive light and found to be correlated with general life satisfaction (Chang, Maydeu-Olivares & D'Zurilla, 1997). However, it does not embody the ways in which individuals can strive after stressful and potentially traumatic events.

Sense of coherence (SOC).

A sense of coherence (SOC) is obtained when an individual can comprehend internal and external stimuli, effectively cope with the demands presented by the stimuli and find meaning in the stimuli (Olsson et al., 2006; Tedeschi & Calhoun, 2004). There are three necessary components of SOC including comprehensibility, manageability and meaningfulness.

Comprehensibility is referring to the notion of whether internal and external stimuli make sense to individuals in terms of being "coherent, ordered, cohesive, structured and clear" (Olsson et al., 2005, p. 219). The manageability component refers to the extent in which individuals believe that the resources they have will assist them with meeting demands presented by the stimuli, such as a trauma (Olsson et al., 2005). Meaningfulness is whether individuals perceive challenges as having been worthy of one's time, energy and engagement. This is the motivational drive behind the concept of SOC (Olsson et al., 2005). These three components are further explained by Olsson et al. (2005) as:

(1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable (*comprehensibility*); (2) the resources are available to one to meet the demands posed by these stimuli (*manageability*); and (3) these demands are challenges, worthy of investment and engagement (*meaningfulness*) (p. 219).

SOC is used to examine the origins of health and wellness of an individual. This term is used to explain the ways in which an individual is able to effectively manage internal and external stimuli (Olsson et al., 2005). However, it does not exclusively incorporate one's capacity to thrive after experiencing a traumatic event.

Measures of posttraumatic growth.

PTG is difficult for researchers and clinicians to measure, however the most widely used psychometric inventory measuring this concept is called the Posttraumatic Growth Inventory. The PTGI was created by Tedeschi and Calhoun (1996) and assesses the positive outcomes one may experience after a traumatic event. The scale consists of 21-items and measures the five major factors of posttraumatic growth. These five factors are as follows: (1) new possibilities, (2) relating to others, (3) personal strength, (4) spiritual change, and (5) appreciation of life. It has been found that these five factors of PTG make it possible to determine the extent of the success an individual has achieved in the aftermath of a trauma including the way they have reconstructed their view of themselves, others and the meaning of the traumatic event (Tedeschi & Calhoun, 1996).

Tedeschi and Calhoun (1996) found that the PTGI has very high internal consistency (Cronbach's $\alpha = 0.94$) and an acceptable test-retest reliability ($r = 0.71$). It was found that responses were not motivated by the urge to appear socially desirable, but the PTGI is not related to psychological health and should not be used to diagnosis PTSD (Tedeschi & Calhoun, 1996). The PTGI's main goal is to determine whether or not the individual has experienced any changes in the schemas they hold of themselves, others and the world. Generally individuals tend to experience a greater positive change in the domain of spirituality and relationships (Tedeschi & Calhoun, 1996).

One of the limitations of the PTGI is that it was developed in the U.S. and is likely to have cultural biases that may impact participants' responses (Flores & Ezemenari, 2003; Spelvins et al., 2010). There have been several studies that developed adaptations of the PTGI in an attempt to make this tool more culturally sensitive through the use of meaningful translations, omitting culturally irrelevant items, and adding items that are culturally relevant. None of these

adaptations have addressed the five domains that make up PTG; therefore it is important to continue research on this instrument (Spelvins et al, 2010).

PTG and culture.

The concept of PTG has been considered culturally neutral due to not claiming any specific world assumptions, making this a fairly universal concept (Spelvins et al., 2010).

However, it has been found that the PTGI being developed and normed with a Western lens is not culturally neutral. Due to the lack of culturally neutral assessment tools, it is important to understand the process of PTG from a variety of cultures and to determine if it is possible to create an unbiased assessment tool. Jieling and Xinchun (2016) conducted a study examining PTSD and PTG among 618 children and adolescent eight months after the Ya'an earthquake in China in 2013. It was found that higher levels of social support after the disaster lead to more experiences of PTG eight months after the earthquake (Jieling & Xinchun, 2016). There were three distinct patterns of PTSD and PTG that were distinguished after this natural disaster. The first pattern was the 'thriving group', which constituted 76.2% of the children and adolescents and was marked by mild symptoms of PTSD and moderate levels of growth (Jieling & Xinchun, 2016). The second pattern was the 'resilient group', which made up about 9.1% of the participants and was marked by mild PTSD symptoms and few experiences of growth. The third pattern discovered was called the 'stressed and growing group', 14.7%, was marked by significant PTSD symptoms and nearly moderate levels of growth (Jieling & Xinchun, 2016). This study indicated that eight months after the earthquake it was possible for growth among children and adolescents and one of the most important factors to this growth was the availability of satisfying social support (Jieling & Xinchun, 2016).

Lev-Wiesel and Amir (2003) examined PTG among 97 child Holocaust survivors, who were all born after 1930 in Israel. The authors were attempting to understand the relationship between PTSD symptomatology, personal resources and PTG. It was believed that the more person resources such as sense of self-identity and social support, an individual had the more likely they would experience PTG and an overall better quality of life (Lev-Wiesel & Amir, 2003). This study found that the more personal resources the individual possessed the less likely they were to suffer from PTSD, and the more likely they were to experience PTG (Lev-Wiesel & Amir, 2003). Additionally, it was found that PTSD and PTG can coexist in child Holocaust survivors and that simply because an individual experiences one of these phenomena does not mean that they are incapable of experiencing the other. Laufer and Solomon (2006) also conducted a study examining PTSD and PTG among Israeli youth who were exposed to incidents of terror. There were 2999 adolescents from grades seven through nine who participated in this study in four different areas that had been exposed to terror attacks. The results demonstrated that 41.1% of participants reported mild to severe PTSD symptoms and 74.4% of participants reported some feelings of growth (Laufer & Solomon, 2006). Additionally, it was found that religious female adolescents experienced the most feelings of growth after exposure to terror incidents (Laufer & Solomon, 2006).

Kroo and Nagy (2011) examined the experience of PTG with 53 Somali refugees living in Hungary, focusing on the potential for positive transformation after experiencing war. The PTGI was used, with the additional of one open-ended item at the end of the questionnaire stating “Please share with us significant changes in your life as a result of your experiences”. This was incorporated in the hopes of exploring new schemas in the context of the participant’s own narrative as well as to allow for the emergence of culturally relevant notions of growth

among this population (Kroo & Nagy, 2011). One of the main findings of this study in particular was the high level of PTG among the Somali refugees, which was most clearly present within the open-ended question (Kroo & Nagy, 2011). There were several factors contributing the personal growth among this population including perceived social support, sense of hope, religiosity and negative religious coping (Kroo & Nagy, 2011). This finding indicates the importance of being able to rely on satisfactory social support networks after experiencing any type of trauma.

Rahmani et al. (2012) investigated the concept of PTG with 450 Iranian cancer patients. They were asked to complete a demographic questionnaire and the Persian version of the PTGI, which had been translated in a culturally sensitive manner for the purposes of this study. It was found that the mean PTG score for participants was 76.1, which is statistically significant, suggesting that Iranian cancer patients experience moderate to high levels of PTG (Rahmani et al., 2012). Additionally it was found that PTG was significantly associated with age and level of education, meaning that the older and highly educated adults were more likely to experience PTG compared to their younger, less educated counterpart (Rahmani et al., 2012).

Taku et al. (2007) conducted a study to determine the underlying factors of the Japanese version of the PTGI (PTGI-J). There were 312 Japanese undergraduate students who reported growth due to their most traumatic event they experienced within the last five years. The results indicate that of the original five factors coined by Tedeschi and Calhoun (1996), three were replicated which included Relating to Others, New Possibilities and Personal Strength (Taku et al., 2007). One of the unique aspects of the PTGI-J is that the fourth factor integrates the Spiritual Change and Appreciation of Life factors into one. As previously mentioned the PTGI was originally created and normed using a Western population therefore, making it essential that more studies exist to develop culturally sensitive assessment tools for PTG.

Cambodia: A History

The Kingdom of Cambodia, also known as Cambodia, is located in Southeast Asia. Cambodia is bordered by Thailand, Laos, Vietnam and the Gulf of Thailand and has a population of approximately 15 million people (Schnuert et al, 2012). The kingdom is a constitutional or parliamentary monarchy, ruled by King Norodom Sihanouck, who ascended to the throne in October 2004 (Chan, 2015). Cambodia originally had much influence from India resulting in the construction of monumental temples, such as the Angkor Wat, the largest religious monument in the world and a World Heritage site (Chan, 2015; Chandler, 2007; Coe, 2005; Van de Put & Eisenbruch, 2002). In 1863, Cambodia became a protectorate of France and was doubled in size due to reclaiming the northern and western parts of Thailand. It was not until 1953 that Cambodia gained its independence from France (Chan, 2015).

Genocide History in Cambodia

The country experienced relative peace and independence until 1967 when the Cambodian Civil War began (Van de Put & Eisenbruch, 2002). The Communist party of Kampuchea, also known as the Khmer Rouge, the Democratic Republic of Vietnam, and the Viet Cong were pitted against the Kingdom of Cambodia. The Cambodian Civil War was a result of the Second Indochina war, which was consuming many of the Kingdom's neighboring countries in civil wars including the Laotian Civil War and the Vietnam War. After five years of intense fighting the country experienced a coup d'état in 1970, resulting in the Khmer Rouge gaining power. The Khmer Rouge led by Pol Pot, Nuon Chea, Ieng Sary, Son Sen, and Khieu Samphan overthrew the old military dictatorship of the Khmer Republic (Human Rights Watch, 2012).

The Khmer Rouge emerged as a major power and in 1975 took over Phnom Penh, the capitol, marking the beginning of the Cambodian genocide, one of the bloodiest and most brutal

genocides in the history of the world (Van de Put & Eisenbruch, 2002). The Khmer Rouge attempted to create a society based on agrarian socialism, founded on the ideals of Stalinism and Maoism. The leaders of the Khmer Rouge regime desired to return to a “pure peasant” society cleansed of all Western influences (Chan, 2015; Van de Put & Eisenbruch, 2002). In essence, the Khmer Rouge desired to get back to the agricultural roots that influenced the creation of Cambodia.

Pol Pot began mobilizing the entire country to fulfill this dream of a socialist agrarian society, creating one of the largest social experiments in the twentieth century. This social experiment was fueled by fear, terror, starvation, resettlement and the collectivization of land to ensure that the population did as the Khmer Rouge commanded (Van de Put & Eisenbruch, 2002). One the first day of the Khmer Rouge regime and the start of the Cambodian genocide everyone living in Phnom Penh, at that time two million inhabitants, were ordered to move back to their ancestral lands. This included the elderly, those currently in hospitals, expecting mothers, and children (Chan, 2015). Along with the forced evictions of the majority of the population there were mass killings, with the main targets including professionals, intellectuals, anyone suspected of having connections with the former government, as well as ethnic Vietnamese, Chinese-Thai, Cham, Cambodian Christians and Buddhist monks. It was not uncommon for individuals to be held at gunpoint to tell their story and family history and then killed if they fit any of the above criteria (Chan, 2015; Strangio, 2014).

Anything that was a reminder of westernized culture including vehicles, modern medicine, money, banks, schools and colleges were destroyed (Chan, 2015; Strangio, 2014). It was not uncommon for fathers to be separated from their families and children to be taught to spy on their parents to obtain information that they were against the Khmer Rouge regime (Chan,

2015). The country became a slave labor camp, similar to concentration camps used during the Holocaust (Chan, 2015). It is estimated that 2 million people or 25% of the entire population was eliminated during the genocide, leaving people without land, religion or culture (Van de Put & Eisenbruch, 2002). This was the first genocide by which the government was directly responsible for killing its own people, and thus the term autogenocide was coined (Van de Put & Eisenbruch, 2002).

It was not until 1979 when the Khmer Rouge was ousted by the Vietnamese, which launched the country into the Cambodian-Vietnamese War of 1979 to 1991 (Van de Put & Eisenbruch, 2002). This was the beginning of a ten-year Vietnamese occupation. Due to the hostile relationships between the Cambodian people and the Vietnamese people the transition of power after four years of horrific autogenocide was not a peaceful one (Strangio, 2014; Van de Put & Eisenbruch, 2002). During much of the Vietnamese occupation the Khmer Rouge continued to be recognized as the official government by the world. It was not until 1989 that the Khmer Rouge withdrew from the international community, due to heavy diplomatic and economic pressure by the international community for the Vietnamese government to implement various economic and policy reforms (Van de Put & Eisenbruch, 2002). In the year 1991, the Paris Peace Accords were signed and the Cambodian-Vietnamese War was ended, leaving the United Nations to govern Cambodia from 1992 to 1993 (Strangio, 2014). In 1993 there was a successful election held and the United Nations handed power over to the Cambodian people once more.

History of Cambodian Refugees' Migration to the U.S.

The years 1975 to 1994 were a time when the majority of the Cambodian population attempted to escape from the horrific human rights violations occurring in the country. It was not

uncommon for individuals to seek refuge in other countries including Thailand, the United States and Australia (Chan, 2015). Prior to the beginning of the Cambodian genocide there was an initial wave of immigration to the United States consisting of well educated Cambodian refugees, who had not suffered the atrocities of the Khmer Rouge. This wave was made up of approximately 5000 individuals including Cambodian diplomats, foreign officials, Navy and Air Force personnel and their families (Chan, 2015). They were eventually able to obtain white-collar jobs and transferred their specialized skills into the United States work force. Prior to this wave of refugees there had not historically been any Cambodians living in the United States. This group of refugees became crucial leaders in the Cambodian-American communities that settled from the mid-1970s onward (Chan, 2015).

The second wave of refugees into the United States was composed of individuals who had successfully escaped Cambodia into Thailand during the Khmer Rouge. These individuals had experienced some of the horrors of the Khmer Rouge regime, but many did not make it across the Cambodia-Thai border to due the countless landmines that were planted. The third wave of refugees arrived to the United States after the Khmer Rouge was overthrown. There was not an immediate exodus of refugees after the regime was overthrown, because many searched the country locating their missing family members.

Between the years of 1975 to 1994 there was a total of 157,518 Cambodians admitted to the United States (Chan, 2015). The Office for Refugee Resettlement (ORR) took responsibility for overseeing the Cambodian refugee resettlement in the United States. However, the ORR and Cambodian refugees had very different views of what they needed from their new home. The ORR was focused on settling refugees in locations with existing voluntary services agencies, placing individuals with known family members, cities with cheap housing and plenty of entry-

level jobs. However, Cambodian refugees were more concerned with rejoining their family and friends, living close to Buddhist temples, settling in warm cities and places where they would have a good chance of finding meaningful support and employment (Chan, 2015). As a result some of the largest Cambodian populations are located in the Southern California area, with the city of Long Beach having the largest population of Cambodian refugees in the United States.

Life in the United States has not been an easy transition for the Cambodian population. Cambodian refugees were welcome or not accepted into the American society with open arms and have experienced discrimination and prejudice (Chan, 2015). The transition from Cambodian culture to American culture is a difficult one, especially due to the tension that exists between the American notions of “individualism, pragmatism, and materialism”, whereas Khmer-Buddhists emphasize “compassionate hierarchy, collectivism and otherworldliness on the other” (Ong, 2003). The switch from a society that emphasizes religious hierarchy and dependency to a society that is fueled by individualism, wealth and status can be a profoundly unsettling experience for many Cambodians and immigrants. Additionally, many Cambodian refugees have experienced vast amounts of trauma (Chan, 2015). The United States was not and is not prepared to treat the vast amount of trauma that Cambodian refugees have survived. Cambodian refugees in the United States have been attempting to get back to their traditional roots and have developed communities that rely heavily on traditional healing methods that were eradicated during the Khmer Rouge. There are now large communities of Cambodian refugees and Cambodian-Americans fostering a sense of resistance from the atrocities that they faced when living under the Khmer Rouge.

The majority of the existing population of Cambodian-Americans have been born and raised in the United States and grew up with parents who experienced living under the Khmer

Rouge (Ong, 2003). The children of these survivors have experienced their own unique issues related to being raised by immigrant parents, such as being the language broker for their parents, and assisting their parents with many of their daily needs due to their familiarity of American cultural and societal norms and systems (Ong, 2003). Additionally, many young Cambodian-Americans do not identify with the Buddhist roots commonly associated with Cambodian culture, especially due to the irregular teaching of these traditions (Ong, 2003). In fact, many young individuals have limited memories of life in Cambodia or none at all, making it difficult for them to understand the beliefs and challenges their parents may face (Ong, 2003). Regardless of these difference that exist within the generations of Cambodians and Cambodian-Americans this population continues to grow and develop throughout the United States and various other countries such as Australia and Thailand (Chan, 2015; Ong, 2003).

