Cultural Differences in Trauma Appraisals and Implications for the development and maintenance of post-traumatic stress disorder (PTSD)

By
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November 2013

PREFACE

This thesis is submitted for the degree of Doctor of Philosophy at the University of East Anglia. I declare that this thesis reports my original work, that no part has been previously accepted and presented for the award of any degree or diploma from any university, and that, to the best of my knowledge, no material previously published or written by any other person is included, except where due knowledge is given. This thesis is 224 pages in length and contains just over 72,500 words.

Part of this work has been presented in the following publications:

Engelbrecht, A & Jobson, L. (2014). An Investigation of Trauma-Associated Appraisals and Posttraumatic Stress Disorder in British and Asian Trauma Survivors: The Development of the Public and Communal Self Appraisals Measure (PCSAM). *SpringerPlus, 3*(44), doi: 10.1186/2193-1801-3-44.

Engelbrecht, A & Jobson, L. (under review). Discrepancies in Self-Concept, Posttraumatic Appraisals and Posttraumatic Psychological Adjustment: Are there Relationships? Personality and Individual Differences.

Engelbrecht, A & Jobson, L. (under review). Brief report: Cultural Differences in Self-Ambivalence and Implications for Posttraumatic Stress Disorder. *Journal of Social and Clinical Psychology*.

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November 2013

ACKNOWLEDGEMENTS

First and foremost I want to thank and acknowledge my supervisor Dr Laura Jobson. I appreciate all her contributions in time, ideas and advice, and to making my PhD experience both productive and stimulating. Her assistance, direction, support and encouragement were the motivation I needed, especially during the tougher times to complete this thesis. Secondly, I would like to thank and acknowledge my secondary supervisor Professor David Fowler for his guidance and support.

Third I would like to acknowledge the trauma survivors that participated in this research, for demonstrating their courage, strength and determination in the retelling of their traumatic memories and deeply personal issues. I would like to thank them for participating in this research. Fourth, I would like to acknowledge and thank the University of East Anglia for providing me with the support and means to complete the PhD.

Finally and most importantly I would like to thank my family for their continual support, love and faith in me which kept me buoyed, especially during the final stages of my PhD, and to my friends and colleagues whose humor, encouragement and insights were a great help. You are all very much appreciated. Thank you.

ABSTRACT

There is an urgent need to improve our understanding of the influence of culture on the onset and maintenance of post-traumatic stress disorder (PTSD). Substantial evidence indicates that appraisals and self-concept, both of which are central to the understanding and treatment of PTSD are found to differ across cultures. This thesis therefore investigated the influence of cultural variation in self-construal on a) trauma appraisals, b) posttrauma self-concept and c) posttrauma psychological adjustment.

The thesis was comprised of three parts with a total of seven studies; the methodology adopted a questionnaire and interviewing approach on British and Asian participants. Part 1 and 2 explored the objectives in a non-clinical sample (n = 75; n = 14; parts 1 and 2 respectively). Part 3 examines the objectives in a clinically relevant sample of trauma survivors with and without PTSD (n = 95).

In relation to trauma appraisals, the thesis' findings relay that there are cultural differences in trauma appraisals, including a significant cultural difference in perceived personal control for those with PTSD compared to trauma survivors without PTSD. However, appraisals of those with PTSD tended to be similar, suggesting cultural similarities in trauma appraisals for clinical groups. Second, the Public and Communal Self Appraisal Measure (PCSAM) which measures collectivistic type cognitions was developed and demonstrated good internal consistency, test-retest reliability, convergent validity, and discriminative validity. This measure further demonstrated collective self-appraisals to also play a significant role in PTSD development and/or maintenance, suggesting both independent and interdependent self-construal are impacted and damaged by trauma. Findings in relation to post-trauma self-concept (i.e. traumatized and trauma-centered self-concept) suggest a pan-cultural relationship to PTSD. Additionally, an ambivalent post-trauma self-concept was found to directly impact British trauma survivors but not Asian. However, when mediated by trauma-related appraisals, self-ambivalence was found to indirectly influence PTSD for the Asian and British groups. Finally, the influence of cultural variation in self-construal on post-trauma psychological adjustment, and theoretical and clinical implications of the thesis are discussed. Limitations and future directions are considered.

TABLE OF CONTENTS

TABLE OF TABLES

TABLE OF FIGURES

TABLE OF APPENDICES

CHAPTER 1

Overview

> Trauma and culture are intertwined because traumatic experiences are part of the life cycle, universal in manifestation and occurrence, and typically demand a response from culture in terms of healing, treatment, and interventions.
>
> (Drozdek & Wilson, 2007, p. 8)

Trauma is a universal phenomenon, experienced the world over and across time. Poets and novelists as far back as Homer and Shakespeare were among the first to record the profound impact of trauma and its subsequent stressors on human cognition, behavior and emotion (Friedman, Resick, Bryant, & Brewin, 2011). Exposure to traumatic events, such as war, conflict, natural and human-made disasters, assault and life threatening illnesses are common, with over two thirds of the general population likely to be exposed to a traumatic incident in their lifetime (Neria, Nandi, & Galea, 2008). Exposure to such events can consequently have a series of serious adverse psychological affects. In the last three decades there has been an increase in the discussion of trauma and its effects, with particular focus on posttraumatic stress disorder (PTSD) (Jones & Wessely, 2005). Previous systematic reviews have documented PTSD to be the most commonly studied psychopathology in the aftermath of trauma (Breslau, 2002; Neria et al., 2008; Norris, Friedman, Watson, Byrne, Diaz & Kaniasty, 2002).

PTSD is a relatively common mental health problem for people exposed to traumatic events. The disorder is characterized by symptoms of repeated and unwanted re-experiencing/reliving of the traumatic event, hyperarousal, emotional numbing and avoidance of stimuli which act as reminders, according to the *Diagnostic and Statistical Manual of Mental Disorders-IV-TR [*DSM-IV-TR] (American Psychiatric Association [APA], 2000). There is an increasing recognition that PTSD is observed in many different societies and cultures (Foa, Keane, Friedman, & Cohen, 2009; Jobson, 2009). However it remains largely unknown as to whether the processes involved in its development and maintenance are culturally similar. Our understanding surrounding the development, maintenance and treatment of PTSD is informed predominately by research using Western populations (Jobson & O'Kearney 2009;

Markus & Kitayama 1991). Consequently, little is known about the etiology, maintenance and treatment of PTSD in non-Western cultures (Foa et al., 2009). It is important to consider the relationship between trauma and culture in order to arrive at culturally informed and appropriate treatments for psychological disorders, such as PTSD; as Boehnlein (2002) asserts, the place of culture in trauma studies is becoming increasingly important, because while extreme physical and psychological distress may be experienced at an individual level, it frequently arises from, and is resolved within, a social and cultural context.

This thesis investigated the influence of culture on two psychological processes involved in the development and maintenance of PTSD; appraisals and self-concept. Prominent cognitive models of PTSD implicate appraisals and self-concept (DSM-IV-TR; APA, 2000) in the development and maintenance of PTSD. Specifically, self-relevant appraisals of the trauma experience and/or its sequelae function to maintain a sense of current threat in the survivor's life and are instrumental in promoting the use of maladaptive strategies intended to control this threat and current symptoms (Ehlers & Clark, 2000). Empirical evidence suggests that cognitive factors are the most useful of a set of pre-trauma factors, trauma specific factors and other predictors for identifying chronic PTSD (Kleim, Ehlers, & Glucksman, 2007). Furthermore, appraisals are potentially modifiable and thus, provide important targets for treatment (Resick, 2001) and the proposed revision of PTSD criteria for the *Diagnostic and Statistical Manual of Mental Disorders-5* (DSM-5) includes negative alterations in cognitions (i.e. appraisals about the self, others, world, self-blame, and trauma causes and consequences), which have subsequently come to pass with its inclusion as Criterion D (*DSM-5*, APA, 2013). In terms of self-concept, trauma shatters an individual's understanding of the self, causing internal disorganization and disintegration, shattered assumptions and feelings of self-annihilation (Abernathy, 2008). Due to these fractures and inconsistencies in self-concept, empirical research has found trauma can become central to self-concept, influencing one's self-definition resulting in a trauma-defined self-concept (Sutherland & Bryant, 2005). Consequently, this sense of a trauma-centered self-concept leads to increases in PTSD symptom severity (Berntsen & Rubin, 2006, 2007).

The cross-culture psychology literature suggests cultural differences in the way individuals perceive their self-concept and appraise everyday events. Research suggests that people in different cultures have strikingly different understandings of

themselves, of others and the interplay of the two (Markus & Kitayama, 1991, 1994). Markus and Kitayama (1991, 2010) outline that individualistic cultures (typically Western) tend to emphasize the independent side of the self (i.e. perceive the self to be unique, independent, autonomous and separate from others), whilst collectivistic cultures (typically non-Western) tend to emphasize the interdependent aspect of self (i.e. perceive the self to be interdependent with others and emphasize relatedness, group norms and group harmony). It is this difference in self that can influence how individuals view and perceive trauma; these culturally diverging self-construal have been found in many cases to govern the very nature of individual experience, including self-concept and how one appraises events (Jobson & O'Kearney, 2009; Markus & Kitayama, 1991). Markus and Kitayama (1991) propose that these construal of self and other are conceptualized as part of a repertoire of self-relevant schemata which is subsequently used to evaluate, organize and regulate a person's experience and actions, thereby causing patterns of past as well as current and future behavior (Markus & Kitayama, 1991; Neisser, 1976). It is important to note that variation exists in the degree to which individuals exhibit an independent versus interdependent orientation both within and between collectivistic and individualistic cultures; however, normative differences between collectivistic and individualistic cultures are marked (e.g. Fiske, Kitayama, Markus, & Nisbett, 1998). Despite this impressive body of literature, to date, limited research has examined the influence of culture on these processes in relation to trauma. This then leads to fundamental questions as to whether these processes also differ across cultures when the event is traumatic and what the implications are for PTSD. This, therefore, could result in differing cultural perspectives on how trauma is understood and processed by individuals. This then lends itself to potentially inform culturally appropriate treatments, as it cannot automatically be assumed that advances in Western psychotherapeutic techniques can be exported and applied to non-Western cultures (Summerfield, 1999; Marsella & White, 1989).

In light of this, and to explore and reflect any nuanced cultural distinctions that could arise within these domains in relation to trauma and to examine the cultural appropriateness of current PTSD models, the overall objective of this thesis is to advance our understanding of the manner in which cultural differences influence the underlying processes appraisals and self-concept play in the development and maintenance of PTSD. Specifically, the thesis considers six specific research questions

related to the following themes:

Appraisals of trauma:

1. How do cultural differences in self influence autobiographical memories of trauma appraisals?
2. How do these differences in appraisals compare to cultural differences in appraisals of other types of autobiographical memories (i.e. positive and negative memories)?
3. How do these differences impact on posttraumatic psychological adjustment (PTSD)?

Self-concept following trauma:

4. What are the cultural differences in self-concept following trauma?
5. How do cultural differences in self-concept influence posttraumatic psychological adjustment?

Appraisals, Self-concept and Culture

6. Does culture influence the relationships between appraisals, self-concept and posttraumatic adjustment?

To address these questions, the thesis is comprised of three parts. Part 1 explores the influence of cultural variation in self-construal on trauma related appraisals and self-concept following trauma in a non-clinical sample. Part 2 uses a qualitative design (focus groups and key informant interviews) to explore how collectivistic cultures appraise trauma and the appropriateness of the commonly used Posttraumatic Cognitions Inventory (PTCI; Foa, Ehlers, Clark, Tolin, & Orsillo, 1999) as a measure of trauma related cognitive appraisals within collectivistic cultures. Based on the responses of the interviews and focus groups, Part 2 also developed a new measure of trauma-related cognitive appraisals that are more appropriate for the interdependent aspect of self. The aim of this new measure is to work alongside the PTCI and other established measures in ascertaining dysfunctional cognitive appraisals, especially within collectivistic cultures. Part 3 extends the ecological validity and theoretical and clinical implications of Parts 1 and 2 by exploring the impact of cultural variation in self-construal on trauma appraisals and self-concept following trauma in a clinical sample of Asian and British trauma survivors with and

without PTSD. Additionally, Part 3 explores the psychometric properties of the measure developed from findings in Part 2.

The subsequent chapters in the Introduction firstly, outline the cognitive models of PTSD. In particular, the importance of appraisals and self-concept in the development and maintenance of PTSD is emphasized and extrapolated. The empirical work supporting the role of appraisals and self-concept in the development and maintenance of PTSD will also be considered. Chapter 3 will then review the cross-cultural theories relating to the self and highlight the influence of cultural differences in self-construal on appraisals of everyday events and self-concept. Finally, Chapter 4 will unite the accounts, providing a conceptual framework that expands upon cognitive and cultural understandings of PTSD and their theoretical connections with the self; helping bridge initial resistance and hesitancy to include cultural factors in the conceptualization and treatment of trauma (Marsella, 2010). The chapter will finally provide a rationale for the research questions and outline the studies developed to investigate the various hypotheses pertaining to the overall research topic; the influence of cultural differences on the psychological processes, appraisals and self-concept, involved in the development and maintenance of PTSD.

To summarize, traumatic events are common happenings and for a significant number of those exposed to such events PTSD can be a manifestation of post-trauma maladaption. Appraisals and self-concept have been found to hold a prominent place in PTSD development and maintenance and thus, are linked to key cognitive models of PTSD (e.g. Ehlers & Clark, 2000; Conway & Pleydell-Pearce, 2000). Cross-cultural research demonstrates culture to have an influence on appraisals and one's self-concept in everyday situations. This gives rise to fundamental questions pertaining to the manner in which these components differ across cultures when the event is traumatic. Thus bringing us to the crux of the thesis, the overarching aim of this thesis is to facilitate further understanding into how appraisals and self-concept can act as mechanisms for the development and maintenance of PTSD across cultures.

CHAPTER 2

Socio-Cognitive Models of Posttraumatic Stress Disorder

> "As always, I immediately checked my mental state, trying to assess what was wrong. I knew a change in my biorhythms had brought Tuesday over, because he was always monitoring me, but I couldn't figure out what it was. Breathing? Okay. Pulse? Normal. Was I glazed or distracted? Was I lost in Iraq? Was a dark period descending? I didn't think so, but I knew something must be wrong, and I was starting to worry..."
>
> (Montalvan & Witter, 2011, p.154)

As denoted by the words of Montalvan and Witter (2011) experiencing a highly stressful and traumatic event can have enduring and long lasting consequences. In its extreme form these enduring and long lasting consequence can manifest as a number of psychological disorders, such as anxiety, depression and PTSD. The purpose of Chapter 2 is to explore PTSD and discuss and reflect on its current socio-cognitive models as a means by which to understand and treat the disorder, and to find if they can be expanded upon.

2.1 Definition of Trauma

Trauma is a universal phenomenon and for the purposes of this thesis refers to an event, which must be a) severely negative and posing a physical threat to the individual, such as assault, natural or human-made disasters or severe accidents, and (b) psychologically overwhelming for the individual exposed; thereby in keeping with DSM-IV-TR (APA, 2000) criteria.

From an etymological standpoint, trauma goes back to the Greek work meaning 'wound'. However, its application has become increasingly important to clinicians and scholars from a wide array of disciplines to account for violence and its aftermath (Hunt, 2010). In particular, attention has been drawn to the manner in which the body and mind has been wounded and implications for the affected individual's recovery. Studies have demonstrated that experiencing a traumatic event is common, with most adults expected to be exposed to at least one traumatic incident over their lifetime (Ozer, Best, Lipsey, & Weiss, 2003). This is increased in certain geographical areas in

which large numbers of populations are constantly and consistently exposed to traumatic events, such as natural disasters, wars and conflicts (Neria, et al., 2008). For instance, those living close to the Pacific Ring are exposed to tsunamis, the Pacific coastlines are exposed to storms and East Africa is tempered with drought. Whilst those in the Middle East, North Africa and Sub Saharan Africa are exposed to violence through civil unrest and conflict. Other unique populations are also consistently exposed to traumatic events, such as search/rescue teams, other first and second emergency responders (e.g. police, firemen), military personnel and refugees and asylum seekers (Gradus, 2007).

2.2 Clinical definition of PTSD

PTSD was characterized as an anxiety disorder and has now, in the latest edition of the DSM, moved into a new class of "trauma and stress-related disorders" (DSM-V, APA, 2013). Exposure to a traumatic event is a necessary condition of PTSD; its initial DSM-III formulation defines this event as being outside the usual range of human experience and one that would be manifestly distressing to almost anyone (DSM-III, APA, 1980). The research accrued in this thesis was attained prior to the release of DSM-V (2013), at the time of this research, the DSM-IV-TR (APA, 2000) criteria in diagnosing and assessing PTSD was used. For a diagnosis of PTSD to be made certain criteria must be met, this included both criteria in criterion A, at least one criterion B intrusive symptom, three criterion C avoidance symptoms and two criterion hyperarousal symptoms (see Table 1 for greater detail). Moreover these symptoms need to last for more than a month (criterion E) in addition to bringing about considerable functional impairment (criterion F).

Table 1

PTSD DSM-IV-TR symptom criteria (APA, 2000)

Criterion A: stressor: 1. The person has experienced, witnessed, or been confronted with an event or events that involve actual or threatened death or serious injury, or a threat to the physical integrity of oneself or others. 2. The person's response involved intense fear, helplessness, or horror.

Criterion B: intrusive recollection: 1. Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. 2. Recurrent distressing dreams of the event. 3. Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur upon awakening or when intoxicated). 4. Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event. 5. Physiologic reactivity upon exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

Criterion C: Avoidant/numbing: 1. Efforts to avoid thoughts, feelings, or conversations associated with the trauma. 2. Efforts to avoid activities, places, or people that arouse recollections of the trauma. 3. Inability to recall an important aspect of the trauma. 4. Markedly diminished interest or participation in significant activities. 5. Feeling of detachment or estrangement from others. 6. Restricted range of affect (e.g., unable to have loving feelings). 7. Sense of foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span).

Criterion D: Hyper-arousal: 1. Difficulty falling or staying asleep. 2. Irritability or outbursts of anger. 3. Difficulty concentrating. 4. Hyper-vigilance. 5. Exaggerated startle response.

Criterion E: Duration: Duration of the disturbance (symptoms in B, C, and D) is more than one month.

Criterion F: Functional significance: The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

2.3 Origination of PTSD

The derivation of PTSD is founded in experiencing a traumatic event. This etiological agent (the traumatic stressor) makes PTSD unique among other psychiatric diagnoses (Friedman, 2007) as a diagnosis cannot be made without first experiencing criterion A (stressor criterion). As outlined above, there are many examples of traumatic events, some of which include natural disasters (e.g. earthquake, tornados, typhoons); human-made disasters (e.g. gas leaks, nuclear power plant explosions, oil fires); road traffic accidents; assault; abuse; wars; and organized violence and terrorism (Breslau, 2002; Kessler, Berglund, Delmer, Jin, Merikangas & Walters, 2005; Shalev et al., 1997). Additionally, while trauma events are frequent (see trauma prevalence rate section below; Section 2.5.2) and not everyone who experiences a trauma develops PTSD, a significant portion of trauma survivors do, with research indicating this figure to be around 25-30 % of trauma survivors going on to develop PTSD (Kessler et al, 1995). Therefore, as Friedman (2007) asserts, trauma cannot be standardized as the trauma experience cognates differently before being appraised as an extreme threat. Thus, individual differences in one's appraisal processes protract for a more protected or vulnerable disposition/trauma threshold (Friedman, 2007). For those that do go on to develop PTSD there are many resultant consequences, these can result in long-term behavioral problems, drug and alcohol abuse, loss of employment, interpersonal problems, mental health problems, physical behavioral problems and a lowering of immune functioning (Kessler et al., 1995).

2.3.1 A Brief Historical Overview of PTSD

PTSD can be purported to be both an enduring and universal disorder, affecting a significant number of trauma survivors through the annals of time and conflict. The disorder has been described in ancient history, classical literature (e.g. Shakespeare perhaps best described war trauma in Henry IV, Part 1), diaries (e.g. Samuel Pepys recorded the nightmares he has for months following the Great Fire of London) and letters (e.g. Tolstoy's recollections of the Crimean War), poetry (e.g. Wilfred Owen poems concerning First World War), through to modern popular culture (e.g. characters in current books, films, TV series). The construct appears to be a widely recognized and documented consequence of war and conflict (Jones, 2013).

The disorder has transitioned through a number of names and labels. Some

examples include “nostalgia”, “soldier’s heart” “war neurosis” and “shell shock” to “combat exhaustion” and “PTSD” (all of which chronicle psychological reactions to combat); while “railway spine” (a diagnosis for the posttraumatic symptoms following railroad accidents) (Jones, 2013; Jones & Wessely, 2005) and “rape trauma syndrome” moved away from war veterans and toward trauma disorders in other populations. Individuals diagnosed with these disorders reported similar symptoms to current criteria for PTSD. However, evidence indicates that those who experienced such symptoms (e.g. flashbacks, dissociation, startle response) were often seen as witchcraft or acts of God (Hunt, 2010). It can be argued that the construct has been around for a significantly longer period of time than first anticipated, under the guise of alternative names reflective of times and events. However, as Hunt (2010) asserts, it would be unwise to over-represent and interpret recorded accounts, as individuals from alternative eras described things differently, reflecting contemporary attitudes and beliefs.

The term and construct of PTSD initially emerged into the diagnostic canon of the American Psychiatric Association, DSM-III in 1980 under the nosologic classification scheme in a response to Vietnam War veterans (Friedman, 2007). The concept was initially controversial as the significant change brought about by the concept was the stipulation that the etiological agent was outside the individual (i.e., a traumatic event) rather than an inherent individual weakness (i.e., a traumatic neurosis) (Friedman, 2007). This introduction of a uniform criteria for psychiatric disorders related to trauma changed the social and research landscape. The legitimization of PTSD in DSM-III led to a new generation of treatment studies as the new disorder achieved widespread interest (Jones & Wessely 2005).

Further, in the last two to three decades there has been a dramatic increase in the discussion of trauma and its effects; specifically, in the use of PTSD as a concept and in the frequency of PTSD as a diagnosis (Jones & Wessely 2005). PTSD has periodically been the focus of much debate in consideration of its symptoms, etiology and appropriate definitions (Jones & Wessely, 2005). This debate is still very much occurring today. For instance, currently the APA’s DSM-V has been published placing PTSD into a new “trauma and stress-related disorder” category. The DSM-V committee argued that PTSD be included in a separate class of disorders. This was the result of the need to distinguish disorders that are precipitated by traumatic stressors and secondly, because it became evident that PTSD is not only a fear-based anxiety

disorder (Friedman et al., 2011). Instead, anhedonic/dysphoric presentations (i.e. negative cognitions and mood states, disruptive behavioral symptoms) are most prominent. However, others, such as Zoellner, Rothbaum, and Feeny (2011) believe that there is insufficient evidence for PTSD to be considered separate from anxiety disorders and would negate the significant role of fear and anxiety in PTSD. Thus PTSD is still very much a disorder up for debate, whose diagnoses, symptoms and definitions will most likely continue to undergo modification and adjustment, aligning with contemporary thoughts, beliefs and attitudes (Hunt, 2010).

2.4. Problems with PTSD as a construct

Whilst PTSD may be a useful construct to aid in the treatment for traumatized individuals, it comes with its own conceptual problems. Hinton and Lewis-Fernandez's (2010) review on the cross-cultural validity of PTSD found support for a global presence of the PTSD syndrome, further supporting the notion that PTSD is both timeless and universal. Conversely, there are many who believe PTSD cannot be exported to non-Western cultures; expressing the construct to be a Western concept that therefore only makes sense in a western context. For instance, Bracken, Giller, and Summerfield's (1997) stance, demonstrated in the quote below, is somewhat sceptical of Western assumptions about trauma and PTSD being applied universally:

> Trauma projects which seek to objectify "suffering" as an entity apart, converting it into a technical problem to which are applied technical solutions like Western talk therapies, are discounting indigenous knowledge, capacities, and priorities. Such projects aggrandize the Western expert who defines the problem (e.g. PTSD) and brings the cure; too often it is the same problem and the same cure, whether to Cambodia, Rwanda, or elsewhere. (p.430)

Thus concerns regarding the PTSD construct focuses on certain symptoms being viewed as 'Western constructs' (Jones, Vermass, & McCartney, 2003). It is therefore important to also consider that the specifics of trauma and trauma responses do also vary across time, place and social subgroups and are not open to universal standardization (Hinton & Lewis-Fernandez, 2010; de Jong, Komproe & Van Ommeren, 2003).

2.5 PTSD Prevalence and Co-morbidity

2.5.1 Prevalence of trauma and trauma experiences

The National Comorbidity Survey (1995, cited in Gradus, 2007) had a large representative sample of over 5,000 U.S. adults and presented several prevalence rates of trauma and trauma experiences. It delineated that over 60% of men and 50% of women reported experiencing at least one DSM-III-R traumatic event in their lifetime and over 25% of individuals had experienced more than one traumatic event. The survey also included that the most prevalent events for men were witnessing someone being injured or killed (36%), being involved in a life-threatening accident (25%), and being threatened with a weapon (19%). The most prevalent events for women were slightly different: being in a fire or natural disaster (15%), witnessing someone being injured or killed (14%), being in an accident (14%) and being molested (12%).