The Cambodian refugee community continues to grow abroad, however there is still a large population living in Cambodia today. The Cambodian People's Party (CPP) and prime minister Hun Sen, who has been in power since 1997, currently rule the country (Strangio, 2014). This was also the year the Extraordinary Chambers in the Courts of Cambodia (ECCC) or the Khmer Rouge Tribunal was established. The Khmer Rouge Tribunal was developed to prosecute those responsible for the millions of deaths throughout the four years of autogenocide (Human Rights Watch, 2012; Strangio, 2014). The Khmer Rouge Tribunal was initially greeted with great support from the Cambodian people, as they wanted to see justice served to those responsible for the deaths of 25% of their country and the destruction of much of the countries traditions and culture. Progress is and continues to be slow and there has been a substantial loss of interest in the Khmer Rouge Tribunal (Hinton, 2016; Human Rights Watch, 2015). Although the CPP initially pushed for the creation of the Khmer Rouge Tribunal, the prime minister

publicly opposes the tribunal and has actively prevented the courts from obtaining the necessary evidence to convict the leaders of the Cambodian genocide (Hinton, 2016; Human Rights Watch, 2015). Therefore, the United Nations halted the trials in 2016 and is no longer investigating the prosecution of the individuals responsible for the Cambodian genocide (Hinton, 2016; Human Rights Watch, 2017).

Current Human Rights Issues in Cambodia

Over the years, the CPP has become less interested in seeking justice for the Cambodian people and has begun to engage in more unethical and violent acts towards its people. In 2012, the World Bank suspended any new loans to Cambodia due to the continuation of human rights violations (Human Rights Watch, 2012). Some of these human rights violations include banning peaceful protests, suppression of garment and textile workers including poor working conditions and small wages, arbitrary detentions, torture and ill-treatment of individuals considered undesirable by the CPP, and forced land evictions by large corporations (Amon et al., 2013; Human Rights Watch, 2015). The CPP is actively working against organizations attempting to assist the Cambodian people through the arbitrary arrests of leaders of the oldest and most influential non-governmental organization (NGO) in Cambodia called the Cambodian Human Rights and Development Association (ADHOC) (Amnesty International, 2016; Human Rights Watch, 2017). The leaders are still being detained for unknown reasons and with unclear sentences for the alleged crimes.

Another major issue facing the people of Cambodia is the current land eviction practices of large garment and textile companies. It is not uncommon for individuals to be evicted from their property without prior warning or negotiations. It has been estimated that approximately 10000 families per year are impacted by the land-grabbing practices of the agroindustrial

businesses (Amnesty International, 2016; Human Rights Watch, 2017). This has resulted in the government targeting veteran land activists and attempting to bar these organizations from taking unauthorized land. Again, this has resulted in various convictions including insulting government officials and many without evidence connecting these individuals to criminal offense (Amnesty International, 2016; Human Rights Watch, 2015, 2017). The forced land eviction of the Cambodian people is extremely concerning and resembles some of horrific practices of the Khmer Rouge.

Although land grabbing is a huge issue especially for the rural Cambodian people, those living in more urban settings also face terrifying practices. The CPP has created facilities labeled “Drug Treatment Centers”, which were which are used as detention centers for “undesirable people” including individuals who are homeless, using drugs, sex workers, street children and the mentally ill (Amon et al., 2013). Prime Minister Hun Sen has promised in the last year to close down the main drug treatment center named Prey Speu, however it still reminds operational (Amon et al., 2013; Human Rights Watch, 2017). There are a total of seven fully operating drug treatment centers. Although there is minimal evidence regarding the practices of these drug treatment centers it appears as if the detained individuals are subject to maltreatment and torture, which again is concerning and eerily similar to the tactics of the Khmer Rouge (Amon et al., 2013). Thirty-nine countries before the United Nations Human Rights Council made a joint statement on September 14, 2016 stating that there were concerned regarding the increasing threats to legitimate activities by opposition parties and human rights NGOs (Human Rights Watch, 2017). The United Nations Human Rights Council called on the Cambodian government to ensure free and fair future elections to ensure a legitimate government. Although

there was a joint statement made there have been no concrete steps taken by foreign governments addressing the deteriorating human rights situation in Cambodia.

There continues to be suspicion of human rights violation in Cambodia, but the country has experienced substantial economic growth over the past two decades. In 2015, Cambodia officially attained lower middle-income status with a gross national income per capita reaching US \$1070 (World Bank, 2017). Cambodia has experienced an average growth rate of 7.6% from 1994 to 2015, which ranks sixth in the world (World Bank, 2017). The current economic growth can be contributed to the garment and tourism industries, which significantly expanded over the past decade. The poverty rate in Cambodia has dropped from 47.8% in 2007 to 13.5% in 2014 (World Bank, 2017). Although the poverty rate has been halved the individuals who have escaped poverty have only done so by a small margin and continue to live in poor economic conditions. The majority of the population does not have access to piped water supply or improved sanitation conditions (World Bank, 2017).

There have been improvements in physical health including advances in maternal health, early child development and primary education programs in rural areas. For example, “the maternal mortality ratio per 100,000 live births decreased from 472 in 2005 to 161 in 2015, the under-five mortality rate decreased from 83 per 1,000 live births in 2005 to 28.7 per 1,000 in 2015” (World Bank, 2017). There have been substantial and vitally important improvements in the country of Cambodia especially on the economic and health care front. Yet there is still room for improvement and growth. One of the most concerning aspects of the current state of Cambodia are the human rights violations taking place on a daily basis. With more attention and pressure from the international community there is a higher likelihood that the country will be pushed to make substantial and lasting changes. One of the ways in fundamental changes could

be made in Cambodia is through the improvement in overall wellbeing of its citizens. To improve the overall wellbeing is through the improvement of mental health, which intimately involves the Cambodian belief system and traditional healing practices.

Cambodia's Belief System and Traditional Healing

Cambodia has a rich and vibrant history of healing practices stemming from spiritual practices. The official religion of Cambodia is Theravada Buddhism, and is practiced by approximately 93% of the population (Overton & Chandler, 2017). There are several aspects in Theravada Buddhism that are related to the idea of health in regards to Cambodian culture. The notion of *Dharma* and *Karma* are major elements of the Cambodian belief system. *Dharma* is “correct action”. *Karma* is “the balance of good and negative deeds from this or a previous life or ‘fate’” (Schnuert et al., 2012). When one strays from their *dharma*, it is believed that this will have a major impact on the individual's ability to advance in the cycle of *samsara*, cycle of birth and rebirth (Agger, 2015; Ratliff, 1997; Schnuert et al., 2012). The Cambodian belief system relies heavily on the concept of luck and astrology (Agger, 2015). It is a fairly common practice for individuals to consult fortunetellers to prepare for the future and it is believed that people may run into misfortune due to causing their ancestors distress. There is much emphasis placed on appeasing one's ancestors, which can be done through ceremonies and offerings placed on the family's shrine (Agger, 2015; Ratliff, 1997; Schnuert et al., 2012).

It is fairly common for individuals in Cambodia to engage in traditional health practices. Traditional health practices are defined as “the sum total of the knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness” (Zhang, 2000, p. 1). Some of the

traditional healing remedies commonly used in the Cambodian culture include drinking only warm water, coining, cupping, and herbal remedies (Agger, 2015; Buchwald, Panwala, & Hooton, 1992; Schnuert et al., 2015). It has been found that traditional health practices are more likely to be utilized by female Cambodians living in rural communities compared to males and females in larger towns (Buchwald et al., 1992). Coining requires that the individual rub a coin firmly on the torso or extremities with the edge of the coin, and is used to alleviate aches, pains, fevers, colds, cough, nausea and abdominal pain (Buchwald et al., 1992). Cupping is performed by placing a small, heated cup on one's skin usually on the forehead or abdomen and allowing it cool. The suction that is created on one's skin to begin blood flow and promote healing for various ailments (Buchwald et al., 1992; Schnuert et al., 2012). It is common for Cambodians to seek the assistance of monks, *kru khmers*, also known as traditionally healers, mediums or fortunetellers (Agger, 2015). These healers are known to alleviate the individual's symptoms through "meditative prayer, blessing ceremonies or communication with ancestral spirits" (Schnuert et al., 2012). The majority of these healers come from a Buddhist background and utilize Buddhist rituals to promote healing within the individual (Agger, 2015; Buchwald et al., 1992). During the Cambodian genocide a vast majority of traditional healing practices were eliminated due to targeted massacres of spiritual leaders and healers (Agger, 2015; Chan, 2015; Van de Put & Eisenbruch, 2002). The deaths of these traditional and spiritual healers have impacted the current Cambodian population due to the younger generations having a lack of exposure to traditional practices. However, there has since been a revival of Cambodian traditional health practices, meaning that many of these practices are being used in the general population as well as among Cambodian refugees (Agger, 2015; Buchwald et al., 1992).

The revival of traditional health practices among the general Cambodian population is noteworthy as many individuals utilize these practices as a first resort when they experience physical or mental symptoms. The continued reliance on traditional health practices is important to note as these practices are essential and core elements to the Cambodian society. However, there is also a fairly general consensus that western medicine, such as doctor visits and pharmaceuticals, will be utilized after all traditional health practices have been exhausted (Beban, 2007; Buchwald et al., 1992; Van de Put & Van der Veer, 2005). There are various factors that may influence the decision of relying primarily on traditional health practices including the limited knowledge, inaccessibility and potential mistrust of western medicine (Buchwald et al., 1992; Mollica et al., 2014; Van de Put & Van der Veer, 2005). It is essential that all treatments provided to the Cambodian population through a western organization or individual are culturally sensitive and incorporate the traditions and norms of the Cambodian population. Western clinicians who are knowledgeable of these traditional health practices are more likely to serve the Cambodian community effectively and promote health in a culturally sensitive manner (Buchwald et al., 1992).

Mental Health in Cambodia

Mental health in Cambodia continues to be a taboo topic, although there have been some advancements in this arena. It is estimated that over 90% of the population has experienced at least one traumatic event (Mollica et al., 2014; Schunert et al., 2012). There are various studies that examine the PTSD rates among Cambodians with percentages being 20.6% (Mollica et al., 2014) to 28.4% (de Jong et al., 2003). These studies have found that PTSD tends to be a relatively common phenomenon among Cambodian individuals. This can be attributed to the Cambodian genocide as well as the Vietnamese occupation and current poverty and political

stress (de Jong et al., 2003; Mollica et al., 2014; Schunert et al., 2012). These high rates of PTSD highlight the necessity for culturally appropriate psychological treatment. The main difficulty with developing culturally appropriate treatment options for this population and providing them is the tremendous stigma associated with mental health issues and seeking treatment in Cambodian culture. Many individuals suffering from mental illness would traditionally seek treatment from their local healers, monks, mediums and fortunetellers and avoid taking psychiatric medications or participating in psychotherapy (Agger, 2015; Van de Put & Van der Veer, 2005).

To understand the stigma surrounding mental health in Cambodian culture researchers and clinicians should understand the cultural implications associated with the experience of complex trauma. Numerous individuals, especially the older generation in Cambodia have experienced some form of trauma throughout their lifetime including corruption, poverty, forced eviction, starvation, forced labor, resettlement, and mass killing. The various brutal wars and bloody Cambodian genocide that have plagued this southeastern Asian country for years, which has led the various generations of traumatized individuals. One of the most important aspects of trauma in Cambodia is somatization, which is defined as one's tendency to experience and communicate physical distress and symptoms that are unaccounted for by any organic causes (Hinton et al., 2016; Lipowski, 1988; Schnuert et al., 2012). Somatization of psychology symptoms differs from somatization disorders in that these particular types of disorders tend to be more persistent and disabling, whereas somatization of psychological symptoms can be temporarily alleviated by means of traditional health practices, western medicine or psychotherapy (Lipowski, 1988). Some of these physical health problems include numbness of the legs and arms, insomnia, "thinking too much", worrying, and headaches (Hinton et al., 2016;

Lipowski, 1988). It is more likely that these symptoms appear in women 36 years or older, widowed or divorced, have little or no primary education and have a lower socioeconomic status (Agger, 2015; Schnuert et al., 2012).

Somatization is one of the most common phenomena that occur among the Cambodian, Cambodian refugee and Cambodian-American populations, with the most common physical symptom constellations associated with trauma being *khyâl* (Hinton et al., 2005, 2010). *Khyâl*, translates to “wind attack”, is a culturally specific version of a panic attack (Hinton et al., 2005, 2010, 2016; Schnuert et al., 2012). This type of panic attack is believed to be at the center of Khmer response to trauma, and includes a sense of panic associated with fear of the instability of the neck (Hinton et al., 2010). Another common somatization is *khmaoch sângkât*, sleep paralysis (Hinton et al., 2005). *Khmaoch sângkât* is associated with a demon or ghost pushing down on the individual who is either asleep or in the process of falling asleep. During *khmaoch sângkât* the individual experiences a paralysis or a sensation of a hand on their chest or neck, chest tightness, and shortness of breath (Hinton et al., 2005). *Khmaoch sângkât* is commonly interpreted as a sign of bad luck and may even imply imminent danger of death (Hinton et al., 2005). One of the traditional methods of managing *khmaoch sângkât* is by visiting a monk who is able to determine what types of restorative rituals are needed for the individual to either remove their bad luck or increase their good luck (Hinton et al., 2005). There have been studies that have found that *khmaoch sângkât* is closely related to the experience of PTSD in western societies, but with Cambodian specific symptoms (Hinton et al., 2005).

It is also fairly common for individuals to experience *Khsaoy beh daung* or “weak heart syndrome” in Cambodia (Hinton et al., 2005, 2010). *Khsaoy beh daung* involves the belief that *kyol goeu* or “excessive bodily wind” causes a breakdown in the functioning of the heart

including heart palpitations when the individual is slightly provoked, being startled or partaking in excessive exercise (Hinton et al., 2005, 2010). *Khsaoy beh daung* is commonly associated with the western diagnosis of a panic disorder (Hinton et al., 2005, 2010; Schnuert et al., 2012). The majority of these somatic syndromes are closely related to a DSM-5 diagnosis of a panic disorder, or the hyperarousal component of PTSD (APA, 2013).

Cambodian people have experienced the aftermath of their trauma in a more physical manner than individuals living in western cultures. These above mentioned syndromes are commonly accepted within the Cambodian culture, and are all treated with physical treatments (Agger, 2015). There is only one syndrome commonly accepted among the Cambodian people, both in Cambodia and abroad that does not include physical symptoms. *Bak Sbat*, literally translated as the “permanent breaking of the body or spirit” or “broken courage”, is a common response to trauma in Cambodia and is associated with the extensive amount of tragedy that Cambodians have faced (Chhim, 2013, p. 288). The symptoms of *bak sat* include low self-esteem, low self-efficacy, submissive attitude, dependence and a sense of fear when surrounded by others (Chhim, 2013; Hinton et al., 2016; Schnuert et al., 2012). This is the only Cambodian specific syndrome that does not include physical ailments and is accepted within the society. This is closely related to the avoidance aspect of PTSD characterized in the DSM-5, and for the Cambodian population is the closest diagnosis to PTSD that exists (APA, 2013). However, it is possible that PTSD does not fully capture the symptoms of trauma that many Cambodians have experienced. This points to the importance of culturally appropriate terms and conceptualizations (Chhim, 2013; Mollica et al., 2014).

The current state of mental health care in Cambodia is bleak. Approximately 97% of Cambodians stated that they would benefit from more access to mental health services such as

psychotherapy and counseling, despite the general misunderstanding and lack of knowledge of psychology and mental health (Schnuert et al., 2012). This may suggest that there is a general consensus among the Cambodian people that they are suffering from mental health issues. It is likely that the majority of the population either knows someone who has suffered from these culture-bound symptoms or has experienced them first hand (de Jong et al., 2003). The country is currently in a difficult situation because the funding to provide these services is essentially non-existent. The only existing mental health services are within the hospital, causing issues because the majority of the Cambodian population live in rural areas and do not have access to hospitals (Buchwald et al., 1992; Mollica et al., 2014; Schnuert et al., 2012; Van de Put & Van der Veer).

There are some grassroots movements that have begun and are educating individuals within the community regarding psychology, the culturally specific responses to trauma and how to best treat them at the community level (Mollica et al., 2014; Schnuert et al., 2012). These movements have been extremely instrumental in rural communities where there is a lack of financial and medical resources (Mollica et al., 2014; Van de Put & Van der Veer, 2005). Van de Put and Van der Veer (2005) began one of these grass root movements that attempts to bring one-on-one talk therapy to Cambodian communities in a culturally sensitive manner. Prior to the Khmer Rouge healers, monks and mediums were used to manage and navigate personal issues. Mediums in Cambodia are essentially counselors engaging in individual talk-therapy, who additionally provide social and financial resources (Hinton et al., 2005; Schnuert et al., 2012; Van de Put & Van der Veer, 2005). Cambodian culture does not typically incorporate space for “getting to the root of the problem”, because there is more interest in finding solutions that are face-saving (Van de Put & Van der Veer, 2005). Face-saving in the Cambodian context describes the preservation of one’s reputation and dignity and is highly valued in this society due to the

importance of the group, which is characteristic of many collectivistic societies (Van de Put & Van der Veer, 2005). It is important to acknowledge the massive impact that the Khmer Rouge had on trust between individuals and communities. These realities make it difficult for individuals to initially believe that counseling could be effective for managing psychological symptoms.

Acknowledging the difficulty Cambodians face in attempting to understand the notion of counseling, Van de Put and Van der Veer (2005) proposed the grassroots movement that consisted of training individuals from the community in psychosocial counseling skills. The authors found that the majority of the individuals felt as if there was too much ambiguity in the therapeutic relationship and expressed interest in learning more concrete skills as well as assisting with basic needs, such as secure safe housing, and financial resources (Van de Put & Van der Veer, 2005). After training on the purpose of therapy and the similarities with speaking to a medium the counselors from the community found that simply being an active listener and having empathy for their clients was enough. There were large improvements in individuals who previously met criteria for PTSD, MDD and generalized anxiety disorder (GAD) simply by feeling listened to, and supported by one of their peers (Van de Put & Van der Veer, 2005). This study demonstrated the power of talk therapy, especially with those who have never truly been listened to, and highlighted the importance of finding culturally specific psychological treatments.

There continues to be a need for improvements and progress within the field of mental health in Cambodia. However, organizations and universities are working towards providing more training for community members to assist the rural population manage their mental health. For the Cambodian population to heal and come to peace with the atrocities they have

experienced, it is essential that they are healthy, both physically and mentally (Agger, 2015; Buchwald et al., 1992; Hinton et al., 2005, 2010, 2016; Mollica et al., 2014; Schunert et al., 2012; Van de Put & Van der Veer, 2005). There continues to be a push from international organizations in Cambodia for individuals to seek psychological treatment that is culturally appropriate and fits with the traditional healing practices engrained in Cambodian society. Through the creation of grassroots movements and organizations the country is slowly eliminating the stigma attached to mental illness. These changes make it more likely that individuals will seek mental health assistance when they recognize that they are suffering. However, to improve mental health there must also be improvements to the physical living conditions of the Cambodian people. Without progress in the financial, political and humanitarian situation it will be difficult to make any substantial improvements in mental health.

Strengths-based research with Cambodians.

Cambodians have endured countless difficulties and extremely stressful situations over the years and yet despite these hardships there is evidence of strength and resiliency in this population. Mendizabal et al. (2012) found that despite the political and economy hardships that are so prominent within this society, individuals have been able to devise creative means of surviving and thriving. Cambodians who were vulnerable to the economic crisis in 2007-2009 stated that they were able to appreciate and find strength within available free health care programs, school feeding as well as the emergency support provided by various NGOs throughout the country (Mendizabal et al., 2012). Although there has been much hardship in the lives of Cambodians, it was found that individuals were able to find the necessary resources in order to endure these trying times.

Nicholson and Kay (1999) conducted a study examining the potential effectiveness of group therapy with Cambodian women who had immigrated to the United States. Many of these women had never discussed any of the trauma or difficulties that they experienced upon arrival to the United States, due to the face-saving aspect of the Cambodian culture. However, it was found that after several weeks of participating in a process group many of the women were able to openly speak about their sadness, depression and anxiety and how they have been able to manage these symptoms since moving to the United States. Additionally, this format gave them an outlet to discuss the acculturation process and many of the challenges associated with moving to completely foreign country with young children. From this group process experience these women were able to form a support group not only within themselves, but also outside of this small group as the strength in one's community became evident (Nicholson & Kay, 1999). These women were able to find a sense of safety, pride in their indigenous roots as well as being able to reconnect to their culture. In a sense these women were able to develop a resilient community amongst themselves and learn from one another's experiences in their home country as well as their new home (Nicholson & Kay, 1999).

There have been other studies discussing the strengths of the Cambodian people and one of those studies was conducted by Chhuon et al. (2010) with Cambodian American college students. The authors were attempting to understand the motivating factors of academic success within these young Cambodian Americans. Through semi-structured interviews it was determined that although academic success is not a highly valued cultural norm, there is a high value placed on saving face within one's family (Chhuon et al., 2010). One of the manners in which these young adults were able to save face within their family was by succeeding academically and being able to succeed at school in an attempt to build a long and successful

career. Another aspect of the sense of family obligation was the importance of being a role model for siblings. It was important for these young adults to be able to set some kind of precedent for their younger siblings in an attempt to help the entire family succeed (Chhuon et al., 2010). When studying the Cambodian and Cambodian-American population it is important to understand some of the strengths that these individuals possess. This is a population that has endured much hardship and by looking at their strengths researchers and clinicians are empowering this population to continue to grow and change in the face of adversity.

Summary of the Literature Review

Over the years there has been a vast amount of research dedicated to trauma and the associated negative outcomes. In recent years there has been an increase in interest in positive psychology and the potentially positive outcomes associated with experiencing a stressful event, such as PTG. Understanding PTG is helpful in understanding the ways in which the majority of human population manage trauma, but will also be beneficial in developing effective clinical interventions for managing maladaptive symptoms after trauma. This is especially relevant when examining the historical, political, and economic background of Cambodia, as this is a country that has suffered much hardship, including various wars, the Cambodian genocide from 1975-1979 and continued political, economic and human rights struggles. To date there are no studies examining the validity of PTG among Cambodians, and there have not been any studies using qualitative methods to elucidate cultural differences in PTG. This research is necessary as it allows for the examination of the potential trajectories for positive growth and will instill hope for recovery in a population that has experienced so much despair. It is equally as important to understand the cultural soundness of the phenomenon of PTG, as this will allow Cambodian and

Cambodian-Americans to be properly treated by Western clinicians in a way that is culturally sensitive.

Research Questions and Hypotheses

Quantitative Research Questions and Hypotheses

Research Question 1: Are the Adult Resiliency Measure (ARM) and the Posttraumatic Growth Inventory (PTGI) internally reliable measures when used with the Cambodian population?

Hypothesis 1a: The ARM will be an internally reliable and valid measure when used among the Cambodian population.

Hypothesis 1b: The PTGI will be an internally reliable and valid measure when used among the Cambodian population.

Research Question 2: Is there a correlation between the number of traumatic life events and one's perception of posttraumatic growth?

Hypothesis 2: There will be a significant positive correlation between the number of traumatic life events and one's ability to perceive posttraumatic growth in their own life.

Research Question 3: Is there a correlation between the number of traumatic life events and resiliency?

Hypothesis 3: There will be a significant positive correlation between the number of traumatic life events and resiliency.

Research Question 4: Is there a correlation between posttraumatic growth and resilience?

Hypothesis 4: There will be a significant positive correlation between posttraumatic growth and resiliency.

Research Question 5: Is resilience a significant predictive factor of posttraumatic growth?

Hypothesis 5: Resilience is a predictive factor of posttraumatic growth.

Qualitative Research Questions

This study utilizes grounded theory methodology for the analysis of interviews regarding Cambodian's experiences of trauma and growth. Grounded theory is a methodology that requires the development of a theory grounded in data that has been systematically gathered and analyzed (Strauss & Corbin, 1994). This particular methodology was chosen due to the flexibility of its nature, making it easily adaptable to various topics and cultural differences (Strauss & Corbin, 1994). Due to the nature of grounded theory, it does not require nor recommend that researchers develop a hypothesis prior to the interview (Strauss & Corbin, 1994). Therefore, no hypotheses will be made for the qualitative portion of this study. The researchers will be examining the patterns that occur within the collected data to create a theory capturing the concept of PTG within the Cambodian population.

Clinical and Theoretical Relevance

This study aims to assist clinicians with treating Cambodians in Cambodia as well as refugees in the United States in a culturally sensitive manner, while helping their clients achieve personal growth after their stressful and traumatic experiences. This study will also provide valuable insight into Cambodians' perspectives of growth, as this is a topic that has not been explored in the psychological research. This knowledge will be foundational for creating culturally sensitive and effective mental health treatments for Cambodian refugees and Cambodian-Americans living in the United States. This study will add to the cross-cultural applicability and limited literature of PTG among Cambodians in Cambodia.

Definitions of Terms

Autogenocide – the mass killing by a government or political regime of a section of its own people, and was coined in the late 1970s due to the Cambodian genocide (Human Rights Watch, 2012; Van de Put & Eisenbruch, 2002).

Bak Sbat – a Cambodian specific trauma response that is characterized by low self-esteem, low self-efficacy, submissive attitude, dependence and fear of being around others (Hinton et al., 2016; Schnuert et al., 2012).

Cambodia – also known as the Kingdom of Cambodia, a primarily Buddhist, southeastern Asian country that is bordered by Thailand, Laos, Vietnam and the Gulf of Thailand (Chan, 2015; Schnuert et al, 2012; Van de Put & Eisenbruch, 2002).

Cambodian Genocide – The first autogenocide including the mass killing of approximately 1.5 to 3 million or 25% of the Cambodian population from 1975-1979 by the Khmer Rouge in an attempt to return to an agrarian socialist society (Chan, 2015; Schnuert et al, 2012; Van de Put & Eisenbruch, 2002; Van de Put & Van der Veer, 2005).

Cambodian People’s Party (CPP) – the current ruling party of Cambodia that took power after the Khmer Rouge was overthrown in 1979, abandoning the socialist ideology that was prominent prior to gaining power (Chan, 2015; Human Rights Watch, 2015).

Cognitive Behavioral Therapy (CBT) – a short-term, goal-oriented psychotherapy treatment that takes a practical approach to problem-solving, with its main goal of changing patterns of thinking or behavior that cause the person psychological distress (Hinton et al., 2015; Pityaratstian et al., 2014).

Collectivistic Culture - communal societies characterized by mutual obligations and expectations, that rely heavily on individuals fulfilling their prescribed social roles and restrict emotional expression to ensure group harmony (Oyserman et al., 2002).

Complementary and Alternative Medicine (CAM) - practices and products that people choose as adjuncts to or as alternative to Western medical approaches (Debas, Laxminarayan, & Straus, 2006).

Eye Movement Desensitization and Reprocessing (EMDR) – a psychotherapy treatment that is designed to alleviate distress, reformulate negative beliefs, and reduce physiological arousal associated with traumatic memories (Acarturk et al., 2016).

Extraordinary Chambers in the Courts of Cambodia (ECCC) – also known as the Khmer Rouge Tribunals, was established to try the senior members of the Khmer Rouge for alleged crimes against human during the Cambodian genocide (Human Rights Watch, 2012, 2015, 2017).

Hardiness – an individual’s tendency towards control, commitment and challenge in response to a traumatic life event (Almedom, 2005; Tedeschi & Calhoun, 2004).

Individualistic Culture - individuals being independent of one another and focusing on personal rights, responsibilities and success with emphasis on self-fulfillment (Oyserman et al., 2002).

Intergenerational Trauma - the transmission of trauma from the first generation of trauma survivors to the offspring and consecutive generations of the survivors (Bar-On et al., 1998).

***Khmaoch Sângkât* or “Sleep Paralysis”** – a Cambodian specific cultural response characterized as a demon or ghost pushing down on an individual’s chest or neck on the verge of sleep or awakening making the individual feel unable to move (Schnuert et al., 2012).

***Khsaoy Beh Daung* or “Weak Heart Syndrome”** – a Cambodian specific cultural response characterized by excessive bodily wind or *kyol goeu*, causing a breakdown of heart functioning when slightly provoked by either a startle, odor, or excessive exercise (Schnuert et al., 2012).

***Khyâl cap* or “Wind Attacks”** – a Cambodian specific trauma response that is characterized by dizziness, heart palpitations, shortness of breath, cold extremities, neck tension and pain due to a wind like substance that rises in the body causing these serious effects similar to panic attacks (Hinton et al., 2016; Schnuert et al., 2012).

Narrative Exposure Therapy (NET) – a psychotherapy treatment for individuals with trauma-spectrum disorders that requires the individual and therapist to construct a chronological narrative of the individual's life story, focusing on the traumatic event, in order to reprocess the trauma, create meaning and integrate the trauma in a healthy manner into the individual's life and worldview (Schaal et al., 2009).

Optimism – the tendency to expect positive outcomes to events (Tedeschi & Calhoun, 2004).

Positive Psychology – the scientific study of strengths that enable individuals and communities to thrive, and is founded on the belief that people desire to lead meaningful and fulfilling lives, cultivate what is best within themselves, and enhance their experiences of love, work, and play (Froh, 2004; Linley & Joseph, 2006; Zoellner & Maercker, 2006).

Posttraumatic Growth (PTG) - positive psychological change experienced as a result of adversity in order to rise to a higher level of functioning, while undergoing significant life-changing psychological shifts in thinking and relating to the world, that contribute to a personal process of change and meaning making (Tedeschi & Calhoun, 2004).

Posttraumatic Stress Disorder (PTSD) – a psychological disorder outlined by the DSM-5 that is a result of an individual experiencing, witnessing or hearing about a traumatic event and is characterized by symptoms of intrusive thoughts and nightmares, avoidance of stimulus that remind the individual of the trauma and hyperarousal (APA, 2013).

Resilience – the process of positively adapting and utilizing effective coping strategies when faced with an adverse event (Allen et al., 2011; Southwick et al., 2014).

Schema - a pattern of thoughts or behaviors that organize categories of information and relationships to more effectively understand the world (Janoff-Bulman, 1989; Tedeschi & Calhoun, 2004).

Sense of Coherence – a characteristic of an individual that can comprehend internal and external stimuli, effectively cope with the demands presented by the stimuli and find meaning in the stimuli (Olsson et al., 2006; Tedeschi & Calhoun, 2004).

Somatization - an individual's psychological distress is manifested in physical symptoms such as headaches, chronic pain, and sleep disturbances (Hinton et al., 2016; Lipowski, 1988; Schnuert et al., 2012).

Traditional Healing - the knowledge, skills and practices based on theories, beliefs and experiences of different cultures, whether explicable or not, used in the maintenance of health as well as the prevention, diagnosis, improvement and treatment of physical and mental illness” (Zhang, 2000,).

Trauma – a serious or unnatural event that individuals and groups can be exposed to, resulting in a psychological response that may alter the individual or group's worldview (APA, 2013; Green, 1990).

CHAPTER II

METHODS

Research Design

This study utilizes archival data that was collected between 2015-2016 by Dr. Skultip Sirikantraporn and was a collaboration between Alliant International University, and Dr. Grant Rich and colleagues at the American University of Phnom Penh (AUPP). The data were collected in Cambodia and IRB approval was obtained from both Alliant International University and AUPP. This is a mixed methods research design, utilizing both quantitative and qualitative research methodology. Participants had the option to participate in the quantitative portion, including a demographic form, PTGI, Adult Resilience Measure (ARM), and the Life Event Checklist (LEC), a qualitative portion where the participants would be interviewed using a structured interview guide, or both the quantitative and qualitative portions.

The use of a mixed methods design allows for the opportunity to capture the true experience of the participants who have endured some form of trauma. This is one of the first studies of its kind, as it examines the types of trauma that these Cambodian participants have faced from both a quantitative and qualitative perspective. This study will illuminate some of the processes that these participants experience after trauma and how they are able to process trauma and create a meaningful life.