2.5.2 Prevalence of PTSD

Most people who experience a traumatic event do not develop PTSD. In fact the majority of research points to individuals as being highly resilient (Southwick & Charney, 2012). Breslau and Kessler (2001) found that 75% of adults have experienced a trauma that would fulfill DSM-IV criteria but only 12% went on to develop PTSD. Similarly, The National Comorbidity Survey (1995, cited in Gradus, 2007) found that while more than half of U.S. adults experience a trauma, about 7% go on to develop PTSD at some point in their lives. However, the prevalence rates may be higher for other groups such as ethnic minority groups (Norris, 1992; Norris, Friedman, Watson, Bryne, Diaz, & Kaniasty, 2002), refugee and asylum seeker populations (Silove, Sinnerbrink, Field, Manicavasagar, & Steel, 1997) and in countries with socio-political unrest, war and conflict. Conversely, prevalence rates may appear lower in certain countries due to differing expressions/reactions to a traumatic event. For example, Jenkin's (1999) study on Salvadoran women following exposure to trauma found that 19 out of 20 women did not engage in avoidance behaviors nor did they experience emotional numbing. Further, the survey found that approximately twice as many women develop PTSD compared to their male counterparts; this is similar to gender differences for depression and other anxiety disorders (Gradus, 2007). Similarly, Kessler et al. (1995) found the risk of PTSD after a traumatic event is 8.1% for men and 20.4% for women. However, once more higher rates are being seen in women, with approximately 20 % of women and 8 % of men

developing PTSD after exposure to a traumatic event (Gradus, 2007). Moreover, young urban populations appear to be at higher risks of PTSD, with an overall risk of 23.6 %; with a 13 % risk for men and 30.2 % for women (National Institute for Clinical Excellence, 2005).

Thus as the National Institute for Clinical Excellence (2005) surmises, while men appear to be inclined to experience more traumatic events than women, women experience higher impact events which are consequently more likely to lead to the development of PTSD (Kessler et al., 1995; Stein et al., 1997).

2.5.3 Prevalence of PTSD in Western and non-Western Countries

Research indicates lifetime prevalence of PTSD do differ from country to country. As previously mentioned, the National Comorbidity Survey (1995) found approximately 7% of U.S. adults develop PTSD at some point in their lives (Gradus, 2007); Javidi and Yadollahie (2012) assert that in New Zealand the lifetime rate for PTSD is 6.1 %; the lifetime rate of PTSD in Canada is estimated at 9.2 % and current PTSD of 2.4%, and estimates for a 12-month prevalence for PTSD was at 1.3% for Australia (Creamer, Burgess & McFarlane, 2001). However, Ferry et al. (2008) estimates that for Northern Ireland, the 12-month prevalence for PTSD in the adult populations was 5.1 % and the estimated lifetime prevalence was 8.8 %. Moreover, they assert that Northern Ireland has the highest level of 12-month PTSD prevalence rate among all comparable studies undertaken across the world, including in other areas of conflict.

Studies have also researched PTSD prevalence rates in non-Western countries. For instance, Wang et al.'s (2009) study on the Sichuan earthquake in China found probable prevalence of PTSD to be 37.8% and 13.0% in two respective communities. Zhang et al.'s (2012) study on the prevalence of PTSD among adolescents after the Wenchuan earthquake in China found rates to be 9.7%, 1.3% and 1.6% at 6, 12 and 18 months following the earthquake. Conversely, Fu et al. (2013) found PTSD prevalence after the Wenchuan earthquake in college students who were in the severely affected area to be 14.1% and rates were still high after one year. In conflict and post-conflict zones PTSD prevalence rates have been found to be higher. For instance, PTSD prevalence rates have been recorded as high as 30 % among ex-political prisoners in Gaza (Gaza Community Mental Health Program, GCMPH, 1996, cited in De Jong, Komproe et al., 2001) and 18 % among civilians in Gaza (a

site of regular tension). In other conflict and post-conflict areas rates have been found to be 37 % in Algeria, 28 % in Cambodia and 16 % in Ethiopia (16%) (De Jong et al., 2001). De Jong et al. (2001) conducted an epidemiological survey between 1997 and 1999 among survivors of war or mass violence. The age range of the participants were not included in demographic data, however, mean age were as follows: 40.6 years for Algeria, 36.3 years for Cambodia, 33.9 years for Ethiopia and 31.6 years for Gaza. Additionally, while it would have been informative, the time since participants were assessed after their index trauma was not measured. Thus, respondents potentially encountering difficulties in recalling events and traumatic experiences that occurred decades ago were mentioned as a limitation of the study. To measure traumas, De Jong et al. (2001) used an adapted version of the Life Events and Social History Questionnaire. In the case for their Cambodian sample, episodes used in the instrument were at the time of the Khmer Rouge regime in addition to the period of the Vietnamese occupation that toppled the regime. De Jong et al. (2001) evaluated PTSD in relation to adverse events from the aforementioned life events. It does however need to be noted that De Jong et al. (2001) assert their study is not a national representative study, as they could not provide nationally representative data. Instead their study indicates the extent of trauma sequelae in selected catchment areas affected by conflict. Thus the generation linked to the Khmer Rouge could well approach trauma differently to the younger generation; further the younger generation could potentially have lower rates of PTSD, however, comparable data between respondents who reported traumas during the Khmer Rouge regime and those living in the more stable period since was not included. Further, some studies, such as that of Sachs, Rosenfield, Lhewa, Rasmussen and Keller (2008), have found that among some refugee groups (e.g. Tibetan), there were low rates of PTSD. These studies demonstrate some cross-cultural variation in PTSD prevalence rates.

2.5.4 Prevalence of PTSD in unique populations

Some individuals are exposed to trauma through their professions, such as combat veterans, ambulance personnel, police officers, firefighters and journalists. These individuals have been found to have differing lifetime prevalence rates of PTSD. For instance in terms of *armed forces,* The National Center for PTSD proposes that the lifetime prevalence of PTSD among male combat veterans is very high at approximately 39 %, with the prevalence rates ranging from 6-12 % in Afghanistan

and 12-20 % in Iraq (Gradus, 2007). If one looks back at the data concerning Vietnam veterans, similar results were found, with lifetime prevalence rates of 30 % (Kulka et al., 1990). Regarding a*mbulance workers*, research demonstrates that this group is consistently exposed to illness, injury and death and rates of PTSD have been found to range from 5.6% - 23% (Bennett, Beck & Clapp, 2005). Bennett, Beck and Clapp (2005) found that PTSD predictors for this group include high organizational stress, greater frequency of traumatic events and spending a longer time in the profession. Studies have found that *police officers* are regularly exposed to those who have been wounded/killed and are present at accidents, involved in shooting another person, and are shot at/assaulted (Maguen et al., 2009; West et al. 2008). Consequently, the group's rates of PTSD range between 8.9 % - 31.9 % (e.g. Asmundson & Stapleton, 2008) with predictors of PTSD involving negative work environment, boredom, discrimination and problems with management/equipment (Maguen et al., 2009). Finally, in the instance of f*irefighters,* research has shown that this group are exposed to a range of traumatic incidents including injury of self or others, accidents, recovering bodies post-disaster, toxins/chemicals, child fatalities and serious accidents, with the latter two being reported as the most stressful (Haslam & Mallon, 2003). Rates of PTSD for this group range between 5 to 16.3 % (e.g. Del Ben, Scotti Chen & Fortson, 2006) and risk factors include witnessing death of a child (Haslam & Mallon, 2003), being of a younger age, second emergency job, greater frequency of life stressors, previous psychological treatment and high aggressiveness and low self efficacy (measured during training) (Del Ben et al., 2006).

2.5.5 Significant predictors of PTSD

Ozer et al. (2003) found predictors for PTSD included prior trauma, prior psychological adjustment, family history of psychopathology, perceived life threat during the trauma, posttrauma social support, peritraumatic emotional responses, and peritraumatic dissociation. Javidi and Yadollahie's (2012) work further asserts that female gender, intensity and nature of exposure to the traumatic event, and lack of social support are risk factors for work-related PTSD. In non-Western countries, Wang et al. (2009) found significant predictors for PTSD symptom severity included female gender, lower educational level, lower social support, and higher initial exposure level. In addition Zhang et al. (2012) assert that depression symptoms, female gender and having siblings to be further predictive factors for PTSD.

2.5.6 Comorbidity

The comorbidity between PTSD and several other disorders is very high. Kessler et al. (1995) propose that there is an 84% rate of comorbidity overall. Javidi and Yadollahie's (2012) puts forth that PTSD has a 9.5% comorbidity rate with panic disorder, 28% with social phobia, 48% with major depressive disorder, 31% with substance abuse/dependency, 40% with alcohol abuse/dependency, 29% with conduct disorder and 9% with mania.

2.6 Economic and Social Costs associated with PTSD

The Rand Corporation's (2008) report place the economic cost of PTSD in the USA at up to US$6 billion over two years. Ferry et al. (2008) found the total estimated costs of resources used and lost among individuals with PTSD in Northern Ireland (direct and indirect costs) were estimated to be £172.8 million over 12 months (2008 prices). The National Institute for Clinical Excellence (2005) report on the United Kingdom states that in 2003–4, social and welfare costs of claims from severe stress and PTSD amounted to £103 million, which was £55 million more than was claimed 5 years previously. Thus, PTSD has an enormous economic cost to society, presenting an economic burden on the patients, their families, health services and society as a whole.

2.7 Development of Cognitive Models of PTSD

Theories of PTSD endeavor to explain the failure of some trauma survivors to successfully cope after experiencing a traumatic stressor and the failure for posttraumatic symptoms to abate amongst a significant minority of individuals exposed to traumatic events (Kessler et al, 1995). Socio-cognitive models delineating the etiology of PTSD have grown in explanatory power since PTSD's inception into the diagnostic canon. Recent studies, using predominately Western samples, identify a number of factors which impede post trauma recovery, maintain post traumatic symptoms and potentially predict the development of ongoing PTSD (see Brewin, Andrews, & Valentine, 2000; Brewin & Holmes, 2003; Ozer et al., 2003, for reviews). Perhaps one of the most widely researched, and prominent features of PTSD, is that of autobiographical memory. Disruptions in autobiographical memory are one of the unique characteristics of PTSD, with hallmark features focusing on the unwanted and intrusive involuntary recollection of the trauma event (see Brewin &

Holmes 2003 for review). Given the prominence of autobiographical memory in PTSD, an increasing body of literature has been investigating the influence of culture on the remembering of trauma and implications for PTSD (e.g. Jobson, 2009).

Other important psychological processes involved in PTSD include cognitive appraisals (Ehlers & Clark, 2000; Kleim, Ehlers, & Glucksman, 2007), self and self-concept (Brewin & Holmes, 2003; Conway, 2005; Dalgleish, 2004), cognitive schemas, motivation and cognitive-affective reactions (see Foa, Ehlers, Clark, Tolin, & Orsillo, 1999 for further details). While this list is by no means exhaustive it highlights several processes involved in the development of cognitive models of PTSD. This thesis will be focusing on two, namely appraisals and self-concept. These two processes are centered upon due to their underlying implications for PTSD development, maintenance and treatment and given that cross-culture psychology literature clearly demonstrates culture to influences both how one perceives their self-concept and how one appraises events (which will be further elucidated in Chapter 3). Appraisals and self-concept are subsequently discussed in relation to current models of PTSD.

2.8 Definition of Appraisals

As defined by DePrince, Chu, and Pineda (2011), and for the purposes of this thesis, trauma appraisals are an individual's assessments of their thoughts, feelings (inclusive of affective states) and behaviors in regards to their trauma exposure. This also includes the assessment of the presence and severity of an affective state resultant due to the trauma event, such as self-blame, fear, anger. Several theorists have proposed that appraisals play a key role in understanding the etiology and maintenance of PTSD (e.g., DePrince, Chu & Annaheen, 2011; Ehlers & Clark, 2000; Foa et al., 1999). The DSM-V (APA, 2013) also highlights the importance of appraisals in criterion D (negative alterations in cognitions/mood), which aims to assess the individual's subjective appraisal of the trauma event. Kleim et al. (2007) also support the importance of cognitive appraisals in PTSD development and found appraisals to be useful in identifying chronic PTSD. In sum, an impressive body of literature now indicates that those with poor posttraumatic psychological adjustment have particular negative appraisals about the trauma and the events following trauma (e.g. Dalgleish, 2004; Ehlers & Clark, 2000),

2.9 Definition of Self-Concept

Self-concept represents one's personhood and acts as the reference point from which all else draws meaning (Combs & Snygg, 1959; Krech & Crutchfield, 1948). It is an active, continuous and changing array of accessible self-knowledge and a framework for the perception and organization of one's life experiences (Markus & Wurf, 1987). Trauma has the potential to shatter an individual's understanding of the self (Janoff-Bulman 1992). Indeed research suggests that trauma causes internal disorganization and disintegration, shattered assumptions and feelings of self-annihilation (Abernathy, 2008) and in so doing disrupts one's continuity which is vital to maintain a coherent self-concept (Erikson, 1980).

Disruptions in identity can affect the self by damaging or altering the self's worth, motivations, goals, sense of security and ultimately self-concept. In order to regain continuity and coherence, research suggests that individuals engage in a schema change to arrive at new understandings of oneself and the world (Abernathy, 2008; Brennam 2001). This schema change allows for the formation of a new sense of self or self-concept which research suggests helps one to overcome trauma (Neimeyer, 2006). Therefore, one's self-concept or identity is not static (Bradley, Calvert, Pitts, & Redman, 2001; McAdams, 1993).

2.10 Cognitive Models of PTSD

2.10.1 Autobiographical Memory and the Self-Memory System (SMS)

Memory functioning has been identified as a significant factor in PTSD, with a bias towards enhanced recall of trauma-related material and difficulties in retrieving autobiographical memories of specific incidents (Williams et al., 2007; see Brewin & Holmes, 2003 for further details). The hallmark symptom of PTSD is the intrusive recollection of autobiographical memories of the trauma which often occur as vivid, highly emotive, sensory-laden flashbacks, reliving experiences, intrusive thoughts and images, and nightmares (Brewin, Dalgleish & Joseph, 1996). Paradoxically, this elevated *involuntary* access to memories of the trauma is often accompanied by compromised *voluntary* access to coherent accounts of what happened during traumatic experiences (Brewin, 2011). Hence, the phenomenological properties of trauma accounts often include being fragmented, temporally disorganized and laden with sensory-perceptual features (Brewin 2011; Brewin et al., 1996; Foa, Molnar, & Cashman, 1995; O'Kearney & Perrott, 2006). These autobiographical memory

difficulties have been found to extend beyond the trauma memory to more global autobiographical remembering. For instance, research has found that those with PTSD have significant difficulties in providing specific autobiographical memories of everyday events (i.e. memories of an event lasting less than one day and occurring at a particular time and place). Instead PTSD sufferers tend to retrieve categoric overgeneral memories (i.e. memories for collections of events) – a phenomenon known as reduced autobiographical memory specificity (AMS) (see Moore & Zoellner, 2007; Williams et al., 2007). Another example of a global autobiographical memory difficulty relates to memories of experiences that reflect and inform one's self-concept (Singer & Salovey, 1993). Research has shown that when asked to provide such self-defining memories, the responses of those with PTSD, when compared to trauma survivors without PTSD, tend to be strongly associated with their trauma experience (Jobson & O'Kearney, 2008a; Sutherland & Bryant, 2005).

Moreover, there is a strong intuitive and theoretical tradition linking autobiographical memory and the self. Conway and Pleydell-Pearce (2000) purport autobiographical memory to be of fundamental significance for the self and for the experience of personhood, and propose that autobiographical memories function as a "resource of the self that could be used to sustain or change aspects of the self" (p.264).

Conway's Self-Memory System (SMS; Conway 2005; Conway & Pleydell-Pearce, 2000) is a conceptual framework that emphasizes this interconnectedness of self and memory. It is a cognitive model of autobiographical memory, which has also been used to account for PTSD, given the prominence of autobiographical memory in this disorder (Conway 2005; Conway & Pleydell-Pearce, 2000). The SMS has two principle components: the autobiographical knowledge base (i.e. a hierarchically arranged database of one's memories), which supports our sense of self, and the working self, which is comprised of a goal hierarchy and motivations, which acts to maintain a stable and coherent set of goals and provides a framework for understanding present experience. This in turn allows for a stable self-image based on the coherence of the goal hierarchy, as information consistent with the contents of the working self is more easily integrated into the autobiographical memory database.

The SMS framework also recognizes a working self-conceptual knowledge base, which regulates autobiographical remembering alongside the working self. The

conceptual self is comprised of abstracted information about self over a longer-term perspective (Conway, 2005). They are representations of socially constructed schema and categories that define the self, others, and typical interactions with others and the surrounding world. These schema and categories are "drawn from the influence of familiar and peer socialization, schooling, religion, as well as the stories, fairy-tales, myths, and media influences that are constitutive of an individual's culture" (Conway, 2005, p. 597). Consequently, the SMS' conceptualization of the self is sympathetic to cultural considerations (i.e. a self which is in part informed by its culture).

The SMS proposes that in the case of trauma, a trauma event has the potential to contradict one's goal hierarchies and in so doing undermines the coherency of the self. Consequently, this violation of current plans and goals does not allow for the integration of the trauma experience with the autobiographical knowledge base and therefore the self is unable to adapt (Conway, 2005). Rather the memory remains un-contextualized event-specific knowledge (Conway, 2005). The fact that the trauma memory remains an un-contextualized experience can account for several of the memory problems associated with PTSD. For instance, this lack of integration gives the memory a sense of "nowness", which research suggests is an important feature of intrusive memories (Kleim, Wallott & Ehlers, 2008) and is associated with "flashbacks" for those with PTSD. Empirical work supports this; trauma survivors with PTSD describe their intrusive memories occurring in the "here and now" to a greater extent than those without PTSD (Ehlers & Clark, 2000). What is more, while intrusive memories are common immediately precipitating traumatic events, neither their presence nor their frequency have been found to be good predictors of PTSD, instead autobiographical memories described with this sense of "nowness" have been found to be more predictive of PTSD (Michael, Ehlers, Halligan, & Clark, 2004).

In sum, the SMS model considers autobiographical memories to be "primarily records of success or failure in goal attainment" (Conway & Pleydell-Pearce, 2000, p. 266). It also proposes that a tension exists between maintaining a correspondence between the self and real life experiences and maintaining a sense of coherence in self across time. If inconsistencies arise due to a trauma event acting as a "threat to current plans and goals" (Conway & Pleydell-Pearce, 2000, p.281) this subsequently renders the working self unable to adapt. Further, it can lead to a lack of integration of the trauma memory and thus the trauma memory remains un-contextualised within the

autobiographical knowledge base/life story. This in turn increases susceptibility to intrusions and other memory problems associated with PTSD (Brewin et al., 1996; Dalgleish & Power, 2004) perpetuating a failure to adapt posttrauma. The trauma memory is therefore poorly elaborated and inadequately integrated into its context in time and place with other autobiographical memories and the conceptual self. Conway and Pleydell-Pearce's (2000) SMS model therefore provides a conceptual bridge linking the large body of research on autobiographical memory retrieval and self. Additionally, Conway (2005) proposes, socialization and culture must play some role in remembering as one's conceptual self is represented in socially constructed schema and categories that define the self. Such assertions make this framework sympathetic to cultural considerations.

2.10.2 Ehlers and Clark's Cognitive Appraisal Model

The prominent cognitive model of PTSD, put forward by Ehlers and Clark (2000), as shown in Figure 1, suggests that PTSD becomes persistent when individuals process the trauma in a way that leads to a sense of serious current threat. One way in which this sense of current threat can arise, is due to excessively negative appraisals of the trauma and/or its sequelae, which can be external (e.g. the world is a more dangerous place) or internal (e.g. a threat to one's view of oneself as a capable/acceptable person who will be able to achieve important life goals); and secondly, disturbance of autobiographical memory. The importance of the role appraisals play in the development and maintenance of PTSD is highlighted throughout this model. Ehlers and Clark (2000) maintain that appraisals of the trauma and its consequences serve to cultivate a sense of continued current threat; this is often accompanied by intrusions, arousal symptoms and other distressing emotional responses. Therefore, the individual is motivated to engage in cognitive and behavioral strategies to reduce perceived threat and distress. Namely, as Figure 1 illustrates, these appraisals maintain PTSD because they directly produce negative emotions, such as anxiety, depression or anger while encouraging individuals to engage in dysfunctional coping strategies which to their detriment have the paradoxical effect of enhancing PTSD symptoms; because while avoidance and safety behavioral strategies reduce distress in the short-term, they maintain the disorder in the long-term by preventing cognitive change.

The two main types of negative appraisals purported by Ehlers and Clark (2000) are that of over-generalization, whereby the individual perceives a range of normal activities to be more dangerous than they are in reality (e.g. avoidance of driving after a car accident), from exaggerations of the probability of occurrence of further catastrophe in general, and from interpretations of the occurrence of the event happening to them and not others (e.g. “bad things always happen to me”). The second is negative appraisals of the way one felt or behaved during the event (e.g. ``I deserve that bad things happen to me"), which can have long-term threatening implications. Other appraisals include one’s interpretation of their PTSD symptoms. For instance, if a trauma survivor does not perceive their symptoms to be part of a normal recovery process it could lead to appraisals of having permanently changed for the worse (e.g. “I am permanently damaged”); while the interpretations of other people’s reactions (e.g. “Others think I cannot cope”) are likely to lead to PTSD symptoms of estrangement from others and social withdrawal.

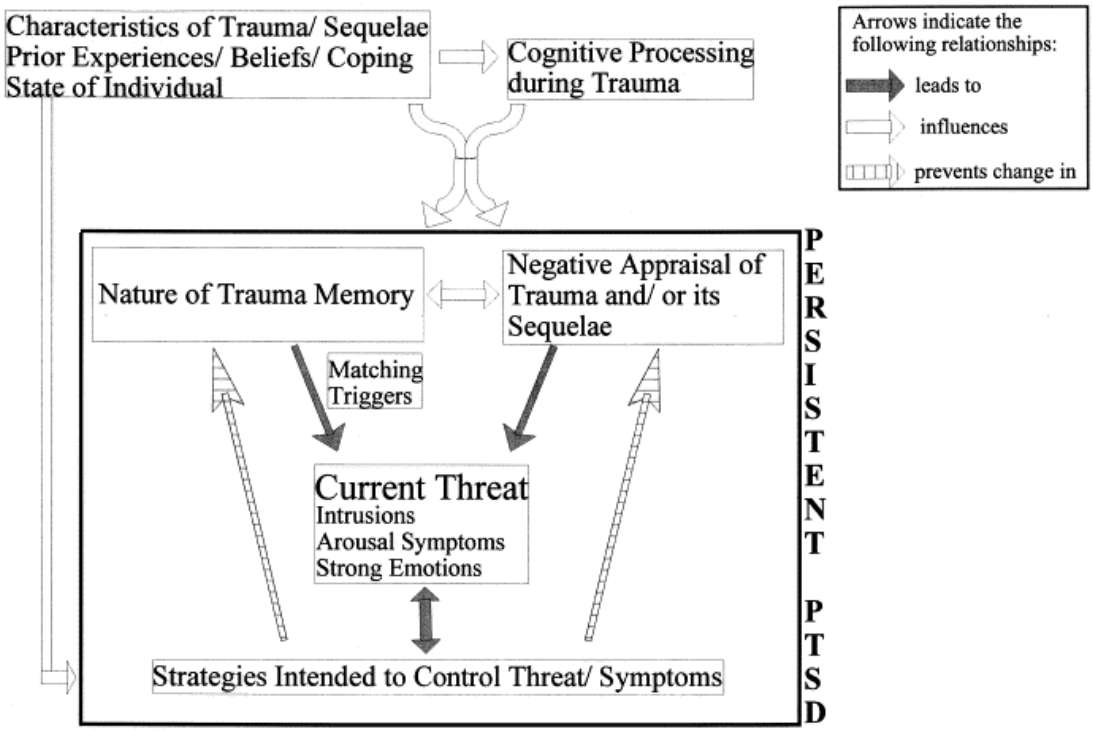

Figure 1: A cognitive model of PTSD. Taken from Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behavior Research and Therapy, 38*(4), 319 -345.

While not the focus of this research, the appraisal model also emphasizes the role of autobiographical memory in PTSD. Specifically, the model proposes that intrusive characteristics and patterns of retrieval characteristic of persistent PTSD (e.g. poor intentional recall, vivid unintentional re-experiencing with 'here and now' quality) is due to the way the trauma is encoded and laid down in memory (Ehlers & Clark, 2000). It is due to this poor encoding during the trauma that individuals are unable to elaborate or incorporate the information in to their autobiographical memory base, which Ehlers and Clark (2000) propose explains problematic intentional recall and the "nowness" quality of the memory. Namely, the trauma memories are experienced as if they were happening in the individual's current time and space rather than from one's past. Therefore, the awareness of remembering that is part of autobiographical memory (remembering oneself in the past in the present) is absent (Ehlers & Clark 2000; Foa & Rothbaum 1998); which only serves to perpetuate this sense of current threat (see Figure 1 and Ehlers & Clark, 2000, for full details). Moreover, a reciprocal relationship between the trauma memory and trauma appraisals is noted. Specifically, when an individual with persistent PTSD recalls the traumatic event, their recall is biased by their appraisals. This in turn results in selective retrieval of information that is consistent with negative appraisals.

In sum, the appraisal model purports PTSD as a resultant of excessively negative appraisals of the trauma and/or sequelae and a disturbance of autobiographical memory which is characterized by poor elaboration, strong associative memory and strong perceptual priming which subsequently go on to produce a sense of serious and current threat. Moreover, throughout the appraisal model the association between the self (i.e. one's understanding of one's self-concept and the manner in which it is at least in part constitutive of an individual's culture) and appraisals are highlighted (e.g. the impact of trauma appraisals on self and subsequent future appraisals concerning self), thereby opening this model up to cultural considerations.