Participants

Prior to the data collection, a priori G-power analysis was conducted by Dr. Sirikantraporn and her research team. The effect size (ES) in this study was 0,3, considered to small using Cohen's (1988) criteria. With an alpha = .05 and power = 0.80, the projected sample size needed with this effect size (GPower 3.1) is approximately N = 50. Therefore, it was determined that for the quantitative portion of this study a minimum of 50 and maximum of 110 participants (to count for missing data) would be needed. Based on this information it appeared

that the sample size of this study is acceptable, although lower than expected due to recruitment difficulties. Regarding the qualitative portion, grounded theory recommends 25 participants or until saturation is reached. However, due to the novelty of research in Cambodia and the challenges with recruitment there were only nine participants in the qualitative portion. This study was conducted using 70 male and female participants, over the age of 18. All participants read and spoke Khmer fluently and those participating in the qualitative interview portion had reported at least one traumatic event in their past. Of the 70 participants, there were 9 who participated in the interview portion. There were several participants who did not speak Khmer as a first language if they were raised outside of Cambodia and participants were given the option to complete the interview in English if they preferred. Individuals were excluded from the study if they were younger than 18 years of age, did not read or fluently speak Khmer or English, and had active suicidal ideation in the last three months. For Part Two (Qualitative), the interview, individuals were excluded if they did not report having experienced a traumatic event in the past.

Participants were recruited by the posting of ads at main universities, hospitals, libraries and community centers in Phnom Penh, the capital of Cambodia. The researchers had permission from AUPP to visit classrooms, explain the study and leave flyers with students. Interested students were asked to contact the researcher and screened for eligibility. Attempts were made to recruit Cambodian adult participants of all ages and genders. Research assistants, including Cambodian students at Alliant International University and AUPP, recruited participants from their personal contacts using the snowball sampling approach. Research assistants forwarded an email script to their Cambodian contacts, which specified that interested individuals should contact the professors and research assistants at AUPP by phone and/or email. The interested

individuals were invited to contact the researchers of their own accord to minimize any coercion. Those who were eligible had the option to participate in Part 1 (Quantitative) only, Part 2 (Qualitative) only, or both.

This study was conducted overseas and with a population that has endured much human suffering, therefore it was important to ensure that the participants were protected. There were minimal risks associated with this study, however it is possible that participants may have experienced distress when answering questions related to trauma. The researchers minimized risk and verified that the participants understood the purpose of the study, and that they had the option to skip any questions and/or stop their participation at any time without penalty. The researchers checked in with the participants periodically throughout their participation and observed any signs of distress. If signs of distress were detected, the researchers stopped the proceedings and checked in with the participants to provide support. Every participant was offered mental health resources, including free services in Phnom Penh and was encouraged to seek these services if they felt they required extra support. Additionally, all researchers who have access to the data signed a confidentiality agreement before the study began.

Measures

Since the participants were fluent speakers of Khmer, all of the measures had to be accurately translated. The measures below have all been front and back translated by three Cambodian research assistants, who are bi-lingual in Khmer and English. Front translation requires that the researchers translate the interviews completed in Khmer into English. After the front translation has been completed the interviews were back translated meaning that they were translated from English into Khmer. This particular method of translation ensured that the

meaning was not lost during translation process and that all translations are exact (Magnusson & Marecek, 2015).

Adult Resilience Measure (ARM)

The Adult Resilience Measure (ARM) has a total of 28 items and utilizes a 5-point likert scale (1 = Not at all, 2 = A little, 3 = Somewhat, 4 = Quite a bit, 5 = A lot). This measure was developed out of the Child & Youth Resilience Measure (CYRM) and created by the Resilience Research Centre in Nova Scotia, Canada in 2011 (Liebenberg et al., 2012). The ARM takes into account that resilience is not a static state, but is ever changing and created a measure that can be used in research and clinical settings. The ARM has been found to measure three components of resilience including the individual's characteristics of resilience, relational resources with others and the contextual resources that facilitate a sense of belonging (Liebenberg et al., 2012). The ARM has been found to have adequate psychometric properties, is reliable and a valid self-report measure (Liebenberg et al., 2012).

Demographics Form

The demographic form was developed by Dr. Skulptip Sirikantraporn and Dr. Grant Rich, and consists of eight questions regarding the participant's demographic data. Some of the data that was asked of the participant includes age, gender, income, religious preferences, and occupation. This information is to determine the demographic information of the participants and to ensure that they meet criteria for the study.

Life Event Checklist (LEC)

The Life Event Checklist (LEC) consists of 17 items and utilizes a 5-point likert scale (1 = happened to me, 2 = witnessed it, 3 = learned about it, 4 = not sure, 5 = does not apply). The measure requires the participants to disclose what types of traumatic events they have

experienced and in what capacity they were exposed to the trauma. The LEC is one of the only measures that examine the types of potentially traumatic events that one may experience, and is used widely in the PTSD research realm (Gray, Litz, Hsu, & Lombardo, 2004). This measure was created by the National Center for PTSD and was originally meant to be administered concurrently with the Clinical Administered PTSD Scale (CAPS) to facilitate a diagnosis of PTSD (Gray et al., 2004). Used alone the LEC should not be used to make a diagnosis of PTSD as it only includes criteria A of the DSM-5, and the endorsement of an item does not indicate that the individual was traumatized by the event (Gray et al, 2004). The LEC was found to have a positive correlation with PTSD when used with combat veterans (Gray et al., 2004). It was found to have generally adequate psychometric properties and that individuals who experienced more potentially traumatic events were more likely to meet diagnostic criteria for PTSD (Gray et al., 2004).

Posttraumatic Growth Inventory (PTGI)

The Posttraumatic Growth Inventory (PTGI) consists of 21 items and utilizes a 6 point likert scale (0 = I did not experience this change as a result of my crisis, 1 = a very small degree, 2 = a small degree, 3 = a moderate degree, 4 = a great degree, 5 = I experienced this change to a very great degree as a result of my crisis). The PTGI is a psychological tool assessing the positive outcomes that may occur after one experiences a traumatic event, and is the most commonly used assessment tools for PTG (Zoellner & Maercker, 2006). This measure is based on the five domains of posttraumatic growth including new possibilities, relating to others, personal strength, spiritual change, and appreciation of life (Tedeschi & Calhoun, 1996,2004). The PTGI examines changes in self-perception, interpersonal relationships, and philosophy of life (Tedeschi & Calhoun, 1996). The measure was originally created using a population of

university students in the southeastern United States, mostly Caucasian women, all of whom had experienced a traumatic event within the last two years. Tedeschi and Calhoun (1996) believed that by including participants who had experienced some form of trauma created a representative sample of the general population. The PTGI is shown to have a very high internal consistency (Cronbach's $\alpha = 0.94$) and acceptable test-retest reliability ($r = 0.71$) (Tedeschi & Calhoun, 1996). The PTGI has been shown to possess adequate psychometric properties and is a valid and standardized self-report measure for PTG (Tedeschi & Calhoun, 1996; Zoellner & Maercker, 2006). The PTGI is a representation of the construct of PTG and should not be used as a diagnostic tool (Tedeschi & Calhoun, 1996).

Semi-Structured Interview

The interview guide was developed by Dr. Skultip Sirikantraporn, Dr. Grant Rich and their research assistants. The semi-structured interview was conducted with eligible participants and included 20 open-ended questions regarding the participants' experience with trauma, how they have been able to process the trauma and make meaning of their life after a traumatic event by accounting the concepts of growth, resilience, optimism, hardiness, and sense of coherence. The interviews took approximately one hour to one and a half hours to complete. The questions incorporated the participants' thoughts on how they had changed in the five domains of PTG including the relationship with oneself, relationship with others, spirituality, personal growth, and meaning in life. All interviews were conducted in Khmer and English depending on participant preference and the researchers checked in with the participant periodically if they appeared distressed by the content of the interview and referral information was available if needed or requested by participants. Head researchers were available should the participants become distressed by the content of the interview.

Provision of trustworthiness.

Several strategies will be utilized to increase the trustworthiness of the study findings. The first strategy is peer scrutiny of the research project, where three coders independently code the data. The coders will compare categories and themes that emerge in the data and resolve any discrepancies there may be until there is a final agreement upon the categories and themes that emerged in the data. The second strategy used to ensure trustworthiness is an audit trail and journaling among the researchers. Throughout the qualitative data analysis the researchers will journal frequently regarding their thoughts of the content of the data including any personal biases that may impact the researchers ability to be a neutral coder. This is an attempt to minimize the influence of the researchers' personal biases on the research procedures and findings by increasing their reflexivity and progressive subjectivity (Lincoln & Guba, 1985). Additionally, consultation with the researchers' chair and dissertation group will be used regularly throughout the data analysis process as an attempt to manage the researchers' bias.

Procedures

This study was conducted at AUPP in Cambodia where Dr. Grant Rich served on the faculty. Participants were recruited using snowball sampling including word of mouth and ads placed at main universities, hospitals, libraries and community centers in Phnom Penh. Additionally, the researchers had permission to visit classrooms, explain the study and leave flyers with students. Interested students were asked to contact the researcher and were screened for eligibility. Dr. Rich was on site during the data collection process and also available to answer questions from participants and other stakeholders. Potential participants were asked to contact the research assistants to determine whether they met criteria. If the potential participant expressed interest in participating in the study the research assistant explained the purpose of the study, procedures, and set up an appointment. Those who stated that they were not interested in participating were thanked for their time and informed that they were not eligible for the study at

this time. Once the participant had been determined to meet criteria (being 18+ years old, speaking and reading Khmer fluently, and the absence of active suicidal ideations for the last three months) the participants were given the option to participate in Part 1 (Quantitative) only, Part 2 (Qualitative) only, or both. Should the participant desire to participate in Part 2 (Qualitative), the research assistant would determine whether they have experienced at least one traumatic event in order to eligibility.

The study was conducted in a private room at AUPP and public libraries, depending on the participant and researcher's choice. At the participant's appointment the researcher gave the participant a consent form and thoroughly explain the purpose of the study, confidentiality, risks and benefits, the voluntary nature of the study, and answered any questions the participant had before, during, and after. Once the participant acknowledged that they understood the written consent form, the participant was asked to sign the form and began the study. Due to space, the research assistants and/or Dr. Rich sat at the front of the view while participants completed questionnaires and where available if there were any questions or concerns. Having the research assistants and/or Dr. Rich in the room also prevented non-participants from disturbing the participants by entering the classrooms. Students placed questionnaires in envelopes or containers after completing them to help ensure privacy. Part 1 (Quantitative) took approximately 15-35 minutes and Part 2 (Qualitative) took approximately 1-1.5 hours. Participants were clearly reminded that they could skip any questions that they did not feel comfortable answering or stop the study without any penalty.

After Part 1 (Quantitative) was complete the participant was thanked and offered the findings of the study upon the study completion. They were given the option to leave their contact information, such as an email or mailing address, with the researcher. Otherwise there

was to be no follow-ups for those who participated in Part 1 (Quantitative) only. Participants who were eligible and expressed interest in participating in Part 2 (Qualitative) were given a short break before the interview began and given the option of completing the interview on a different day. They were asked whether they were interested in checking the accuracy of the qualitative data after the data analysis process was completed as part of the “member-checking” of the grounded theory analysis. Once the participant completed Part 1 (Quantitative), Part 2 (Qualitative) or both the researcher debriefed the participant and observed any signs of distress. If there were any signs of distress the researcher was to contact the head researchers for support and assistance. All participants were given a mental health resources list in Phnom Penh for additional support. There was a group debriefing session at the end of the data collection period in which Dr. Rich and the research assistants explained more about the purpose of the study and answered any remaining participant questions about the study or about psychological research more generally, such as questions about research methods, analytic techniques, ethics and the purpose of conducting scientific research. All quantitative data were transported back to San Diego and entered into SPSS version 25 by the research assistant at Alliant International University (AIU) and all interviews were translated and transcribed from Khmer to English by the research assistants at American University of Phnom Penh (AUPP) in Cambodia. After the interviews had been translated and transcribed they were transported by to San Diego and kept secure by Dr. Sirikantraporn.

To begin the data analysis process approval through AIU’s Institutional Review Board (IRB) was obtained. Once IRB approval had been achieved this researcher will be able to access the redacted dataset provided by her dissertation chair, Dr. Sirikantraporn. To ensure that the dataset is secure it will be stored on a password-protected computer and only those researchers

who have permission to access this dataset will have the password. After the dataset was stored securely, qualitative and quantitative analysis, outlined below, began. Upon completion of this doctoral dissertation project the dataset will be kept on the password-protected computer for seven years and will be deleted from this computer.

Data Analysis and Statistical Hypotheses

This mixed method study utilized statistical analysis to answer research questions 1 to 5 and grounded theory analysis to answer the qualitative research question.

Quantitative Data Analysis

The quantitative portion of this study utilized SPSS Statistics 25, a statistical analysis program, to address research questions one through five.

Research Question 1: Are the Adult Resiliency Measure (ARM) and the Posttraumatic Growth Inventory (PTGI) internally reliable measures when used with the Cambodian population?

Hypothesis 1a: The ARM will be an internally reliable and valid measure when used among the Cambodian population.

Hypothesis 1b: The PTGI will be an internally reliable and valid measure when used among the Cambodian population.

Analysis Plan: A Cronbach's α internal reliability test will be used to determine the internal reliability of the ARM and PTGI. Cronbach's α test is a common test of reliability and will be used because it measures the internal consistency within measures (Warner, 2013). It is hypothesized that there will be a strong internal reliability of the ARM and the PTGI in the Cambodian sample as indicated by a significant Cronbach's α at or above 0.7 (Warner, 2013).

Research Question 2: Is there a correlation between the number of traumatic life events and one's perception of posttraumatic growth?

Hypothesis 2: There will be a significant positive correlation between the number of traumatic life events and one's ability to perceive posttraumatic growth in their own life.

Analysis Plan: A Pearson's correlation analysis will be conducted to examine the correlation between the number of traumatic life events and the perception of posttraumatic growth. Pearson's correlation will be used because of its ability to measure the linear relationships between two variables, determining how well the variables are related (Warner, 2013). It is hypothesized that there will be a correlation between the number of traumatic life events and perception of posttraumatic growth. Thus it is predicted that the correlation will be significant (Warner, 2013).

Research Question 3: Is there a correlation between the number of traumatic life events and resiliency?

Hypothesis 3: There will be a significant positive correlation between the number of traumatic life events and resiliency.

Analysis Plan: Another Pearson's correlation analysis will be conducted to analysis the relationship between the number of traumatic life events and resilience. Pearson's correlation is used because it measures the linear relationships between two variables (Warner, 2013). It is hypothesized that there would be a correlation between the number of traumatic life events and resilience. Therefore there will be a significant correlation, indicating a positive correlation between the number of traumatic life events and resilience (Warner, 2013).

Research Question 4: Is there a correlation between the concepts of posttraumatic growth and resilience?

Hypothesis 4: There will be a significant positive correlation between posttraumatic growth and resiliency.

Analysis Plan: A Pearson's correlation analysis to determine if there is a linear relationship between posttraumatic growth and resiliency. It is hypothesized that there will be a significant correlation, indicating that there is a correlation between posttraumatic growth and resilience (Warner, 2013).

Research Question 5: Is resilience a significant predictive factor for posttraumatic growth?

Hypothesis 5: Resilience is a predictive factor of posttraumatic growth.

Analysis Plan: A linear regression analysis will be utilized to determine whether resilience is a possible predicting factor of posttraumatic growth. Linear regression analysis examines the relationship between an independent and a dependent variable (Warner, 2013). It is hypothesized that there will be a significant p-value, indicating that resilience is a predictive factor to posttraumatic growth (Warner, 2013).

Qualitative Data Analysis

The qualitative portion of this study utilized grounded theory due to its flexible nature and ability to be used accurately with a wide variety of research topics (Strauss & Corbin, 1994). Grounded theory was first introduced in 1967 and is a general methodology used for developing theory grounded in the data, which is systematically gathered and analyzed (Strauss & Corbin, 1990, 1994). Researchers are attempting to integrate a set of concepts that "provide a thorough theoretical explanation of social phenomena" (Strauss & Corbin, 1990, p. 5). Grounded theory will explain and describe a social phenomenon, incorporating the potential fluidity of each theory

(Strauss & Corbin, 1990). The analysis process begins as soon as data collection begins, meaning that researchers' are looking for common themes and topics. Once the interviews were completed, three research assistants transcribed and translated all interviews from Khmer to English as needed. Each of the concepts found are considered basic units and grow in prevalence depending on the amount of times they are brought up throughout the interviews. These concepts are then grouped into categories, which are broader themes that occur multiple times throughout the interviews. These categories are eventually used to develop an appropriate theory (Strauss & Corbin, 1990). Categories are used to create hypotheses that are continuously tested during the data collection process.