2.10.3 Multiple Self-Representations

Many theorists believe one's self-concept to be a collection of 'multiple selves' (Brewin, 2003; Higgins, 1987; McConnell, 2010). The dual representation theory (DRT, Brewin & Holmes, 2003) elucidates multiple selves to be experienced at different times and in different contexts due to the manner in which they correspond

to structures in long-term memory. DRT proposes there are two or more memory systems that operate in parallel to each other but with the ability for one to take precedent over the other at any time (Brewin & Holmes, 2003). Therefore, one's self is experienced as different self-experiences at different times and in different contexts and therefore creates multiple self-representations or identities, which then compete to be retrieved. These identities provide "a series of high-level frameworks that summarize experiences with the world and with close relationships, and within which specific thoughts, images, or impulses are organized" (Brewin & Holmes, 2003, p.359).

The DRT (Brewin et al., 1996) suggests there are two memory systems that operate in parallel but one system can take precedence over the other at different times. The Situationally Accessible Memory (SAM) system is limited to material that was encoded using lower level perceptual processing of the traumatic scene, such as sights and sounds, and thus, can only be accessed involuntarily through situational reminders of the trauma. The Verbally Accessible Memory (VAM) system includes material that was consciously processed during the traumatic event and can be accessed through voluntary recall and described verbally. Ideally, SAMs are integrated with VAMs to form an elaborate and coherent account of the trauma event. However, under extreme stress the conscious processing that leads to VAMs is impaired resulting in the domination of the SAM system (Brewin et al., 1996). As a result of very little information being encoded in the VAM system, memories of the trauma are repeatedly brought to mind as sensory and emotional fragments. As the SAM system does not use a verbal code, these memories are difficult to voluntarily communicate to others and the memories do not necessarily interact with, and get updated by other autobiographical knowledge (see Figure 2). More recently the VAM system has been referred to as contextual memory (C-memory), which is abstract, contextually bound representations and its representations as C-reps. Similarly, SAMs has more recently been referred to as low-level sensation-based memory (S-memory) and its corresponding representations (S-reps) (see Brewin, Gregory, Lipton, & Burgess, 2010, for further details).

Additionally, when considered in the context of trauma and PTSD, individuals often have common negative identities that perceive the self as powerless, inferior, futureless, namely, vulnerable identities (Brewin, 2003). These negative cognitions are evoked due to difficulties in retrieving positive self-identities or

negative self-identities are reactivated due to the trauma experience, thereby delineating the competition in self-concept retrieval. Therefore, the trauma event can be seen to have power over one's cognitions (views of self and world) and more worryingly, threatening one's sense of self (Brewin, 2003). The exploration of alternative identities is used as a source to reduce and or modify negative cognitions and addressing vulnerable identities. Further, the self-concept of those with PTSD can become fragmented, dominated by thoughts and memories of trauma and altered as a result of the trauma memory becoming the turning point in construction of self-concept and dominating much of a person's mental life (Berntsen & Rubin, 2006; Brewin, 2011).

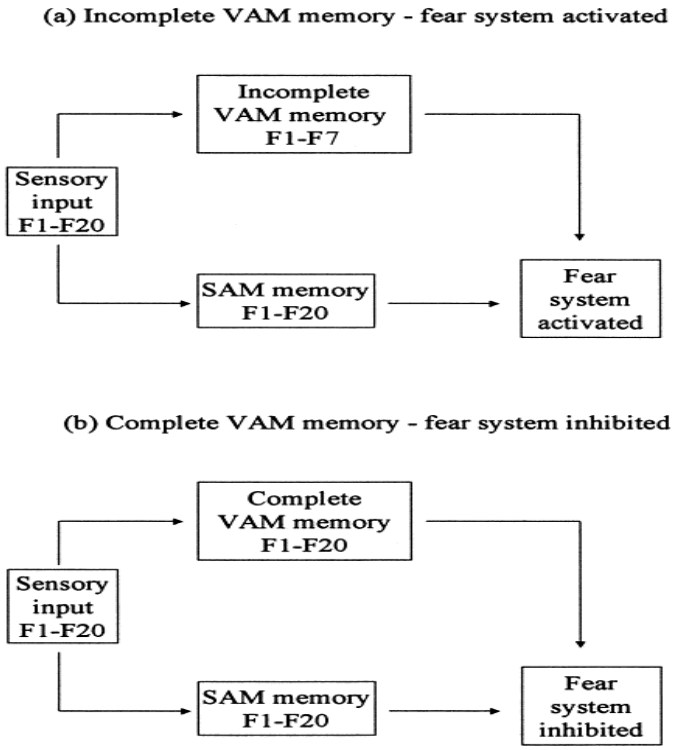

Figure 2. Completeness of verbally accessible memories and activation of the fear system. Taken from Brewin, C. (2001). A cognitive neuroscience account of posttraumatic stress disorder and its treatment. *Behavior Research and Therapy, 39*(4), 373-393.

In sum the DRT (Brewin, 2001; Brewin & Holmes, 2003) proposes, many of the features and details that arise after experiencing a traumatic event (e.g. sounds, smells) are initially retained in the SAM system, as this system represent sensory information and spatial images. The information stored in this system is not

understood or integrated, therefore, cues or stimuli associated with the trauma can therefore activate or prime content in this memory system, resulting in subsequent experiencing of intrusive images and/or flashbacks, both of which are hallmarks of PTSD (Brewin 2001). The VAM system is engaged when the trauma exposed individual endeavors to integrate information relating to the trauma event. Therefore if SAM information is integrated with material that was consciously processed during the traumatic event in the VAM then an elaborate and coherent account of the trauma event can be formed, thereby reducing subsequent maladaptive experiences. Finally, research proposes the self is made up of multiple identities, however, following a trauma negative self-identities (the self as powerless, inferior, futureless) can emerge and have been found to hold clout over one's cognitions. This subsequently affects one's future self-concept, as the self is still perceived to be under threat. The exploration of alternative identities can help redress such vulnerable identities.

2.10.4 The Schematic, propositional, analogue and associative representational systems (SPAARS) model

The SPAARS model put forward by Power and Dalgleish (1997; Dalgleish, 2004) delineates an integrative cognitive model of emotion, in which emotions are described as appraisal-based goal-discrepancy accounts. Traditional models of cognition and emotion present the relationship between the two as a single sequential process (e.g., Schachter & Singer, 1962), as expressed in Figure 3.

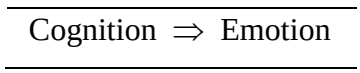

Figure 3. Cognition and Emotion

However, the SPAARS model suggests a more complex multi-level processing system, which has four levels of representation (see Figure 4). *The analogical system* refers to a collection of primarily sensory-specific systems (e.g. vision, hearing, taste, smell, touch), which provide the initial processing of external events that are often emotion provoking. *The associative system* in general operates automatically and outside one's awareness. *The propositional system* represents verbal-linguistic statements (propositions). Finally, the *schematic model system* is the high-level system that is similar to the notion of schema and represents abstract,

generic knowledge. This level of representation refers to the "dynamic and ever-changing models of the self and the world are constructed and which provides overall executive control. In relation to emotion, effortful appraisal of events and situations leads to schematic models that generate emotions; appraisals typically evaluate events and situations in relation to key goals, both personal and interpersonal, with the appraisal outcomes generating different emotions" (Power, 2007, p. 138).

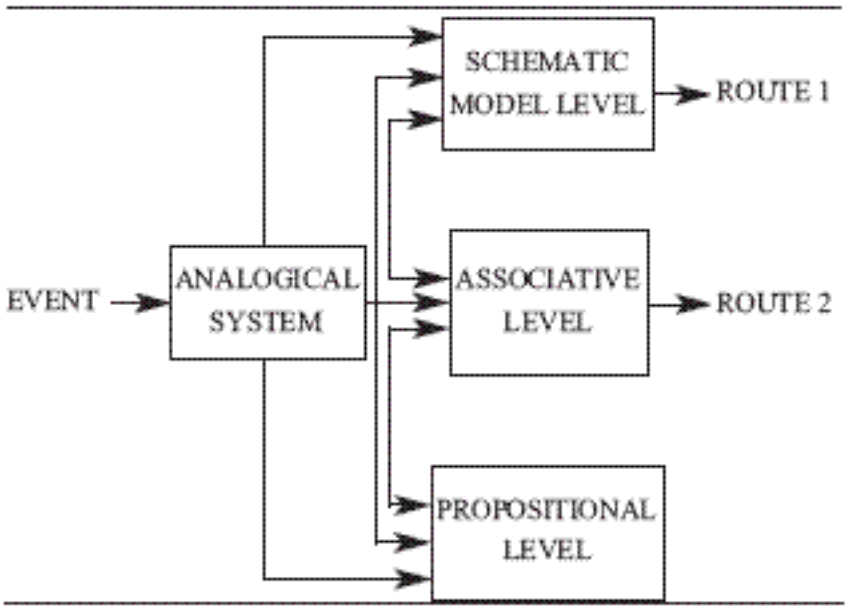

Figure 4. SPAARS model of emotion. Taken from Power, M. J. (2009). Cognitive psychopathology: The role of emotion. *Análise Psicológica, 2*(XXVII), 127-141.

As illustrated in Figure 4, these four proposed systems combine to produce two routes to emotion. The first is the appraisal driven route, in which event and event interpretations are appraised at the schematic level of meaning. For instance, "fear is generated when there is an appraisal of threat because a schema is constructed in working memory, which represents the possible future interpretation or non-completion of a valued goal" (Dalgleish, 2004, p.248). The second proposed route is the automatic route via associative representations. Namely, emotions that are activated without appraisals are a result of "biologically prepared, repeated or overlearned relationships" (Dalgleish, 2004, p249).

When thought of in relation to PTSD, the SPAARS model stresses the importance of the emotional content linked to PTSD. For instance, appraisals of the trauma information produce an intense experience of fear (Dalgleish, 2004). These

chronic activations are believed to configure one's cognitive system to attend to trauma related cues, which are then selectively processed. This in turn re-enforces the sense of current and constant threat. Thus demonstrating one's cognitive system's persistent inability to resolve discrepancies between trauma-related information and pre-existing mental representations (i.e. schemas) based on appraisals. Further, they go on to act as a basis for the disorder (Dalgleish & Power, 2004), because it leads to characteristic symptom patterns of PTSD, such as re-experiencing and avoidance of trauma-related material (Dalgliesh & Power, 2004). In addition to this idea that trauma cannot be assimilated to any preexisting knowledge structures, other theorists have suggested that it may be assimilated to negative schematic models of the self (Dalgleish, 1999; Foa & Rothbaum, 1998), negative beliefs (Ehlers & Clark, 2000), or negative identities (Brewin, 2004), all of which are analogous to PTSD development and maintenance.

2.10.5 Trauma as Central to Self-concept Model

Theorists have posited that trauma can become central to one's self-concept and a trauma-centered self-concept leads to increases in PTSD symptom severity. While somewhat contentious, Berntsen and Rubin (2006, 2007) postulate that the trauma event affects self-knowledge through the violation of an individual's schemata (Berntsen & Rubin, 2007). They theorize, in contrast to the above theories, that the trauma memory is not poorly integrated or fragmented. Instead, they believe the trauma memories are distinct, emotionally charged, and due to enhanced integration are highly accessible and act as cognitive reference points for the organization of other autobiographical memories. This in turn can potentially go on to effect interpretations of future non-traumatic experiences and future expectations (Berntsen & Rubin, 2007; Smeets et al., 2010). Namely, the trauma event becomes highly salient to the individual's life script and acts as a major causal event on which to base future interpretations, thereby subverting self-concept and maintaining a trauma centered self-concept. This account is also reflective of Ehlers and Clark's (2000) conception of a continued perceived sense of current threat. Evidence to support enhanced integration of trauma memories was further investigated by Bernsten and Rubin (2006) to examine their previous claims. They went on to developed the Centrality of Event Scale (CES), which measures the extent to which one's traumatic memory forms as a central component of their self-concept. This measure advocates

enhanced integration of the trauma memory to one's self-concept and has increasingly been used by researchers to assess the influence of trauma on self-concept (e.g., Robinaugh & McNally, 2011). These studies have reported positive associations between CES scores and PTSD symptom severity in undergraduate students (e.g., Berntsen & Rubin, 2006, 2007; Robinaugh & McNally, 2010) combat veterans (Brown, Antonius, Kramer, Root, & Hirst, 2010) and women reporting a history of childhood sexual abuse (Robinaugh & McNally, 2011). Other studies using other methodologies, such as self-defining memory tasks (i.e. participants are asked to provide memories that they remember very clearly, is important to them and engender strong feelings) have demonstrated how useful this method can be. As Blagov and Singer (2004) assert, people use important memories as a reference to cogitate about current situations or goals. Further, self-defining memories have a tendency to contain meaningful content, and demonstrate what kinds of situations or events a person is inclined to avoid or attain. Sutherland and Bryant's (2005) study on self-defining memory in PTSD used this methodology and found those with PTSD had greater trauma-centered self-definition. Specifically, individuals with PTSD were more likely to recall trauma-related memories than individuals without PTSD. Further, holding trauma-related goals was an independent predictor of recalling trauma-related memories. Jobson and O'Kearney's (2008) study investigating cultural differences in goals, self-defining memories, and self-cognitions in those with and PTSD found similar results. In their study, trauma survivors with PTSD from independent cultures reported more goals, self-defining memories, and self-cognitions that were trauma-related than those with PTSD. Collectively, these studies suggest that a trauma-centered self-concept is associated with PTSD symptoms.

To summarize, evidence suggests that trauma can potentially become central to self-concept and inform one's self-concept, in turn this has been found to be positively correlated with PTSD symptoms (Rubin, 2005). Further, Berntsen and Rubin (2006) assert that the recollections of emotionally charged memories [e.g. trauma memories] are potentially shaped by culture. Indeed, they insist that theories of autobiographical memory minimize the impact of culture on the content and structure of autobiographical memory, when instead they should be looking to culture to help further inform theories of autobiographical memory. Subsequently, their approach is clearly drawn into the cultural sphere due to their inclusion of self-

concept, life scripts and cultural expectations in regards to self-concept and in the development and/or maintenance of PTSD.

2.10.6 Summary of Cognitive Models

The models delineated above are internally sound and account for much of the phenomena observed in PTSD. Conway's (2005) SMS models proposes the self and memory are interconnected. Within this framework the working self (conceived as a complex set of active goals and associated self-images) has a reciprocal relationship with long-term memory. However, threats to current plans and goals (i.e. the self) can lead to the working self not adapting, this in turn potentially leads to a lack of integration, remaining as un-contextualized within the autobiographical knowledge base/life story. This in turn increases susceptibility to intrusions and other memory problems associated with PTSD. Ehlers and Clark's (2000) model proposes PTSD becomes persistent when individuals process the trauma in a way that leads to a sense of serious and current threat. Further, this sense of threat arises as a consequence of excessively negative appraisals of the trauma and/or its sequelae and a disturbance of autobiographical memory characterized by poor elaboration and contextualization, strong associative memory and strong perceptual priming. These dysfunctional and negative appraisals and dysfunctional trauma memories consequently influence problematic behavioral and cognitive strategies, which are the underlying factors for PTSD development and maintenance. In Dalgleish's (2004) SPAARS model emotions are described as appraisal-based goals-discrepancies and there are two routes for the generation of these emotions; an appraisals driven route and a direct route in which the appraisals have become automatized. Thus the SPAARS model serves as a useful approach for understanding the affective deficits in various disorders, such as in PTSD.

Brewin's (2003) model focuses on DRT and elucidates multiple selves to be experienced at different times and contexts due to the manner in which they correspond to structures in long term memory. The model accounts for the unsuccessful adaption of trauma by emphasizing its relation to trauma processing in memory, namely the trauma gives rise to two memory systems, the SAM and VAM. However, when under extreme stress, such as during a trauma, inhibited processing can occur, which gives rise to PTSD phenomena such as reliving experiences. Whilst Berntsen and Rubin's (2006, 2007) model proposes that trauma can become integral

to self-concept, and this trauma centrality is associated with PTSD symptoms. Overall, Berntsen and Rubin's (2006, 2007) and Brewin's (2003) approaches are predicated on self-concept, social roles and life scripts, all of which implicate the self (which in turn is influenced by culture) in the development and maintenance of PTSD, consequently drawing their models into the cultural sphere. Additionally, Conway's (2005), Ehlers and Clark's (2000) and Dalgleish's (2004) models all center around and implicate the self (via memories, appraisals and emotions), thereby also drawing these models in to the cultural sphere.

2.11 Empirical evidence relevant to Appraisals and Self-concept

Here we review the current evidence relating to the role of cognitive appraisals and self-concept, given their centrality in this thesis and in PTSD development and maintenance.

2.11.1 Appraisals

The importance of the role of negative appraisals in PTSD has been well substantiated. There is a large body of evidence showing that the way in which an individual appraises events posttrauma has significant implications for their mental health (e.g. Bryant & Guthrie, 2005; Ehlers & Steil, 1995; Foa & Riggs, 1993). For instance, Dunmore, Clark, and Ehlers (2001) investigated negative appraisals of the traumatic event and negative appraisals of the sequelae of the trauma. They found cognitive variables that significantly predicted PTSD severity at both follow-ups were: cognitive processing style during assault (mental defeat, mental confusion, detachment); appraisal of assault sequelae (appraisal of symptoms, perceived negative responses of others, permanent change); negative beliefs about self and world; and maladaptive control strategies (avoidance/safety seeking). Further, relationships between early appraisals, control strategies, and processing styles and subsequent PTSD severity remained significant after statistically controlling for gender and perceived assault severity.

Further work on negative trauma-related cognitive appraisals has found appraisals referring to the self, world and self-blame (as indexed by the Posttraumatic Cognitions Inventory; PTCI, Foa et al., 1999) have been established as being significantly related to PTSD symptom severity and in predicting chronic PTSD (e.g. Agar, Kennedy, & Kind, 2006; Beck et al., 2004; Kleim et al., 2007). Additionally,

other work on negative appraisals has also found a relationship with PTSD severity, such as negative appraisal of actions (Foa, Rothbaum, Riggs & Murdock, 1991; Frazier & Schauben, 1994;) negative appraisals of PTSD symptoms (Clohessy & Ehlers, 1999; Dunmore et al., 1997; Ehlers et al., 1998; Ehlers & Steil, 1995; Steil & Ehlers, 2000) and negative perception of other's responses (Davis, Brickman, & Baker, 1991; Dunmore et al., 1997, 1999). These empirical findings have much bearing on PTSD definition and diagnoses and treatment plans, their application in redressing PTSD symptoms are discussed below under the Clinical Implications heading (section, 2.12).

2.11.2 Self-concept

A number of studies have investigated the relationship between self-concept posttrauma and PTSD (e.g. Brennan, 2001; Brewin, 2011; Janoff-Bulman, 1992). These studies have found self-concept to be of significant importance to psychological well-being. The trauma event acts as a catalyst for a re-defining or re-evaluating one's self-concept, as one is prompted to make sense of the experience. Finding meaning in an otherwise incomprehensible situation potentially leads to a possible schema change, and in so doing, one's possible selves are subject to change and potentially result in a new or discrepant self-concept (Brewin, 2011). Western psychological theories purport such inconsistencies and discrepancies in self-concept (i.e. a fractured or incongruent self) have been linked with various forms of psychological maladjustment (Brewin, 2011; Higgins, 1996; Strauman & Higgins, 1987; Sutherland & Bryant, 2008).

Other work demonstrates trauma can have a negative impact on self-concept; specifically for some trauma survivors, self-concept can become trauma-centered. These alterations have been found to be associated with disrupted posttraumatic psychological adjustment (e.g. Berntsen & Rubin, 2006, 2007). Groleau, Calhoun, Cann and Tedeschi's (2013) study examined the contribution of centrality of event to the development of posttraumatic distress and found the centrality of the event to be a unique predictor. Brown, Antonius, Kramer, Root and Hirst (2010) support this assertion, professing research to have demonstrated that the extent to which an individual integrates a traumatic event into their self-concept (i.e. trauma centrality) is associated with PTSD and PTSD symptom severity. Their study investigated the role of trauma centrality in PTSD in a sample of veterans returning from Iraq and

Afghanistan. Brown et al (2010) found that even in a sample of individuals exposed to combat stress, trauma centrality (using the abridged CES) did indeed predicted PTSD symptoms. Indeed, since its inception, progressively more researchers are using Berntsen and Rubin's (2006) CES to examine the impact of trauma as a central aspect of one's self-concept. These studies have found CES scores for traumatic events to be positively associated with PTSD symptom severity among undergraduates (e.g., Berntsen & Rubin, 2006, 2007; Robinaugh & McNally, 2010) among combat veterans (Brown et al., 2010) and in adult survivors of childhood sexual abuse (Robinaugh & McNally, 2011). Ogle, Rubin, Berntsen & Seigler (2013) examined the frequency and impact of exposure to potentially traumatic events in a nonclinical sample of older adults. In their sample approximately 90% of participants experienced one or more potentially traumatic events. When these events occurred with greater frequency early in the life course, they were associated with more severe PTSD symptoms compared to events that occurred with greater frequency during later decades. Thereby suggesting that trauma does become central to self-concept and identity, especially when they occur early in life.

2.12 Clinical Implications

The socio-cultural models of PTSD have guided current clinical practice. Generally, the models (e.g. Conway, 2005; Ehlers & Clark, 2000) predict that positive adaption to trauma should involve the development of conceptual associations between appraisals of the event, autobiographical memory of the event and current self-concept. As illustrated throughout the models of PTSD cited above, a core treatment mechanism is the change in dysfunctional appraisals of the trauma and its aftermath. Namely, contemporary clinical theories propose cognitive restructuring to modify catastrophic appraisals about current threat and future harm (using cognitive behavior therapy) is critical for positive outcome when treating people with disrupted adjustment following trauma. This often involves targeting the coping strategies developed in response to the trauma experience that can extend and/or worsen the symptoms. Additionally, exposure therapy is also used to lessen the fear (and therefore fear appraisals) about the trauma memory. In addition, it helps individuals to understand their thoughts about the trauma in respect to their self-image, self-concept and goals. Thereby facilitating the integration of the trauma memory, subsequent trauma appraisals and posttrauma self-concept into existing self-knowledge (Hembree

& Foa, 2004). This facilitation can also be achieved through cognitive therapy using self-schema work, to aid in the reintegration of a healthy self-concept/posttrauma self-concept. This aspect of cognitive therapy aims to address traumatized identities and "vulnerable identities" such as the self being powerless, inferior, nonexistent and futureless (Brewin, 2003). It works to integrate the individual's current view of the self following trauma such as "I am a victim" or "I am damaged" with pre-trauma views and their life story.

Furthermore, Herman (1992) proposed the core experiences of psychological trauma were disempowerment (i.e. a loss of autonomy) and disconnection from others (i.e. loss of relatedness/interdependence). Treatment, therefore, is based upon the empowerment of the survivor, "She must be the author of her own recovery." (Herman, 1992, p. 133) and assisting the survivor to make new connections/relationships. Thus the role of significant others is brought to light and their role is to help the survivor in rebuilding their former and positive self. Monson, Rodriguez and Warner (2004) second this and propose interpersonal relationship functioning has been implicated in the development, maintenance, and possibly the amelioration of PTSD. For instance, Ehlers, Maercker and Boos (2000) find this interpersonal support assists the trauma survivor in correcting negative beliefs about themselves and others. While Brewin, Andres and Valentine (2000) have also found social support to be one of the more robust and consistent factors predicting the development of PTSD. Hence there appears to be a clinical emphasis on increasing autonomy in trauma survivors and a secondary focus on the role of relatedness and interpersonal relationships in the treatment of maladjustment following trauma.

2.13 Overall Chapter Summary

Since the emergence of PTSD into the DSM-III (1980) there has been a wealth of research and findings delving in to its etiology, maintenance and treatment. Answers are needed to help alleviate the burden and cost generated by PTSD, as research has demonstrated PTSD is of great economical, social and emotional burden to sufferers, their families and national health systems.

Braquehais and Sher (2010) report that while many of the signs and symptoms of PTSD are universal patterns of post-traumatic distress, there still remain culture-specific expressions of this distress which could account for differences in PTSD prevalence rates from country to country (e.g., Braquehais & Sher, 2010; Pham,

Weinstein & Longman, 2004). Thus, whilst there is increasing recognition that PTSD is observed in many different societies and cultures (Foa, Keane, Friedman & Cohen, 2009; Jobson, 2009), it remains relatively unknown as to whether the processes involved in its development and maintenance are culturally similar or distinct.

The cognitive models delineated above inform current understandings of PTSD and indicates that PTSD becomes persistent when the trauma is processed in a way that leads individuals to believe the threat is serious and current. One way in which this sense of current threat can arise is due to excessively negative appraisals of the trauma and/or its sequelae, which can be external (e.g. the world is a more dangerous place) or internal (e.g. a threat to one's view of oneself as a capable/acceptable person who will be able to achieve important life goals) (Ehlers & Clark, 2000). Other risk factors for developing and maintaining PTSD are tied to a fracturing or discrepant self-concept, which can lead to incongruent and maladaptive cognitions that in turn reinforce a traumatized self and disrupted sense of self-concept. While not the focus of this thesis, it is important to note there are several other influencing factors pertaining to the development and maintenance of PTSD including disruption to one's motivations and goals, disturbance of autobiographical memory and dysfunctional schemas/core beliefs.