To create a grounded theory there are three basic methods of coding including open, axial and selective coding, all of which will be utilized with this study (Strauss & Corbin, 1990). Open coding is the first process in which the data is broken down analytically. Any events, actions and interactions that occur during the data collection phase are compared for similarities and differences. Events, actions and interactions that are similar are grouped to form categories (Strauss & Corbin, 1990). Once open coding has been completed for all the interviews, axial coding can begin. This type of coding requires that the categories created in the open coding phase be further refined. Researchers are looking to relate categories and subcategories to one another and test their relationship against the data that has been collected. This is where hypothetical relationships can be proposed, however they should be considered provisional until they are verified repeatedly against the data (Strauss & Corbin, 1990). The final stage of coding is called selective coding. This is the phase in which all of the formed categories are unified to create a core category, also known as the central phenomenon of the study. The selective coding

phase is a time where the categories that require further explanation are completed with descriptive details (Strauss & Corbin, 1990).

One aspect of grounded theory that is important to highlight is the generalizability of these theories. It may be difficult to determine a core category, however this can be achieved through a process of abstraction, which takes place throughout the course of the research study. When the core category is more abstract it becomes more applicable to a variety of situations, making the theory more desirable. Upon completion of these three stages of coding researchers and clinicians will have a better understanding of the process of PTG within this sample of Cambodians as well as the general Cambodian population.

Anticipated Limitations

One of the anticipated limitations of this study is that archival data is being utilized. Due to the archival nature of this study it is necessary to recognize that there was not an opportunity to recruit more participants from diverse backgrounds. Therefore, the diversity of Cambodian participants is limited and could impact the data acquired. In future studies it would be important to recruit participants from diverse backgrounds including socioeconomic status, educational background, and individuals living in rural areas for both the quantitative and qualitative portion. Another anticipated limitation of this study is that the translated versions of the ARM and PTGI have not been validated to determine the psychometric properties. There are several factors as to why this was not done prior to conducting this experiment including lack of resources, time and the necessity of understanding to some degree Cambodian's perception of resilience and posttraumatic growth. However, it is important and necessary to conduct the psychometric research to validate the ARM and PTGI in Khmer to ensure the measures validity and reliability.

Through the validation of these measures it would allow for more research within the Cambodian population both in Cambodian and abroad.

CHAPTER III

RESULTS

This chapter will discuss the quantitative and qualitative results utilizing the archival data that was collected between 2015-2016 by Dr. Skultip Sirikantraporn in collaboration between Alliant International University, and Dr. Grant Rich and colleagues at the American University of Phnom Penh (AUPP). The quantitative and qualitative results will be examining the experience of posttraumatic growth in Cambodian individuals. Below are the results for the quantitative and qualitative analyses conducted by this writer.

Quantitative Data Analysis

A total of 70 individuals completed the quantitative measures. However, upon further revision, three individuals did not meet the inclusion criteria due to being under the age of 18. Therefore they were excluded from the analysis, making a new total of 67 participants who completed all measures and fulfilled all inclusion criterion.

Demographic analysis.

A total of 67 participants completed the measures and met all inclusion criterion. The demographics of participants are listed in Table 1. The average age for participants was 21.06 (SD = 3.87). Participants ranged between the ages of 18 and 40 years old with the median age being 18 years old. Fifty-five percent of participants were male (n = 37) and 43 percent of participants were female (n = 29). Ninety-one percent of the participants identified as single (n = 61), with 4 percent identifying as married (n = 3) and an additional 4 percent declining to identify their marital status (n = 3). Seventy-one percent of participants identified with being in

the moderate range for income (n = 48). Whereas, 16 percent of participants identified as being in the low-income bracket (n = 11) and 9 percent identified as being in the high-income bracket (n = 6). Sixty-nine percent of participants identified as having completed high school (n = 46) and 28 percent of participants reported obtaining higher education beyond high school (n = 19). Of the 67 participants, seventy-six percent reported being students (n = 51), 18 percent reported being employed for wages (n = 12), 1.5 percent reported being a homemaker (n = 1), 1.5 percent reported being out of work for more than one year (n = 1), 1.5 percent reported being out of work for less than one year (n = 1) and 1.5 percent declined to answer (n = 1). The breakdown of religion is as follows: 94 percent Buddhist (n = 63), 2.9 percent identified as other (n = 2), 1.5 percent Christian (n = 1) and 1.5 declined to answer (n = 1).

Table 1

Demographics

Characteristics	Total (n)
Age	
18-20	38
21-25	22
26-30	4
31-35	1
36-40	1
Sex	
Female	29
Male	37
Other	1
Marital Status	
Single	61
Married	3
Decline to answer	3
Income	
High	6
Moderate	48
Low	11
Decline to answer	2

Education

Elementary School	2
Completed high school	46
Obtained higher education	19

Employment

Employed for wages	12
Out of work for more than 1 year	1
Out of work for less than 1 year	1
Homemaker	1
Student	51
Decline to answer	1

Religion

Buddhism	63
Christianity	1
Other	2
Decline to answer	1

Preliminary analysis.

Prior to conducting the analysis for the five stated research questions, a series of preliminary analyses were conducted to verify that the analyses for the research questions would be plausible. A Pearson's correlation was conducted to determine if there were any significant bivariate associations between age and the participants score on the PTGI. There was strong correlation between age and PTGI scores [$r = 0.84$, $n = 67$, $p = 0.025$]. An additional Pearson's correlation was conducted between age and total ARM scores to determine if there were any significant associations. There was a strong correlation between age and total ARM scores [$r = 0.174$, $n = 67$, $p = -0.168$]. Overall, there were strong correlations between age and scores on the PTGI and ARM. Indicating that an increase in age will impact an individual's scores on the PTGI or ARM measures.

An independent t-test was conducted to compare sex and scores on the PTGI and ARM.

There was not a significant difference in the scores for PTGI ($M = 87.85$, $SD = 20.93$) and ARM

scores ($M = 101.96$, $SD = 19.17$); $t(64) = -0.03$, $p = 0.97$. Based on these results it can be said that there is no significant difference in scores on the PTGI and ARM based on the participant's sex.

Finally, a chi-square was conducted to determine whether income was associated with scores on the PTGI and ARM. There were no associations between income and scores on the PTGI and ARM, $\chi^2(114) = 123.14$, $p = 0.26$. Therefore, a participant's level of income will not impact their scores on the PTGI or ARM. Based on these preliminary analyses, it is determined that scores on the PTGI and ARM are not impacted by a participant's age, sex or level of income. These results illustrate that preexisting characteristics such as age, sex and income will not hinder one's ability to experience PTG or resiliency.

Hypothesis analysis.

The first research question being analyzed is the following: Are the Adult Resiliency Measure (ARM) and the Posttraumatic Growth Inventory (PTGI) internally reliable measures when used within the Cambodian population? It is hypothesized that the ARM will be an internally reliable and valid measure when used among the Cambodian population. It is additionally hypothesized that the PTGI will be an internally reliable and valid measure when used among the Cambodian population. A Cronbach's α internal reliability test was used to determine the internal reliability of the ARM and PTGI. Cronbach's α test is a common test of reliability and will be used because it measures the internal consistency within measures (Warner, 2013). The ARM has three subscales including the individual subscale consisting of 11 items ($\alpha = 0.94$), the relational subscale consisting of 7 items ($\alpha = 0.92$) and the contextual subscale with 10 items ($\alpha = 0.94$). The ARM was found to have a high level of internal reliability ($\alpha = 0.89$). The PTGI has five subscales including relating to others consisting of 7 items ($\alpha = 0.91$), new possibilities consisting of 5 items ($\alpha = 0.92$), personal strength consisting of 4 items

($\alpha = 0.86$), spiritual change consisting of 1 item ($\alpha = 0.67$), and appreciation of life consisting of 3 items ($\alpha = 0.86$). The PTGI was also found to have a high level of internal reliability ($\alpha = 0.89$). Therefore, hypothesis 1 was supported.

The second research question is as follows: Is there a correlation between the number of traumatic life events and one's perception of posttraumatic growth? It is hypothesized that there will be a significant positive correlation between the number of traumatic life events and one's perception of posttraumatic growth in their own life. A Pearson's correlation was conducted to determine if there were any significant associations between the number of traumatic life events and one's perception of posttraumatic growth. There was no correlation between the number of traumatic life events and perception of PTGI [$r = 0.04$, $n = 67$, $p = .76$]. Indicating that the number of traumatic life events is not associated one's perception of posttraumatic growth. Therefore, hypothesis 2 was not supported.

The third research question being analyzed is the following: Is there a correlation between the number of traumatic life events and resiliency? It is hypothesized that there will be a significant positive correlation between the number of traumatic life events and resiliency. A Pearson's correlation analysis was conducted to analysis the relationship between the number of traumatic life events and resilience. It was found that there was no statistically significant correlation between the number of traumatic life events and resilience [$r = .03$, $n = 67$, $p = 0.79$]. Therefore, the number of traumatic life events is not associated with one's perception of resiliency. Hypothesis 3 was not supported.

The fourth research question is as follows: Is there a correlation between the concepts of posttraumatic growth and resilience? It is hypothesized that there will be a significant positive

correlation between posttraumatic growth and resiliency. A Pearson's correlation analysis was conducted to determine if there was a linear relationship between posttraumatic growth and resiliency. There was a statistically significant correlation between posttraumatic growth and resiliency [$r = 0.58$, $n = 67$, $p = 0.00$]. Indicating that there is an association between posttraumatic growth and resiliency. Hypothesis 4 was supported.

The fifth and final research question analyzed is the following: Is resilience a significant predictive factor for posttraumatic growth? It is hypothesized that resilience is a predictive factor of posttraumatic growth. A linear regression analysis was utilized to determine whether resilience is a possible predicting factor of posttraumatic growth. Linear regression analyses examine the relationship between an independent and a dependent variable (Warner, 2013). A simple linear regression was calculated to predict posttraumatic growth based on an individual's experience of resiliency. A significant regression equation was found ($F(1,65) = 32.75$, $p < 0.00$), with an R^2 of 0.33. Resiliency is a predictor of a participant's perception of posttraumatic growth. Hypothesis 5 was, therefore, supported. However, it is important to note that this linear regression does not determine the casual relationship between the concepts of posttraumatic growth and resilience. These statistical analyses have determined that resiliency does statistically predict a participant's perception of posttraumatic growth, but does not identify the cause of one's ability to experience posttraumatic growth.

Qualitative Data Analysis

The qualitative data consisted of nine interviews with participants who were 18 years or older, spoke English or Khmer fluently and endorsed experiencing at least one traumatic event. The participants were asked open-ended questions based on a semi-structured interview guide

that had been established. Each interview lasted approximately 40 minutes. This writer and two research assistants at AUPP have coded this data independently. Based on the codes created by this writer and the research assistants there is good inter-rater reliability and these results can be considered reliable and valid. In this section, the following qualitative findings will be reported: demographics of interviewees, the process of identifying core categories, and identification of core categories as well as an overview of all the core categories. Participants' quotes, both short and long, as well as the participant's known gender will be used to illustrate the emerging themes in each category.

Demographics of interviewees.

Of the individuals interviewed there were four males and five females who participated. All interviewees endorsed at least one traumatic event and were able to answer all of the questions asked. Of the nine interviewees only one interview was conducted in Khmer with the other eight being conducted in English.

Core categories.

Process of identifying core categories.

Prior to beginning the qualitative portion of the data analysis the quantitative data analysis had been completed. Given the quantitative results, it is believed that this group of participants indeed experienced posttraumatic growth to some extent. However, it is important to note that this is a fairly specialized group of individuals, as the majority are young Cambodian students. This group of participants is homogenous in age there is the possibility that this may impact the understanding of posttraumatic growth and how it is experienced. For the qualitative analysis grounded theory was used with the intention of creating a theory based on the

information that emerged from nine semi-structured interviews. Based on this theory there are three phases of analysis including open coding, axial coding and selective coding. The three types of coding allow for the researcher to identify codes that eventually create themes, which illustrate a larger category of information. These three types of coding will allow the researcher to identify a coherent theory regarding the experience of posttraumatic growth in Cambodia.

To begin the analysis process, open coding was conducted using inVivo12, a qualitative research analysis software, designed for more ease when completing open coding as it allows the researcher to easily create tentative labels for pieces of data and group them in tentative codes. Throughout the entire coding process the researcher wrote memos of her thoughts and impressions, which would guide the overall creation of the theory. During the open coding phase several words and phrases were repeated throughout the majority of the interviews. These repeated phrases are as follows: “have good family and friends”, “it’s just a phase”, “more open to experiences”, “stronger”, “my goals changed”, and “good experience.” These were the most common words and phrases throughout the interviews and stood out to this writer during the open coding phase. Many of the phrases highlighted the importance of social support, personal growth and strength, which will be further discussed throughout this chapter.

After the open coding portion was completed, the next step was axial coding. The purpose of axial coding is to identify relationships between the open codes and create themes that make up the larger categories. For the axial phase, the open codes created in inVivo12 were transferred to a word document to assist the researcher in identifying relationships between open codes. Finding relationships and identifying similarities between each piece of information gathered during the open coding phase determined themes. Once relationships were identified, they were grouped together and given a tentative label to assist the researcher in creating

categories. Along with the aforementioned open codes a variety of additional open codes were identified included: “more brave”, “parents”, “friends”, “appreciate things more”, and “think about my family.” These codes were then grouped into themes based on the similarities between them and eventually grouped into core categories. Once core categories were created, the final step of theoretical coding was completed. In this final stage, a theory is generated based on all of the themes and categories that were identified to create an overarching theory that encompasses the experience of the interviewees.

Identification of core categories.

Due to the nature of the interviews being archival, this writer was only able to analysis nine interviews. Although nine interviews is slightly below the proposed number of interviews from a grounded theory perspective (between 10-20), theoretical saturation had been reached at nine interviews. Throughout the open and axial coding processes there were four core categories that emerged including: personal growth, relational growth, religion/spirituality and avenues of growth. These categories appear to align with the original posttraumatic growth theory developed by Tedeschi & Calhoun (2004). Each category will be further explored and outlined below. See figure one for a mind map of the core categories and themes.

Personal growth.

During the analysis of the interviews it was apparent that personal growth after a traumatic event was essential for each of the interviewees. The themes that contributed to this core category include: (a) acceptance, (b) self-efficacy, and (c) self-actualization. Overall, it appeared that personal growth was a major area of growth for the interviewees and illustrates the ways in which the interviewees grew independently after their experience of trauma.

Acceptance.

Many interviewees expressed the necessity of acceptance of the traumatic life event and how this led them to view themselves in a different light. After having experienced a traumatic event many of the interviewees indicated that they had made peace with the event and were able to move on with their life. This is evident by this quote (P10, Male) “You know, it’s been a long time, so I kind of made peace with it.” Additionally, there were thoughts on the notion of how acceptance could lead an individual to discuss and recall the trauma without becoming overwhelmed. Participant 3 (female) stated, “To actually accept that it happened. *Pauses.* And then after that acceptance would be to be able to talk about it” and “to just be able to recall without being held back by it or talk about it.” Both statements demonstrate the notion that once an individual has accepted their past experiences they will be able to move forward in life.

Another aspect that was discussed was the idea that individuals were finally able to find truth and understanding in their experiences, which helped facilitate the process of acceptance. Participant 5 (Female) stated, “I feel good that I finally found some truth that I didn’t realize before.” Additionally, it was stated, “I think it was a good experience, without those experiences I wouldn’t have come this far (P6, Female).” Throughout the interviews, acceptance was a theme that was continually discussed and for many interviewees this was a part of their process of growth after trauma.

Self-efficacy.

Another theme that emerged was the notion of self-efficacy, meaning that the interviewees had experienced an increase in self-confidence and felt like they could succeed in various tasks regardless of how difficult they might have perceived them to be. This was evident by Participant

1 (Female) who stated, “It give me strength, it makes me feel that... I can do everything as long as I want to do it.” For many of the participants the event they experienced provided them with the ability to learn more about themselves including their perception of their own strengths and weaknesses. Participant 6 (Female) stated, “I’m not perfect either and... I think I know my strengths and weaknesses. Sometimes I just know I’m not the person I thought I was”, which exemplifies the ways in which expectations of oneself had been altered by experiences of trauma.

For many individuals knowing what they perceived to be strengths and weaknesses was helpful in truly understanding who they are as individuals, including what they want in life. For example “I learn how to take care of myself, and how to be responsible for everything I do” (P2, Male) and “I just realize like how important other things are in life such as school... Also I want to be successful so that not to prove to someone, but to prove to myself that I can also achieve the thing I want” (P4, Male). Many of the interviewees had come to a realization that through the traumatic event they were able to learn more about themselves and what they believe they deserve in life.