PTSD as a construct has been criticized, however, it needs to be noted that it has been found to be useful in guiding the treatment of traumatized individuals (Hunt, 2010). Yet, while models of PTSD do account for much of the phenomena observed in the disorder, each model discussed above has resolute links to the self, yet they have stopped short of considering the theory of self-construal (discussed in Chapter 3) and its cultural implications. Therefore, considering a cross-cultural and intercultural approach is needed to better understand how PTSD manifests, especially if this construct is to be applied in a global setting.

Chapter 3
Culture, the Self and PTSD

"If we see from Buddhist point of view, then we Tibetans are suffering because of our collective bad karmas which we had done. Otherwise there are no reasons why should we suffer so much in our life. So, I accept whatever happens in my life as results of my past karmas. One cannot do anything about it."

(Hussain & Bhushan, 2010, p. 528**)**

In the ever growing face of globalization the impact and influence of culture and cultural diversity is of increasing importance for cross-cultural and trauma psychology. This is of particular importance because culture can mediate responses to situations, including traumatic ones. Further, as Hussain (2001) asserts, the very essence of what is considered traumatic experiences can vary across cultures. Additionally, in the aftermath of trauma meaning making processes are shaped by preexisting cultural factors (e.g. values, norms, mores, religious interpretations) which can result in culture specific disorders and culturally weighted symptoms (Hussain, 2007).

As previously outlined in Chapter 2, many have criticized PTSD, asserting that its global construct is problematic due to potential cultural differences in symptom meaning (Bracken, Giller & Summerfield, 1995), psychological resilience and vulnerability (Hussain & Bhushan, 2010). Despite this, accumulating research is continually demonstrating that PTSD is observed in many societies and cultures (Jobson, 2009). Therefore, the construct of PTSD may provide a useful way to investigate psychological maladjustment in trauma survivors universally and consequently, there is a need to improve our understanding of the role of culture in development, maintenance and treatment of the disorder (Foa et al., 2009).

It is with this in mind that Chapter 3 will outline the place of culture in trauma studies and its influence on psychological well-being, specifically in relation to PTSD. The chapter draws upon prominent theories of cultural variation in self-construal and their impact on the concepts fundamental to current socio-cognitive models of PTSD; paying particular attention to appraisals and self-concept. Thus the

links between these concepts and cultural differences in self will be drawn upon to transport the PTSD models into the cultural sphere.

3.1 What is culture?

Culture, as operationalized in this thesis, is a "group's characteristic way of perceiving its social environment" (Triandis, Malpass, & Davidson, 1972, p. 3), which includes the group's particular array of shared beliefs, norms, and values which are pronounced and apparent in one's everyday social practices. One's culture can be seen as products of past behavior in addition to shaping future behavior; thus culture is both a product and shaper of human behavior (Segall, Dasen, Berry, & Poortinga, 1999).

3.2 Cultural Models of Variations in Self-Construal

There are a number of prominent theories of cultural variation in self-construal. All pertain to a marked divergence in the manner in which individuals view and understand the self, others and world around them, and the interactions between these three variables. Markus and Kitayama (1991) argue that the manner in which we think, feel and act make up an individual's construal of the self and this in turn is influenced by culture. Thus, culture affects how we construe our self-concept and subsequently this self-construal influences our subjective experience in various domains. For instance, research demonstrates that members of different cultures vary in their social cognition and basic social psychological processes, such as value orientation, attitudes, attitude-behavior relations, person perception and attribution of observed behavior (Cheng 2009; Kuhnen & Haberstroh, 2004; Suh, Diener & Updergraff, 2008). These differences can lead to disparities between the two cultures in perception, attention and in high-level social cognition such as self-representation (Zhu & Han, 2008).

3.2.1 Hofstede's Model of Cultural Dimensions

Perhaps the most commonly used dimension in explanations of cross-cultural differences in behavior is the individualism-collectivism dimension, put forth by Hofstede (1980). This cultural dimension proposes *Individualism* reflects the extent that people emphasize personal goals, while *Collectivism* is instead giving preference to in-group goals over individual goals.

Based on a large body of research, Hofstede (1980; Hofstede & Hofstede, 2004) ranked societies on this individualism-collectivism dimension. Whereby those societies (e.g. Western European) high in individualism were ranked as such due to dominant indications of individuality, independence and autonomy. Conversely, societies low in individualism (therefore high in collectivism) (e.g., Asian, African, Middle Eastern) were ranked as such due to emphasis on interconnectedness with others and relatedness (Hofstede & Hofstede, 2004). This construct has been measured in several ways and has been used to describe, explain and predict differences in attitudes, values, behaviors and cognitions and self-concept (Hofstede, 1980) (for a further overview, see Oyserman, Coon, & Kemmelmeier, 2002).

Typically, individualist traits characterize those from a Western context (e.g. United Kingdom, North America, Australia), whilst collectivistic traits characterize individuals from non-Western contexts (e.g. Asian, South American, African). The typical characteristics and attributes of individualistic cultures are based on autonomy, self-reliance, uniqueness, achievement orientation and competition, having control and taking responsibility for one's actions (Green, Deschamps & Pez, 2005). Conversely collectivistic attributes are associated with a sense of duty toward one's group, interdependence with others, a desire for social harmony, and conformity with group norms (Green et al., 2005). Thus demonstrating behavior and attitudes of those from collectivist cultures are determined by norms or demands of the in-group (i.e. those of the family/community). Although there have been many critiques of Hofstede's work (see Smith, Dugan, & Trompenaars, 1996, for summaries of critiques), there is general agreement that the dimensions he proposed hold.

3.2.2 Allocentrism vs. Idiocentrism

Triandis and colleagues (Triandis, 2001; Triandis & Gelfand, 1998; Triandis & Suh, 2002) put forth that cultures differ in levels of cooperation, competition, or individualism; and at the psychological level they posit these differences are reflected in a personality dimension, which they termed *allocentrism* versus *idiocentrism.* These dimensions pertain to groups being distinguished based on individualist and collectivist values. *Idiocentricism* places importance on independence, competition, and superiority, whilst *allocentricism* places value on interdependence, in-group harmony, and solidarity. Subsequently, research proposes that relational aspects of self-view are salient to allocentric individuals, whilst independent aspects of self-view

are salient to idiocentric individuals (Triandis, Chan, Bhawuk, Iwao, & Sinha, 1995). However, within a culture, individuals vary in the degree to which they define themselves as being separate from or connected with others (Matsumoto, Weissman, Preston, Brown, & Kupperbusch, 1997). Therefore, individual differences in allocentrism and idiocentrism would occur in the same manner as with the individualism/collectivism dimension (Triandis, Leung, Villareal, & Clack, 1985).

3.2.3 Markus and Kitayama's Self-Construal Theory

It was Markus and Kitayama (1991) who put forth the theory of self-construal; the notion that pertains to cultural differences in self. In particular, their theory differentiates between two fundamentally differing perspectives on the self, namely, an independence vs. interdependence self-construal. An independent or individualistic self-construal places the self as being perceived to be fundamentally different from others, whereby emphasis is placed on attending to the self and the appreciation of one's difference from others. Thus, important features of an independent self-construal are centered on one's autonomous features (e.g. traits, abilities and personal attitudes) and the self is conceived as unique, independent and self-contained. Moreover, the self behaves in a manner that is consistent with these internal attributes and is therefore seen as being detached from the social context; this type of self-definition is most prominent in Western, individualistic societies (Markus & Kitayama, 1991, 1994, 2010), where the normative imperative is to be independent from others and to discover and express one's unique attributes. This view of the self gives rise to processes such as 'self-actualization', 'realizing oneself' and 'developing one's distinct potential'. The Western, independent view of the self is illustrated in Figure 5. Expressed in this figure, the large circle represents the self and the smaller circles represents specific others, which are separate and outside the self.

Conversely, an interdependent self-construal is a typical perspective for those from collectivistic cultures such as East Asia. This self-definition places emphasis on attending to and fitting in with one's culture/social context, inter-connectedness of the self with others and the importance of harmony and interdependence with others. Thus, key features of this interdependent self perspective refers to one's social roles, group memberships and personal relations to important others (Kuhnen & Haberstroh, 2004). Experiencing interdependence requires perceiving oneself to be part of an inclusive and encompassing social relationship in which behavior is determined,

contingent on, and to a large extent organized by, the perceived thoughts, feelings and actions of others in this relationship (Markus & Kitayama, 1991) in order to achieve the normative imperative of maintaining this interdependence among individuals. Thus from the perspective of this construal, the self takes on meaning when it is cast in the appropriate social relationship; unlike the independent self, this self-construal motivates individuals to find a way to fit in with others, fulfill and create obligations and in general to become part of various interpersonal relationships, thus becoming more interdependent and highlighting the more public aspects of the self. Additionally, while this self-construal also possess internal attributes such as traits, opinions and personality characteristics, they are understood as situation specific and are unlikely to assume a powerful role in regulating overt behavior. The interdependent self is illustrated in Figure 5 which expresses that it cannot be characterized as a bounded whole.

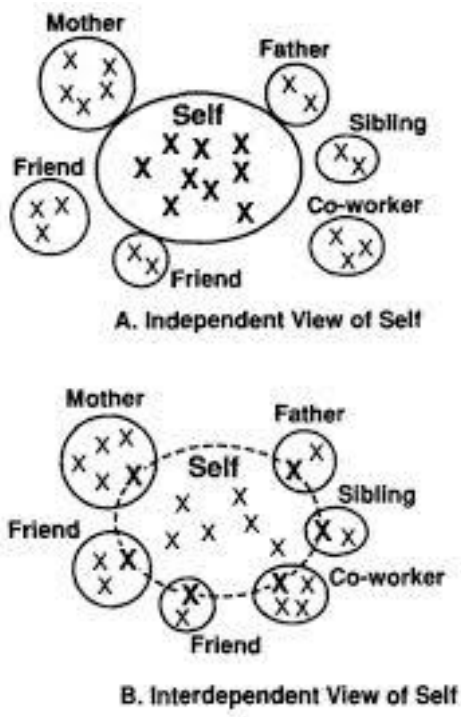

Figure 5. Independent and Interdependent Self-Construal. Taken from Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98,* 224–253.

In addition to differences in definition, other key differences between an independent and an interdependent self-construal pertain to its structure, important

features, tasks, role of others and basis of self-esteem. Markus and Kitayama (1991) propose that the structure of an independent self is bounded, unitary and stable, while an interdependent self is flexible and variable, able to change structure depending on the nature of the particular social context. Important features of the independent self are internal and private aspects of the self (e.g. abilities, thoughts, feelings), while external and public aspects of self are important for the interdependent self (e.g. statuses, roles, relationships). The tasks of the independent self are to be unique, expresses the self, realizing internal attributes, promoting own goals and being direct, such as stating what is on one's mind. Conversely, tasks of the interdependent self are belonging, fitting in, occupying one's proper place, engaging in appropriate actions and promoting others' goals and being indirect, such as reading or preempting what is on others' mind. The role of others for the independent self is self-evaluation, namely, others are important for self-evaluation, social comparison and reflected appraisals; while for the interdependent self self-definition is based on relationship with others in specific contexts. The basis for self-esteem for the independent self is the ability to express the self and validate internal attributes, while for the interdependent self it is the ability to adjust, restrain the self and maintain harmony with the social context. There is a large body of research holding that individuals from different cultures hold divergent views regarding the self, however, Markus and Kitayama (1991) propose that these differences are pronounced and that these construal between self, others and the relationship between the two are powerful and clearly influenced by differences amongst cultures. Thus when a psychological process implicates the self (such as those outline in the PTSD models), the degree to which one emphasizes either independence or interdependence in their self-concept will affect the outcome (Kuhnen & Haberstroh, 2004). Furthermore, Markus and Kitayama (1991, 1994) argue that a person's sense of the self is influenced by his or her cultural background and influences in turn how the person thinks, feels and acts. Thus self-construal can affect core conceptions, salient identities, self-schema and appraisals; these representations govern behavior and individual experiences, including cognitions, emotion and motivation.

3.2.4 Sato's Self-Organization Theory

Sato (2001) proposed that there are two basic systems of self-organization. Much like Markus and Kitayama, he too groups these two components of the self into

two similar categories, autonomy (independence) and relatedness (interdependence), which he proposes are essential to a person's well-being regardless of their cultural or societal allocation. Autonomy, as put forth by Sato (2001), is characterized as the sense of competence, control, achievement, or agency. This aspect of the self is focused on control over one's environment and bodily functioning and serves to enhance well-being or sense of self-worth. Subsequently, relatedness is characterized as the sense of being "at one with others," of communion or affiliation (i.e. group to which the individuals perceived they belong to/with). Additionally, if the individual feels this connection to the group and its members, it then becomes essential to belong to this group for the individual's well-being.