Self-Actualization.

The final theme included in the category of Personal Growth is self-actualization, the belief that an individual has the capacity to thrive and learn from their trauma to become a better person. Participant 8 (Female) stated:

“I want, in the future, I want to become rich and have a good family. I hope that my family will be healthy and wealthy. So it’s not only about having the family or enough money, but it’s about the self-actualization, fulfillment.”

This quote captures the idea that participants have come to an understanding that they not only have the capacity to thrive, but to become a better person that is not dependent on their family. For example, participant 3 (Female) said “I guess it impacted it a lot, cause before everything just focus on everyone else and then now my goals and everything they focus more on myself.” Participant 6 (Female) stated, “It gives me an experience of how I can recover again if I meet another circumstances like that, and also it makes me think more about life; it makes me know more about myself.” The experience of trauma is difficult to navigate, however for these interviewees it has created an opportunity of self-exploration and understanding. It provided an opportunity to truly learn about oneself including their capabilities regardless of what others have say, which appears to be an invaluable experience for many of the interviewees.

Relational growth.

Another category that emerged from the interviews was the notion of relational growth. Many of the interviewees experienced a change in the way they interacted with others in their life. The themes included in this category are the following: (a) increased appreciation for social support, and (b) developing empathy. Overall, this category illustrates the importance of social support as well as a shift in relating to others after a traumatic life event.

Increased appreciation for social support.

One of the most prominent themes throughout the transcripts was an increased appreciation for social support. Every interviewee discussed the importance of social support to some extent in his or her interview. Although interviewees differed on the type of support they appreciated most, this was a common link between all participants. Participant 6 (Female) highlights the importance of having social support after a traumatic event through this quote:

“Sometimes I got tired in life, or because I experienced something bad, what I usually do is sit down, relax, have some sleep and then think back and try to find some factor that encourages me, especially my family; I just recover back from everything, and also people around me also make me feel better.”

One of the primary forms of social support discussed in the interviews as being the most appreciated was family. Participant 1 (Female) stated, “I always think about my parents, like if I’m not gonna get out of it or something like that. Or if I’m going to hurt myself then I’m just going to put every people that love me in pain.” Family was thought of as positive social support when in a time of need as illustrated by “well, I was a bit sad, so I didn’t talk as much at school, but at home, you know, my family knew what was going on, so we talked a lot about it” (P10, Male). There was a general sentiment that family was able to assist participants in returning to an improved level of functioning, while simultaneously improving their relationship with their family. This is evidenced by Participant 8 (Female) stating “we became united and we had each other, and [xx] and we became sympathetic. Our relationship moved forward and better than before.” A greater appreciation for family as discussed time and time again.

However, some participants discussed the importance of friends and that this social support was more helpful during times of distress. Participant 1 (Female) illustrates the importance of friendship, “Without their [friends] advice I can’t, I can’t do it.” Additionally, participant 7 (Male) stated, “I guess I felt hopeless, but the encouragement by my friends helped me to raise up because just a bad day, it’s not a bad life.” Some individuals stated that they preferred the support of their friends as they did not fully trust their family to keep a non-judgmental stance when it came to trauma, which is evidenced by Participant 7 (Male) “I prefer to have my friends around me to help me recover.” Participant 1 (Female) stated, “Mostly friends because in

Cambodia as we all know we cant really talk it out with our family. There's always problems, that they can't, their just not open minded about it." Participant 4 (Male) stated, "it was mostly my friend, not really my family since I could not tell my family about my...problems."

Although the interviews indicated that there are different social systems that interviewees look to for support, all interviewees mentioned the importance of social support, as this was a major factor in their ability to recover and grow as an individual.

Developing empathy.

Another interesting and unexpected theme that emerged throughout the interviews was the development of empathy. Many interviewees discussed how prior to the traumatic event they struggled to see other's perspectives and did not understand where they were coming from. This may have led to challenges such as connecting with others and empathizing with other's life struggles. However, after having experienced a trauma many of the interviewees developed a deeper sense of empathy and understanding for other people's struggles. For example, Participant 3 (Female) stated, "I've become a lot more empathetic about everything" and Participant 4 (Male) stated:

"I became *pauses* not more friendly, more like I want to help people that are in need. It became something that I enjoy doing and really want to do in my spare time. Even though I have not really done it a lot, but I've done a few already and I think its because when a person has been hurt or felt something that they did not wish to feel it again, they don't want other people to feel that."

These quotes exemplify the notion that the interviewees were able to develop a deeper sense of empathy and desire to help others. For some of the interviewees this could be due to notion

that they are trying to alleviate other's pain, so others did not have to experience what they went through. However, for other participants it was more so developing an awareness of others. Participant 5 (Female) stated "I became more thoughtful for people around me", indicating that a greater sense of empathy for others had developed after experiencing a trauma. This is an important theme as many interviewees reported that because of their newfound empathy they were better able to connect with others and form meaningful relationships.

Religion/spirituality.

An additional core category that emerged after qualitative analysis was that of religion/spirituality. The interviewees explained how they relate to religion and spirituality before and after they experienced a traumatic event and this appeared to be an essential part of each of interviewees journey to posttraumatic growth. The themes that encompass this core category as the following: (a) karma, and (b) shifting ideas of religion/spirituality. Overall religion and spirituality appeared to be impacted by the interviewee's traumatic event and had meaning as to how each individual understood themselves and their life.

Karma.

Karma can be defined as "the balance of good and negative deeds from this or a previous life or 'fate'" (Schnuert et al., 2012). Although there were mixed views on the role of religion and spirituality after trauma, many interviewees discussed the role that karma plays in their daily life, as noted by Participant 8 (Female) who stated, "I think after the fire caught the other shops and we recovered from it, my mother and me, we prayed to [xx] and I mean, we tried to do something good. We believe in it." It is of interest to note that not all participants labeled the experience of karma with this terminology, but explained the belief. Participant 3 (Female)

demonstrated this notion and stated, “No, I try my best to do good but I mean like it doesn’t necessarily mean you get any good... But I keep on doing it anyway, maybe there’s a part of me that believes it.” The majority of the participants believed karma played a role in the reason they had changed for the better after their trauma. For example, Participant 1 (Female) stated, “its just like the meaning of the word karma, what comes around goes around. And sometimes I have a feeling is because I hurt someone and that’s the reason why that person hurts me back.” Additionally, some interviewees discussed the idea that they do not believe karma played a role in their own situation, but did believe in the concept of karma as illustrated by this quote “I don’t really believe in karma, no I mean I believe in karma, but when I’m in my hard times, I don’t really think about karma or anything because I be thinking about way to solve it” (P5, Female). Some participants even stated that they did not in fact believe in religion, but found that karma was more meaningful for them:

“Uh, honestly, I don’t really believe in religion, but I think karma do exist because as you can see if you do—if you have done bad things to your parents, you will have your children do the bad things to you...in the future” (P7, Male).

It is generally believed that if one is able to behave in positive ways towards others, there is a greater likelihood that one will receive positivity and good fortune in return.

Shifting ideas of religion/spirituality.

Additionally, there seemed to be somewhat of a shift in the ideas of religion and spirituality in interviewee’s lives. There were mixed perceptions on this topic as well, it was mentioned that the majority of the interviewees felt that they had either maintained their religion or had become more spiritual. This is of interest as much of the spirituality was in relationship to the belief of

karma and luck, a very common belief system in Cambodia. These shifts in religion and spirituality are illustrated by this quote:

“I was never really that into religion or anything like that... but I guess I became a believer of faith in way. *Giggles*. Just that you know sometimes things do happen for a reason and maybe in the long run things will play out you know the way they are meant to play out so. You don't always get what you want, but that's for a reason” (P3, Female).

Whereas other participants believed that their sense of religion did change, but not in a positive way as participant 6 (Female) stated, “It does change. At first, I believed if you just do good things, good things will just come to you, but reality is not like that.” It is clear that the notion of religion and spirituality for many interviewees changed since experiencing a traumatic life event.

Avenues of growth.

The final core category that emerged from the analysis of the nine interviews was that of avenues of growth. Although each interviewee experienced growth in a different manner there were several common themes. These themes including: (a) fear to courage, (b) openness, and (C) shifting priorities. These themes make up the core category that highlights the importance of understanding that there are various ways in which an individual can achieve growth and success.

Fear to courage.

As one means of achieving growth and success, many interviewees discussed the experience of what it was like to move from experiencing fear to having an increased sense of courage.

Several interviewees stated that although they had been felt fear during the traumatic event, they learned how to be courageous in the face of adversity and were able to move forward in life and become stronger individuals. Participant 1 (Female) stated “I actually got more confident after the event, the fearful event”, which was also echoed by Participant 4 (Male) statement of “ I am able to pick myself up and start over, like not dwelling on some uh bad experience in the past that hinder me from achieving other thing that I want in life.” The notion of being in fear was also brought to light throughout the interviews and it was found that this was a pivotal and necessary experience for interviewees to experience in order to achieve growth. This is evident by Participant 7 (Male) “I learned, like, people in the fear factor, people are like, frightened. So, I learned that we should encourage each other to stand up.” Additionally, Participant 8 (Female) stated, “I think it [traumatic event] was very, very meaningful. I think that even just, if we stay under fearful and not courageous, it is not forever that we feel a lot about it, so we have to have courage and stand up.” These statements demonstrate that the move from fear to courage is difficult and necessary for the interviewees in their path to growth after trauma.

Openness.

The change in one’s mindset after experiencing a trauma was discussed by many of the interviewees as evidenced by statements encompassing the idea of feeling more open to new and different experiences compared to before. Participant 1 (Female) stated, “I see things differently, before...I used to be really closed minded about things but after that I actually see things more wide and clear.” Along with being more open to situations interviewees were able to cope with new and different situations more effectively as evidenced by this statement “I am open to any kind of situation now, yeah, I can cope with all kinds” (P2, Male). However, there were some interviewees who stated that they were more open to experiences, but cautious at times due to the

trauma they experienced. This concept of being cautious, but open is demonstrated by participant 3 (Female) who stated “more cautious to new experiences with other people, but more open to new experiences in general.” Additionally, Participant 4 (gender) stated:

“There are certain things that I’m more willing to be open other such as excepting other people flaws, other people negative aspects that I don’t appreciate. I feel like open to be more accepting. And I’m more willing to try to accept other people flaw, but I also at the same time am more close about my own feelings.”

Being open as well as cautious and open simultaneously indicate that the participants’ mindsets shifted after the trauma and they are now more effectively able to tolerate new and different experiences.

Shifting priorities.

Another area of growth includes the shifting of priorities; many interviewees discussed how prior to their traumatic events they had been hyper focused on achieving personal success. However, after the traumatic event many noticed a shift in life priorities. “I change my future, my ambitions, my goals, after I encountered that situation” (P2, Male) truly encompasses the notion that everything changed in one’s life after experiencing a trauma. In some instances, family and friends became a greater priority, whereas for others there had been a shift in becoming successful with the intent of bettering themselves and their family.

To illustrate the notion of shifting priorities towards focusing on oneself is this quote:

“I actually realized that I’m...like no matter what I’ll always be on my own. Like I’m the most important person who can makes me a better person and also the one who can keep

myself going so... I have a feeling that everything is possible if I want it to happen.” (P1, Female)

As well as this quote “I guess it [traumatic event] impacted it a lot, cause before everything just focus on everyone else and then now my goals and everything they focus more on myself” (P3, Female). It is important to note that for these interviewees life priorities had shifted from their family and social support system to working more so on themselves, as evidenced by “the fun things in my life always change, and also the important people in life change, my parents get older, I get older, so I have to do some work, I mean... I have to work to live for myself” (P2, Male). Although, this may seem counterintuitive due to the collectivistic nature of Cambodian society, it appears that shift was an essential part of their growth after trauma.

Although some interviewees stated that they had shifted away from prioritizing their family and focused more on themselves, others had the opposite experience. This shift towards focusing on family is evident in this quote:

“It does change. At first, as I said, I wanted to make an impact and I want to play a very important and big role in society, but right now, I mean, it doesn’t matter to me now in society- it’s my family.” (P6, Female)

It is apparent that for some this shift meant spending more time caring for and with family members. Participant 5 (Female) stated, “I, first of all, I didn’t realize that he was that sick. I just don’t know what, and then, after his recovery, I realized how much he meant to me and I really appreciate it. Every single day I tell him I love him and take care of him more and we’ve become much closer (*laughs*).” Additionally, Participant 6 (Female) stated “before, all it

means to me to be successful in life was to be successful academically and with career, but right now it comes both- family and career.” Regardless of how one experiences life priorities, all interviewees experienced a shift in priorities and realized that these shifts were essential to their growth.

Overview of Core Categories.

Based on the interviews conducted and analyzed there are four core categories that emerged from the qualitative data. The categories that capture the experience of posttraumatic growth within this population are as follows: (a) personal growth, (b) relational growth, (c) religion/spirituality and (d) avenues of growth. Qualitative analysis determined that for the interviewees personal growth was truly encompassed by three themes including a greater of sense of acceptance, increase in self-efficacy and achieving self-actualization. These themes emphasize the notion that personal growth is a multifaceted and complex experience for these Cambodian interviewees. Relational growth, the second major category, was experienced by the interviewees and is made up of an increased appreciation for social support along with the development of empathy. The third major category that emerged was religion/spirituality, which included the notion of karma as well as shifting ideas of religion and spirituality. Within this population it was evident that religion and spirituality had shifted and changed for the interviewees to better understand, accept and grow from the experience of trauma. The fourth and final category that was identified for this population is called avenues of growth as it demonstrates the three additional ways in which the interviewees were able to grow. The themes that encompass the avenues of growth include moving from fear to courage, an increased sense of openness and shifting priorities. Based on the analysis of this qualitative data it is apparent that this group of Cambodian individuals experienced growth after a traumatic event in four

significant and unique ways. This grounded theory analysis illustrates that these interviewees experience posttraumatic growth in a manner that is in line with cultural norms and values of the Cambodian population at large.

The data reveal that these Cambodian individuals developed a sense of personal strength and maturity that is evident in their own personal growth, enriched connections with others and their sense of spirituality as well as the ability to continue growing and finding meaning in life after hardships. Although these concepts differ somewhat from the original theory and domains of posttraumatic growth, there are striking similarities including the notion of new possibilities, relating to others, changed sense of priorities and spiritual change (Tedeschi & Calhoun, 2004). These categories illustrate that the notion of posttraumatic growth within this particular Cambodian population is similar to the experience of posttraumatic growth in westernized and individualistic cultures. Therefore demonstrating that the concept and theories related to posttraumatic growth can be applied to this particular group of Cambodian individuals. It is possible that this theory may be accurate for the Cambodian population as a whole, however further studies are needed with a more diverse participants to confirm this theories generalizability.

CHAPTER IV

DISCUSSION

The purpose of this study was to generate a theoretical model that explains the way PTG is experienced within the Cambodian population. Specifically, this study aimed to examine the experience of PTG and resiliency within the Cambodian population as well as create a theory regarding the domains of PTG that are relevant to Cambodian individuals. A mixed-methods approach was utilized to examine the Cambodian perception of the PTG phenomenon from the ground up. This chapter provides an overview of the experience of PTG within the Cambodian population and will examine this phenomenon through quantitative and qualitative data analysis. This chapter will also discuss the clinical and theoretical implications of the study, limitations and suggestions for future research.

Quantitative Results

To fully examine the results of the study it is important to understand the participants, as this will provide context for both the quantitative and qualitative results. The majority of the participants in the study, specifically in the quantitative portion of the study, were young, single males who were students, had moderate incomes and identified as Buddhist. This is a fairly specific population and may have differing views of the world compared to their older counterparts (Schnuert et al., 2012). Although the Khmer Rouge did not directly impact this specific population of Cambodians, they have experienced the effects of intergenerational trauma and continuous political difficulty throughout their lifetime (Amnesty International, 2016; Amon et al., 2013; Bar-On et al., 1998; Field, Muong, & Sochanvimean, 2013; Human Rights Watch, 2015, 2017). Additionally, it is important to note that this population is privileged in some ways

including their gender, financial and educational status. Therefore, this sample may not be the most representative of the Cambodian population. However, studying their experiences of trauma, and PTG is essential, especially due to the fact that the Cambodian population is typically not studied in research.

To begin the quantitative analysis the ARM and PTGI had to be translated accurately from English into Khmer. The measures were front and back translated to ensure accuracy of translation, but there was some debate as to whether this would be sufficient to ensure the true meaning of the measures. Therefore, it was necessary to conduct reliability analyses, which determined that both the ARM and PTGI were in fact internally reliable and valid measures. Although, it is not ideal to not have the psychometric properties completed prior to this study, the results indicated that both measures accurately measured the concepts of resiliency and PTG.

After it was determined that the ARM and PTGI were internally reliable measures in Khmer and English ($\alpha = 0.89$) it was possible to move on with the rest of the analyses. The analysis for research questions two and three determined that the number of traumatic events did not impact one's ability to experience resiliency or PTG. The original hypotheses stated that there would be a significant positive correlation between the number of events and one's ability to experience resiliency and PTG. However, the results indicate that the number of traumatic events does not determine one's ability to experience resilience or PTG. This is a positive result as it indicates that an individual is capable of experiencing resiliency and PTG after one or many traumatic events. Therefore, resilience and PTG should not be seen as a phenomenon that can only occur after a specific number of traumatic events.

As the literature demonstrated there are differences in the experience of resiliency and PTG. Resilience was defined as the process of positively adapting and utilizing effective coping strategies when faced with an adverse event (Allen et al., 2011; Southwick et al., 2014). Whereas, PTG was defined as positive psychological change experienced as a result of adversity in order to rise to a higher level of functioning, while undergoing significant life-changing psychological shifts in thinking and relating to the world, that contribute to a personal process of change and meaning making (Tedeschi & Calhoun, 2004). Research question four was designed to examine if resiliency and PTG were correlated and it was hypothesized that there would be a significant positive correlation between these two concepts. The quantitative analysis determined that in fact resiliency and PTG have a strong positive relationship. This relationship is important to acknowledge, as it indicates that although both phenomena are different they are related and should not be thought of as exclusive experiences from one another.

Based on the above-mentioned results, the final research question examined whether resiliency was a predictive factor of PTG. It was hypothesized that resiliency would be a predictive factor for PTG and the quantitative analysis confirmed this. The notion that resiliency is a predictive factor of PTG has been confirmed within other populations including women with infertility problems (Yu, Peng, Chen, Long, He, Li, & Wang, 2014), Chinese trauma survivors (Duan, Guo, & Gan, 2015), survivors of motor vehicle accidents (Nishi, Matsuoka, & Kim, 2010) and survivors of the Yangzhou earthquake (Wu, Zhang, Liu, Zhou, & Wei, 2015). These studies have also found that resiliency is positively correlated with PTG and is a predictive factor of PTG, consistent with the results of this study. This is an important finding as many Cambodians have experienced trauma in their lifetime and this could be incorporated into the clinical work being done with the Cambodian population (Schnuert et al., 2015). This is

especially relevant for clinicians doing trauma work within the Cambodian population, as resiliency tends to be a term and concept that is more commonly understood. However, it could also be an indicator as to whether an individual is able to experience PTG after a traumatic event. This relationship has the ability to assist clinicians in determining what types of therapy would be the most beneficial for the individual and allow for the best facilitation of healing and growth for the individual.

The quantitative results indicate that the Cambodian population experiences PTG, which is an important finding as the cross-cultural literature on PTG is limited. By adding to the cross-cultural literature on PTG, it creates a deeper understanding of the phenomenon and ways this it is experienced by Cambodian individuals. These findings illustrate that Cambodians do experience PTG and resiliency, and that these two concepts are relevant and related for Cambodians. The experience of PTG will be further discussed and illustrated in the discussion of qualitative results.

Qualitative Results

One of the major benefits of conducting a mixed methods study was to come to a deeper understanding of the experience of PTG within this population. Grounded theory was utilized as it provides flexibility and can be used accurately over a wide variety of research topics (Strauss & Corbin, 1994). Grounded theory is a general methodology used for developing theory grounded in the data, which is systematically gathered and analyzed (Strauss & Corbin, 1990, 1994). Although this data had been collected without the researcher, it was analyzed by the researcher and independent coders.

Prior to exploring the categories and themes that emerged, it is important to review the initial PTG theory, which was created in 1994 (Tedeschi & Calhoun, 1994, 2004). The concept of PTG is broken down into five specific domains including: (1) greater appreciation for life and changed sense of priorities, (2) more intimate relationships with others, (3) greater sense of personal strength, (4) recognition of new possibilities in one's life, and (5) spiritual development (Tedeschi & Calhoun, 2004). These domains illustrate the change that may occur for individuals after they experience a traumatic event. The qualitative data demonstrated that for this particular Cambodian population there were four categories, which included: (1) Personal Growth, (2) Relational Growth, (3) Religion/Spirituality, and (4) Avenues of Growth. After completing the various grounded theory coding methods it was determined that Cambodian individuals developed a sense of personal strength and maturity, enriched connections with others and their sense of spirituality as well as the ability to continue growing and finding meaning in life after hardships.

Although these are different from the original domains of PTG, there are many striking similarities that should be highlighted. One of the first similarities between the two theories is between personal growth and a greater sense of personal strength. The category of personal growth included themes such as acceptance, self-efficacy and self-actualization. Whereas, the domain of a greater sense of personal strength demonstrated that individuals are capable of managing difficult situations that they are presented with. They have learned that they will experience negative events in their life, but have learned that they can handle them effectively (Tedeschi & Calhoun, 2004). Therefore, illustrating that a person is better able to understand him or herself after a trauma.

Another area of similarity is between the second category of relational growth and the second domain of PTG, which are more intimate relationships with others. The category of relational growth includes the themes of an increased appreciation of social support and the development of empathy. More intimate relationships exemplify this notion of individuals learning not only how to have better interpersonal relationship, but they also become more likely to cherish these relationships.

The category of religion/spirituality and domain of spiritual development are similar in name, and has some differences in meaning. For Tedeschi and Calhoun (2004), spiritual development was about a stronger connection with one's spirituality. Whereas for Cambodian individuals it was more about the role of karma and experiencing some shifts, both positive and negative when it came to spirituality. Other studies have illustrated that there continues to be discrepancies within the spiritual change domain. For example within some westernized populations there tends to be a floor effect on the PTGI that may not be capturing the full experience of these individuals and within Japan there tends to be a more existential connection between spiritual change and appreciation for life (Tedeschi, Cann, Taku, Senol-Durak, & Calhoun, 2017). Having a deeper understanding of any spiritual or religious changes one may experience after a trauma is essential to understanding how PTG functions, therefore making it important to understand the nuances of spirituality and religion within the Cambodian population. It is important to note that many of Cambodian's belief systems are deeply engrained into every day life, as 93% of the Cambodian population practices Theravada Buddhism (Overton & Chandler, 2017). Many of the beliefs that are commonly practiced by the majority of the population including *Dharma* and *Karma* as well as luck and astrology (Agger, 2015; Ratliff, 1997; Schnuert et al., 2012). It appears that a traumatic event has the capacity to cause

individuals to deeply think about how religion and spirituality play a role in their daily life (Schnuert et al., 2015). It can be said that this is a domain that is somewhat different for Cambodians, but there are still developments that are developed and meaningful.

The final category that was found through qualitative analysis was avenues of growth, which is somewhat of a combination of the PTG first and fourth domains of a greater appreciation for life and new possibilities. This category of avenues of growth was created and includes the following themes of moving from fear to courage, openness and shifting priorities. Essentially, for Cambodians it is more logical to combine these two domains into one category, as this is a better way of illustrating the overall notion of growth. The category of avenues of growth differs from different cultures in that it may not necessarily be relevant to all populations. Within the Japanese and Latino cultures there tends to be a commonality between the domains of relating to others, new possibilities and personal strength and the combination of spiritual change and appreciation of life into one domain (Taku, Calhoun, Tedeschi, Gil-Rivas, Kilmer, & Cann, 2007; Weiss, & Berger, 2006). This difference in domains is also demonstrated among survivors of breast cancer, as these individuals experience PTG specifically in the domains of relating to others, appreciation of life and spiritual changes (Cordova, Cunningham, Carlson, & Andrykowski, 2001). Among Nepali survivors of commercial sexual exploitation it appeared that the domains that were the most relevant included relating to others, personal strength, new possibilities and cognitive restructuring (Volgin, Shakespeare-Finch, & Shochet, 2018). There appears to be somewhat of a similarity between the category of avenues of growth and the Nepali domains of new possibilities and cognitive restructuring, as both populations are experiencing a shifting in thoughts and becoming more open to new possibilities. These studies emphasize the

differences and similarities in the experience of PTG between culturally different groups of survivors, and highlight the importance of understanding the Cambodian experience PTG.

Bak sbat or “broken courage” is a Cambodian cultural syndrome of distress, which is a potential factor that may hinder an individual’s ability to achieve growth within the domain of avenues of growth (Chhim, 2012). *Bak sbat* is a Cambodian syndrome of distress that is associated with low self-esteem, low self-efficacy, submissive attitude, dependence and a sense of fear when surrounded by others (Chhim, 2012, 2013; Hinton et al., 2016; Schnuert et al., 2012). When an individual experiences *bak sbat* it may be difficult for them to achieve PTG. But this also illustrates ways in which Cambodians and Westerns differ in their response to trauma as well as their response to growth. Although there are similarities between the concept of PTG for Cambodians and Caucasians, there are subtle differences that need to be taken into consideration to truly understand the phenomenon of PTG within this population.

The participants in the qualitative portion of this study were young, college students living in Cambodia. To obtain a deeper understanding of these individuals experience of PTG it is also important to examine PTG within first-generation Cambodian refugees living in the United States. There is limited research examining PTG within Cambodian refugees living in the United States, however Uy and Okubo (2018) conducted a study that looked at PTG with displaced Cambodian community leaders living in the United States. Based on their qualitative analysis, five similar themes emerged in respect to the experience of PTG among displaced community leaders including: “(a) gratitude and greater appreciation of life, (b) new priorities and goals, (c) importance of family and interpersonal relationships, (d) increased personal strength, and (e) leadership effectiveness” (Uy , & Okubo, 2018, p. 54). Many of the domains are similar to those found in this study, with the exception of leadership effectiveness and

religion/spirituality. This is a unique population in that being a community leader is central part to these individuals' identities. It is possible that leadership effectiveness could potentially fall under the avenues of growth category in this study, as it indicates that these individuals used their trauma(s) to enhance their leadership skills and made them more courageous and open to new experiences. It is of interest that religion and spirituality was not a major domain of Uy and Okubo's (2018) study. However, many of the participants were religious and spiritual leaders, which indicate that they had strong spiritual connections and relationships prior to their trauma(s). Cambodian community leaders also experienced personal growth and strength, a shifting of priorities and relational growth, which were also found within this study. Uy and Okubo's (2018) findings along with the findings of this study validate that Cambodians do experience PTG in a similar fashion, regardless of if they are living in Cambodia or have resettled in the United States.

Qualitative Results: Critical Discussion

Throughout the qualitative data analysis process it was essential that provisions of trustworthiness were utilized to ensure that the qualitative findings are accurate. Seeing as this study is archival in nature the researcher only completed the coding process outlined by grounded theory. Therefore, the researcher was not involved in the collection of the interviews, or translation. This is important to note as the researcher lacked involvement in the data collection and translation process, it is possible that there could be aspects of the qualitative analysis that the researcher missed. However, based on the outcomes of the provisions of trustworthiness it does not appear as if this lack of involvement in the data collection and translation process impacted the results.

During the qualitative analysis process the researcher utilized various provisions of trustworthiness to ensure the grounded theory results were accurate. The first strategy utilized was peer scrutiny. This required that three coders independently code the data. For the sake of this project, the coders were the researcher assistants who had originally worked on this project. The categories and themes were compared between the coders and this researcher and it was determined that the final categories and themes were similar across all coders.

Another strategy used to ensure trustworthiness was an audit trail and journaling. The researcher frequently used journaling as a way to record thoughts in regards to the content of the data including any personal biases that arouse. The purpose of journaling was to minimize the influence of personal biases on the research process by increasing the researcher's reflexivity and progressive subjectivity (Lincoln & Guba, 1985). Through the journaling process one of the topics that often came up in the journaling was the notion of social support. Upon examining the journal kept by the researcher it appeared that there were often thoughts about interviewee's main support coming from family members and whether they could openly share genuine thoughts and emotions with their family. However, it became apparent for the researcher fairly early on that social support was seen differently for each of the interviewees. This was an important realization as much of the researcher's knowledge of Cambodian culture was gathered during the literature review process.

Another common thought that was discussed in the journal was the notion of spirituality and religion. This researcher was surprised at the initial lack of direct discussion regarding religion and spirituality, which can again be contributed to the researcher's lack of exposure to Cambodian culture. However, the researcher thought it was of interest that the majority of interviewees discussed the ideas of karma, luck and spirituality without labeling them as such.

This demonstrated that these belief systems are deeply engrained into the Cambodian society even if they are not discussed in such an explicit manner (Schnuert et al., 2015). The researcher found this of interest as it demonstrated the importance of these belief systems even if the interviewees were not directly articulating them. These were two of the major thoughts that were present upon examination of the researcher's journal. As the researcher analyzed more of the interviews it became evident that many of the thoughts had been articulated in previous interviews. This is another marker that demonstrates that theoretical saturation was reached.

The final strategy used was consultation with the researcher's dissertation chair and group throughout the analysis process. Consultation was used when the researcher struggled with what steps to take next in the analysis process as well as to manage researcher's bias. Having the opportunity to discuss issues of coding as well as bias was ultimately necessary to ensure that the data was analyzed in the most accurate manner possible.

Clinical and Theoretical Implications

Prior to this study, there had been no studies examining PTG in Cambodia and few studies on the cross-cultural relevance of PTG. The hope of this study was to understand more deeply the experience of growth after trauma among Cambodians in the hopes of being able to identify ways to better treat Cambodian individuals. This study has demonstrated that Cambodian individuals experience PTG in a fairly similar manner as Caucasian Americans and other individuals from westernized cultures. This is important to highlight as this would imply that many of the clinical interventions used with Americans and other Westernized individuals have the potential of being beneficial for this population. That being said, it is also apparent that for Cambodians interpersonal relationships are essential to foster growth after trauma.

As was previously mentioned Cambodians have experienced much human suffering and trauma at the hands of the Pol Pot Regime as well as the current political climate (Chan, 2015; Strangio, 2014; Van de Put & Eisenbruch, 2002). This human suffering has resulted in 90% of Cambodians experiencing at least one traumatic event and between 20.6% (Mollica et al., 2014) to 28.4% (de Jong et al., 2003) of Cambodians having symptoms related to posttraumatic stress disorder (Mollica et al., 2014; Schunert et al., 2012). Marshall, Schell, Elliott, Berthold and Chun (2005) found that 99% of Cambodian refugees had experienced at least one traumatic event while living in Cambodian and 70% had been exposed to violence after resettling in the United States. Of the Cambodian refugees living in the United States, 62% met criteria for PTSD and 51% met criteria for Major Depressive Disorder (MDD), with 42% having both PTSD and MDD. These results have the potential to create a foundation for potentially effective mental health treatments for traumatized Cambodians. These treatments should highlight Cambodian's strength such as religion and spirituality, emphasizing the role of interpersonal relationships, self-efficacy and the capacity for Cambodians to find many sources of strength. One potential clinical intervention that could assist Cambodians in the healing process would be allowing for individuals to disclose trauma stories and reconstruct them (Uy, & Okubo, 2018). Through the disclosure and reconstruction of one's trauma narrative individuals are creating a space in which they are able to use the different avenues of growth as well as religious and spiritual backgrounds to promote individual healing. Through the trauma narratives not only enable individuals to promote self-healing and growth, but also facilitate the healing and growth of the Cambodian community as a whole (Uy, & Okubo, 2018). The use of groups that allow for the reconstruction of community traumas, such as the Khmer Rouge, could be a positive way of facilitating the healing and growth of the Cambodian people. These findings indicate that psychotherapy

interventions such as Narrative Exposure Therapy (NET) may be beneficial for Cambodians as it is based on the creation and modification of narratives (Schaal et al., 2009). Additionally, it is essential that clinicians incorporate the spiritual and religious beliefs that are deeply engrained in Cambodian culture and society. Many of spiritual and religious beliefs in Cambodia are based on Buddhism, and at the core of Buddhism exist the notions of suffering, forgiveness and karma (Gethin, 1998). If clinicians assist their clients in weaving in these notions throughout their trauma narratives this will enhance Cambodians understanding, reconstruction and acceptance of their trauma narratives (Schaal et al., 2009; Uy & Okubo, 2018). The creation of effective mental health treatments for Cambodians and Cambodian Americans is essential, as this is a population that has suffered for many generations and could truly benefit from the creation of more effective mental health treatments.

Finally, this research adds to the cross-cultural literature on PTG. The majority of the studies in positive psychology and PTG focus on Caucasians. Therefore, it is essential that we continue to examine the experience of PTG among a variety of different countries and cultures, as it is possible that individuals experience growth after trauma differently. When there is more cross-cultural research in the field of PTG this will allow researchers and clinicians alike to better understand and serve these populations mental health needs. Without this research the psychology community is missing out on a depth and variety of meaningful experiences. Having access to cross-cultural research is necessary for the field of psychology to continue growing and staying relevant with an ever-growing population.

Limitations

Like all studies, this one is not without its limitations. One of the major limitations of this study is that it utilized archival data. Due to the nature of international research, there are often times limitations for financial support, time, resources, and limited knowledge and exposure to psychological research. This study is no different. Due to the limitations that are part of international research the diversity of the recruited participants was also limited. Many of the participants were young, male students, which is not considered a representative sample within Cambodia. Therefore, the results from this study should be utilized with caution.

Additionally, the ARM and PTGI translated into Khmer have not had formal psychometric analyses completed and therefore cannot be fully determined as reliable and valid measures. However, as the quantitative results indicate these measures are internally reliable and valid measures in the preliminary psychometric analysis that were completed. Although it was not ideal that these measures were utilized, there are no existing measures in Khmer that have psychometric properties. This again highlights the nature of limitations when conducting international psychological research and the many constraints for researchers that are attempting to design studies and collect data within cultures that are unfamiliar with the field of psychological research.

Due to the nature of the data that was collected it was not possible to complete more advanced statistical analysis. Based on the statistical analyses that were performed it is not possible to determine the casual relationship between the concepts of posttraumatic growth and resiliency. However, the analyses do highlight the possibility of there being overlap between these two fairly similar concepts and experiences of recovery after hardship. Without determining causality, it is not possible to determine the extent to which conceptual overlap is impacting the results.

Another limitation to this study is the nature of qualitative research and grounded theory methodology. Grounded theory attempts to develop new theory based on the in-depth experiences of a limited number of individuals who have a shared experience. However, due to the small number of individuals who are needed to complete the grounded theory analysis it is possible that saturation was not achieved and therefore the generalizability of these findings are limited. It is important to note that the goal of grounded theory is not to create generalizable findings, but to create a rich picture of these individuals' experiences. Due to the nature of qualitative research it is also important to identify that recall bias and self-selection bias are common types of biases that emerge in qualitative analysis. The provisions of trustworthiness are an attempt to minimize these biases, but it continues to be a limitation of qualitative analysis and this study.

Suggestions for Future Research

Future research could include a variety of different elements. The first would be to conduct studies to determine the psychometric properties of the ARM and PTGI in Khmer. These analyses would allow for more statistically sound future research on resilience and PTG in Cambodia. Through the completion of psychometric properties of the ARM and PTGI brings the possibility for future psychological research to take place in Cambodia, which is a country that has little exposure to this type of research. It would also be appropriate to develop a version of the PTGI that can be used specifically with the Cambodian population. The development of a culturally specific PTGI would allow for the incorporation of a more culturally sensitive measure, as it would be utilizing the framework of PTG that is specific to Cambodians. It would also be beneficial to complete an item analysis of the ARM and the PTGI to determine if there is any conceptual overlap among these measures. This would establish the convergent and

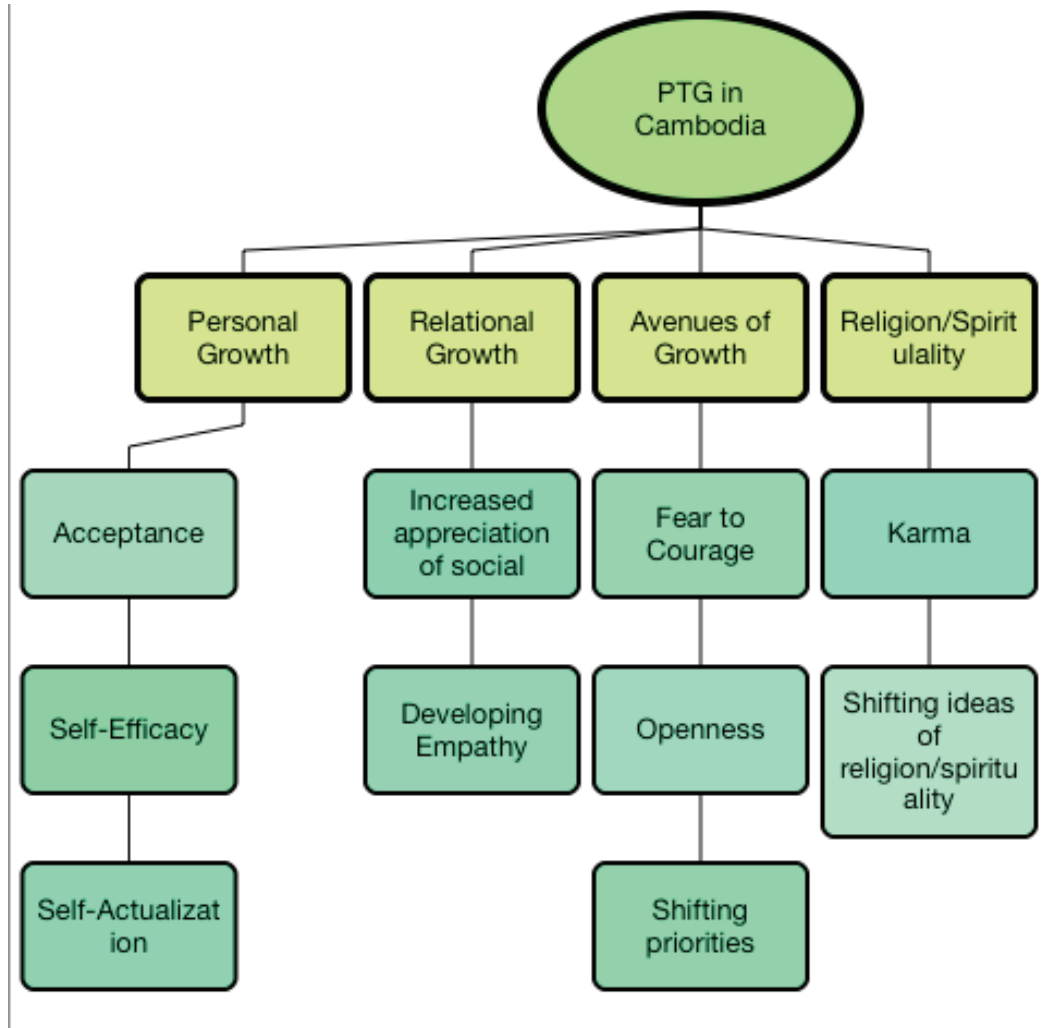
divergent validity of these measures and demonstrate the effectiveness of the ARM and PTGI within the Cambodian population.

Another future research idea would be to conduct the same study, but with a more diverse group of participants and over a longer period of time. It would be interesting to see how the results may differ when examining the experience of PTG among older adults, people from lower socioeconomic states, individuals living in rural areas and Cambodian Americans. Specifically, it would be interesting to determine whether age impacts one's perception and experience of PTG as the preliminary analysis indicated that as people age they are more likely to experience PTG. By recruiting a variety of participants, this will allow the research findings to be more representative of the Cambodian population. It would be beneficial to recruit more participants for the qualitative portion of this study, as this would allow for the possibility of reaching saturation. This type of large-scale, longitudinal study would allow for a broad and deeper understanding of how PTG is truly experienced among the Cambodian people as well as strengthen the predictive validity of the ARM and the PTGI.

Future research may also include conducting similar studies in different regions of the world. For example, it would be interesting to conduct this study utilizing Middle Eastern, Latinos, and African participants. The research that does exist within the field of PTG is fairly limited to Americans and individuals of European descent. Therefore, exploring the differences of posttraumatic growth and resiliency for individuals living in other parts of the world is vital to the growth of positive psychology as a whole.

Figure 1

Mind map of the categories and themes illustrated through the qualitative analysis of data



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Appendix A

Demographic Form (English)

Demographic Information Form

1. **What is your age?** _____
2. **What is your sex?**
 - Female
 - Male
 - Other _____
3. **What is your marital status?**
 - Single
 - Married
 - Separated
 - Divorced
 - Widowed/Widower
 - Decline to answer
4. **What level do you think your household income is?**
 - Very high
 - High
 - Moderate
 - Low
 - Very low
5. **What is your highest educational level?**
 - Elementary school

- Some high school, but did not finish
- Completed high school
- Two-year college degree / A.A / A.S.
- Four-year college degree / B.A. / B.S.
- Completed Masters or professional degree
- Advanced Graduate work or Ph.D.
- Decline to answer

6. **Employment status**

Are you currently:

- Employed for wages
- Self-employed
- Out of work for more than 1 year
- Out of work for less than 1 year
- A homemaker
- A student
- Retired
- Unable to work
- Decline to answer

7. **With what denomination or faith tradition do you most closely identify?**

- Buddhism
- Christianity
- Islam
- Hinduism

- Sikhism
- Other (Please specify _____)
- Decline to answer

8. How did you hear about this survey?

Adult Resilience Measure (ARM) English

To what extent do the statements below describe you?	Not at All	A Little	Some-what	Quite a Bit	A Lot
1. I have people I can respect	1	2	3	4	5
2. I cooperate with people around me	1	2	3	4	5
3. Getting qualifications or skills is important to me	1	2	3	4	5

4. I know how to 1 2 3 4 5
 behave in
 different social
 situations
5. My family 1 2 3 4 5
 have usually
 supported me
 through life
6. My family 1 2 3 4 5
 know a lot about
 me
7. If I am 1 2 3 4 5
 hungry, I have
 money to buy
 food to eat
8. I try to finish 1 2 3 4 5
 what I start
9. Spiritual 1 2 3 4 5
 beliefs are a
 source of
 strength for me

10. I am proud of 1 2 3 4 5
my ethnic
background
11. People think 1 2 3 4 5
that I am fun to
be with
12. I talk to my 1 2 3 4 5
family/ partner
about how I feel
13. I can solve 1 2 3 4 5
problems
without harming
myself or others
(e.g. without
using drugs or
being violent)
14. I feel 1 2 3 4 5
supported by my
friends
15. I know where 1 2 3 4 5
to get help in my

community

16. I feel I 1 2 3 4 5

belong in my

community

17. My family 1 2 3 4 5

stands by me

during difficult

times

18. My friends 1 2 3 4 5

stand by me

during difficult

times

19. I am treated 1 2 3 4 5

fairly in my

community

20. I have 1 2 3 4 5

opportunities to

show others that

I can act

responsibly

21. I know my own strengths	1	2	3	4	5
22. I participate in organized religious activities	1	2	3	4	5
23. I think it is important to support my community	1	2	3	4	5
24. I feel safe when I am with my family	1	2	3	4	5
25. I have opportunities to be useful in life (like skills, a job, caring for others)	1	2	3	4	5
26. I enjoy my family's/partner's cultural and	1	2	3	4	5

family traditions

27. I enjoy my 1 2 3 4 5

community's

culture and

traditions

28. I am proud of 1 2 3 4 5

my nationality

LIFE EVENTS CHECKLIST (LEC) (English)

Listed below are a number of difficult or stressful things that sometimes happen to people. For each event check one or more of the boxes to the right to indicate that: (a) it happened to you personally, (b) you witnessed it happen to someone else, (c) you learned about it happening to someone close to you, (d) you're not sure if it fits, or (e) it doesn't apply to you.

Be sure to consider your entire life (growing up as well as adulthood) as you go through the list of events.

(a) Event Happened to me

- (b) Witnessed it
 - (c) Learned about it
 - (d) Not Sure
 - (e) Doesn't apply
1. Natural disaster (for example, flood, hurricane, tornado, earthquake)
 2. Fire or explosion
 3. Transportation accident (for example, car accident, boat accident, train wreck, plane crash)
 4. Serious accident at work, home, or during recreational activity
 5. Exposure to toxic substance (for example, dangerous chemicals, radiation)
 6. Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)
 7. Assault with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb)
 8. Sexual assault (rape, attempted rape, made to perform any type of sexual act through force or threat of harm)
 9. Other unwanted or uncomfortable sexual experience
 10. Combat or exposure to a war-zone (in the military or as a civilian)
 11. Captivity (for example, being kidnapped, abducted, held hostage, prisoner of war)
 12. Life-threatening illness or injury
 13. Severe human suffering
 14. Sudden, violent death (for example, homicide, suicide)
 15. Sudden, unexpected death of someone close to you
 16. Serious injury, harm, or death you caused to someone else
 17. Any other very stressful event or experience

Post Traumatic Growth Inventory (English)

Instructions: Indicate for each of the statements below the degree to which this change occurred in your life as a result of your breast cancer, using the following scale:

- 1 = I did not experience this change as a result of my crisis
- 2 = I experienced this change to a very small degree as a result of my crisis
- 3 = I experienced this change to a small degree as a result of my crisis
- 4 = I experienced this change to a moderate degree as a result of my crisis
- 5 = I experienced this change to a great degree as a result of my crisis

6 = I experienced this change to a very great degree as a result of my crisis

1. My priorities about what is important in life 1 2 3 4 5 6
2. I'm more likely to try to change things that need changing 1 2 3 4 5 6
3. An appreciation for the value of my own life 1 2 3 4 5 6
4. A feeling of self-reliance 1 2 3 4 5 6
5. A better understanding of spiritual matters 1 2 3 4 5 6
6. Knowing that I can count on people in times of trouble 1 2 3 4 5 6
7. A sense of closeness with others 1 2 3 4 5 6
8. Knowing I can handle difficulties 1 2 3 4 5 6
9. A willingness to express my emotions 1 2 3 4 5 6
10. Being able to accept the way things work out 1 2 3 4 5 6
11. Appreciating each day 1 2 3 4 5 6
12. Having compassion for others 1 2 3 4 5 6
13. I'm able to do better things with my life 1 2 3 4 5 6
14. New opportunities are available which wouldn't have been otherwise 1 2 3 4 5 6
15. Putting effort into my relationships 1 2 3 4 5 6
16. I have a stronger religious faith 1 2 3 4 5 6
17. I discovered that I'm stronger than I thought I was 1 2 3 4 5 6
18. I learned a great deal about how wonderful people are 1 2 3 4 5 6
19. I developed new interests 1 2 3 4 5 6
20. I accept needing others 1 2 3 4 5 6
21. I establish a new path for my life 1 2 3 4 5 6

Question Guide for the Interview (English)

1. What do you think has helped you make it through the traumatic experience?
2. What does growth after trauma mean to you?
3. Have your priorities in life changed? Please explain.
4. What has helped you to feel hopeful or keep hoping after your traumatic experience?

5. Were there times when you experienced hopelessness during and after your traumatic experience? If you ever experienced hopelessness, what brought you back to keep perspective?

Relationship with Others

1. Are there any changes in your relationships with friends and your family? If so, how are your relationships with friends and family different than the time before the traumatic experience? If not, why do you think so? Probing question: What do you think contributed to this change?
2. Have you acquired new skills in terms of how you relate to others? If so, could you please describe these new skills?
3. Please describe how your social support has played a role in your recovery after trauma?
4. During the difficult times of your traumatic experiences, who were you frequently thinking of and why?

Relationship with Oneself

1. Has your view about yourself changed from the time before your traumatic experience? Please explain.
2. Do you feel that you have become more or less acceptant of yourself? How so and why?
3. What have you learned about yourself after the trauma?

Spirituality

1. Have your religious beliefs changed after your traumatic experience? How so?
2. Do you think that Karma might play a role in your traumatic experience? Please explain.
3. Do you think that Karma might play a role in your recovery? Please explain.

Personal Growth

1. How has your outlook about life changed after your traumatic experience? Please explain.
2. Have your traumatic experiences contributed to how you are more open or closed up to new experiences, challenges or possibilities? If so, what are your attitudes toward new experiences or challenges?

Meaning in Life

1. How has your experience influenced your sense of purpose or meaning for your life?
2. How has your experience influenced your roles in your life?
3. What do you make of your whole experience? What thoughts and feelings are coming up for you?