In this model, individuals are motivated to achieve both systems of self-organization. When these systems of self-organization are coordinated effectively, the individual is able to understand and behave in accordance with achieving feelings of both autonomy and relatedness, which leads to a sense of well-being (Sato, 2001). Further, Sato (2001) proposes that despite all individuals holding both sets of self-systems, autonomy is the most emphasized in individualistic cultures. In addition those in individualistic (primarily Western) cultures require high levels of autonomy and moderate levels of relatedness to maintain mental health. In contrast, relatedness is emphasized in collectivistic cultures (primarily East Asian), with individuals in these cultures requiring high levels of relatedness and moderate levels of autonomy to maintain mental health. Thereby demonstrating the degree of autonomy and relatedness required to maintain mental health in a specific society is affected by cultural mores.

3.2.5 Suh's Theory of Self-Consistency

As stated above, research demonstrates that all individuals have multiple views of themselves. However, the question arises: do all these views need to be consistent? Is self-consistency (i.e. maintaining a consistent sense of self across time and context) important to everyone? This is the line of enquiry that Suh (2000, 2002) adopted when developing the theory of self-consistency. Ingrained in social psychological research is the premise that individuals strive to resolve inconsistencies which have subsequent effect on mental health. However, Suh (2000, 2002) theorized that this emphasis on an internally coherent self-concept is essential to psychological

well-being in individualistic societies but not in collectivistic societies where consistency among the different aspects of self-concept is not emphasized. Instead "multiple selves" are often viewed as coexisting realities for these cultures.

Suh (2002) draws upon well-established theories of a stable, consistent self as a staple of mental health for individuals from individualistic cultures. He details how well a consistent sense of self ingratiates with the cultural beliefs of individualistic cultures, namely, holding absolute autonomy of oneself as an individual. He further suggests that the individual integrates various components of the self, is consistent across situations and allays or realigns information that is inconsistent with a congruent self view. This demonstrates a highly self-centered cultural scheme (i.e. the self is the principal source of personal meaning and guidance). It is not surprising then that in such cultures, self-consistency has been found to be associated with maintaining well-being (Heine & Lehman,1999). This is evidenced in many of the PTSD models (e.g. Berntsen & Rubin, 2006, 2007; Brewin, 2002; Conway, 2005) outlined in Chapter 2. Namely, the traumatic experiences, such as anxiety, tension and PTSD originate from a lack of consistency among self-concepts. However, central to the self-consistency theory, is that the notion that the importance of self-consistency and its relevance for well-being does not hold true for those in collectivistic cultures who instead emphasize interpersonal harmony and therefore are guided by situational forces; thereby calling for a self-system that is relatively malleable and highly context sensitive (Cousins, 1989; Kitayama & Markus, 1999). Thus the belief that behavior should be consistent with internal thoughts is less salient in these cultures, demonstrating the collectivistic self to have a high tolerance for inconsistencies. Indeed a rigidly held self-consistent view is perceived to be immature or arrogant within these cultures due to the value they place on variations in self when engaging with various self-relevant groups (e.g. family, friends, work). Thus self-consistency is weighted differently across cultures, due to differences in self-beliefs, social context, and the relationship between the two. As previously denoted, individualistic cultures, view the self to be autonomous, distinct, and self-sufficient (Fiske, Kitayama, Markus, & Nisbett, 1998; Markus & Kitayama, 1991). Conversely, collectivistic cultural selfhood is augmented through feelings of connectedness with significant others (King & Bond, 1985), namely the self is a social product.

3.2.6 Higgins' Self-Discrepancy Theory

Higgins' influential self-discrepancy theory (1987) argues that the self can be divided into three domains, the 'Actual self' (representation of the attributes that one believes they actually possess and is one's basic self concept), the 'Ideal self' (representation of the attributes that someone would like to possess) and 'Ought self' (representation of the attributes that someone believes they should or ought to possess such as duty, obligations and responsibilities). When these domains are discrepant from one another negative affect can occur (e.g. Strauman, 1990; Strauman & Higgins, 1987). Furthermore research has found that discrepancies within these domains and the significance of these discrepancies differ across cultures. For instance East Asians have been found to have a more flexible self-concept than their Western counterparts and are more tolerant of apparent contradictions in self-concept (Choi & Choi, 2002). It is not surprising then that research has found that those from collectivistic cultures have higher self-discrepancy scores than those from an individualistic culture (Cukur, 2002).

Moreover, this tolerance for self-discrepancy and for inconsistencies as denoted by Suh (2000, 2002) has also been documented in various other psychological domains. For instance, research has found East Asians to be less disturbed by cognitively dissonant situations (Heine & Lehman, 1997), they are less likely to believe their behavior needs to align with private attitudes, are able to accommodate oppositional emotions simultaneously (e.g. happy and sad) (Schimmack, Oishi & Diener, 2002) in addition to being less critical of incongruent acts displayed between private and public situations (Fu, Lee, Cameron, & Xu, 2001). This tolerance in thinking provides further convincing evidence that East Asians have a very different self-concept than those individuals in the West.

3.2.7 Dialectic Self-Concept and Dialectic Thinking

Further work on the differences in self-concept and cognitive thinking was outlined in Peng and Nisbett's (1999) seminal paper on cultural differences in the cognitive tendency toward acceptance of contradiction, which they defined as 'dialectical thinking'. This manner of thinking is considered to consist of sophisticated approaches towards seeming contradictions and inconsistencies. Much research has denoted East Asians as dialectical thinkers, (e.g. Peng & Nisbett, 1999), emphasizing change, contradiction, and co-variation, whereby the world is viewed as

inherently contradictory (Spencer-Rodgers, Williams & Peng, 2010a).

Briefly, dialecticism (see Peng & Nisbett, 1999; Spencer-Rodgers & Peng, 2004 for full details), lends credence to the *theory of change* (i.e. the universe is unpredictable, dynamic, and in constant flux); the *theory of contradiction* (i.e. two supposedly contradictory and oppositional propositions can both be true at the same time) and *holism* (i.e. the part can only be understood in relation to the whole). Using these suppositions, research has indeed found East Asians to be more comfortable and able to accept psychological contradiction (e.g. conceive themselves as both good and bad simultaneously); display greater change and holism in their spontaneous self-concept (Peng & Nisbett, 1999); and greater inconsistency in their implicit self-beliefs and well-being judgments (Schimmack et al., 2002). Moreover, this occurs despite research indicating that East Asians do indeed experience cognitive dissonance hence making incongruent choices for important others; or when faced with social disapproval (Kitayama, Snibbe, Markus, & Suzuki, 2004), they are nonetheless less troubled by such contradiction in their private, self-relevant thoughts, emotions, and behaviors (Heine & Lehman, 1997). On the contrary, as Spencer-Rogders, Boucher, Mori, Wang and Peng (2009) put forth, Westerners, and those low in dialecticism, have been found to strongly endorse polarized responses (i.e. accepting or providing positively keyed items and rejecting negatively keyed ones), namely, seeking to reconcile inconsistencies, because such discrepancies in their cognitions, emotions and behaviors give rise to a state of tension, disequilibrium or dissonance, all of which have been linked with poorer psychological well-being (Spencer-Rodgers et al 2004; Spencer-Rodger, Williams & Peng, 2010; Spencer-Rodgers et al., 2010a). In contrast, in Asian cultures an inconsistent and discrepant self is considered normative and therefore these qualities of self are more strongly associated with psychological well-being and not psychological distress (Spencer-Rodgers et al., 2004). For instance, a study by Spencer-Rodgers, Peng, and Wang (2010) found self-ambivalence was unrelated to life satisfaction, anxiety, and depression among their Chinese sample but it was significantly related among their European American sample.

3.2.8 Summary of Cultural Models of Self

The theories described above highlight that people in different cultures have very different understandings of the self, others and the relationship between the two.

These differences are based on cultural understanding and emphasis on self-construal. In short, one's self-construal refers to one's self-definition and whether this self-definition is defined as independent of others or interdependent with others. The general consensus across the aforementioned theories pertained to those from individualistic cultures emphasizing an independent self-construal, while for those from collectivistic cultures an interdependent self-construal is emphasized. Accordingly, the independent self-construal is defined as separate from the social context, bounded, unitary and stable entity, which promotes private aspects of the self and self-goals. Its primary aim is to be autonomous, self-reliant and unique (Markus & Kitayama, 1991). Contrastingly, the interdependent self-construal is perceived as connected with the social context, it is flexible, variable and promoting external, public aspects of the self. Its primary aim is centered on relatedness with significant others, to belong, occupy one's proper place and engage in appropriate action (Markus & Kitayama, 1991). These diverging self-construal have been found in many cases to govern individual experience, including self-concept, self-coherence, self-consistency, appraisals, behavior, motivation, memory, schema and emotion. Despite these prevailing cultural differences, it still needs to be borne in mind that individuals do have both aspects of self (Sato, 2001).

3.3 Empirical work relating to Cultural Differences in Self-Construal's Influence on Appraisals and Self-Concept

As outlined in Chapter 2 appraisals are an important mechanism to understanding the development and maintenance of PTSD and they offer a means by which to provide effective treatment of PTSD symptoms. Their links with the self also bring them into the cultural sphere. What is more, while appraisals have not been investigated in relation to trauma research within a cultural domain, there has been work done on everyday appraisals, which has collated substantial evidence indicating appraisals to differ across cultures. This part of the thesis therefore examines to what extent culture influences appraisals.

3.3.1 Appraisals

A basic premise of appraisal theory is that appraisals give rise to emotions and can determine the intensity of emotions (Frijda, 1986; Scherer, 2001; Smith & Ellsworth, 1985). Lazarus (1968) was one of the first to elaborate and explore

appraisals and its relationship to emotional consequences of an event and as a result a large number of 'appraisal theories of emotion' have emerged, in an attempt to predict the elicitation and differentiation of emotion on the basis of a derailed set of appraisals (van Reekum & Scherer, 1997). Early cross-cultural studies were exclusively based on Scherer's (1984) model, which proposed five evaluative appraisal dimensions; novelty, pleasantness, goal/need significance, coping potential and self/norm compatibility. The hypothesis of appraisal universality has been tested in a number of studies using cross-cultural questionnaires. In these studies participants were asked to report instances of specific emotion from their past and answer questions about how they appraised these situations/events.

The most extensive cross-cultural study on appraisals was conducted by Scherer and Wallbott (1994). They examined evidence for universality and cultural variation of differential emotion response patterning. Using data from a series of cross-cultural questionnaire studies in 37 countries on 5 continents, they found strong evidence for universality as well as cultural differences in emotional experience, including both psychological and physiological responses to emotions. Specifically, results demonstrated highly significant main effects and strong effect sizes for the response differences across 7 major emotions (joy, fear, anger, sadness, disgust, shame, and guilt). They reported cultural similarities for joyful situations (e.g. reported as very pleasant, enhancing self-esteem); fear (e.g. reporting as unpleasant, obstructing goals, hard to cope with); and anger (e.g. unpleasant, unfair). However, cultural differences in appraisals across geopolitical regions were also reported. Specifically, African countries appraised antecedents of all negative emotions as significantly higher on unfairness, external causation and morality. Conversely, Latin American countries reported lower ratings of immorality than countries in other geopolitical regions. Frijda, Markham, Sato and Wiers (1995) found similar results albeit with different emotions and slightly different appraisal dimensions using students from the Neatherlands, Indonesia and Japan.

However, Mauro, Sato and Tucker's (1992) study used a somewhat different methodology, in a comparative study with students in the United States, Japan, Hong Kong and the People's Republic of China. Their method differed in that they asked participants to remember times they felt 16 different emotions and to then rate each of the eliciting situations on 10 appraisal dimensions (pleasantness, goal/need conduciveness, coping ability, norm/self compatibility, control, responsibility,

attentional activity, anticipated effort, legitimacy, certainty). Following this, Mauro et al. (1992) compared the absolute and relative position of the 16 emotion episodes on the appraisal dimensions. They concluded that there were no substantial differences in appraisal dimensions among their sample, especially on what they called the more primitive dimensions (pleasantness, attentional activity, certainty, coping ability and goal/need conduciveness). However, the most substantial differences were found in three of the five more complex dimensions (control, responsibility and anticipated effort). Roseman, Dhawan, Rettek, Naidu and Thapa (1995) used students from the United States and India to study emotions of sadness, anger and fear in a similar fashion to Mauro et al. (1992). Using a MANOVA with emotion and culture as predictor variables and appraisals as the dependent variable, they found a main effect for emotion, which pertained to a universal appraisal-emotion relationship. Additionally, significant culture effect and emotion-culture interaction effect was found, demonstrating culture to influence the appraisal-emotion relationship. Therefore, taken together, these results demonstrate both cultural universality and cultural differences in appraisals.

Since these pioneering studies, cross cultural research has been accumulating evidence to suggest that there are culture-specific tendencies to appraise events differently (Mesquita and Ellsworth, 2001; Mesquita & Fridja, 1992; Mesquita & Walker, 2003; Scherer, Schorr and Johnson, 2001). Mesquita and Ellsworth (2001) propose cultural models foster culture-specific appraisal tendencies, which account for the cultural differences in the selection and/or prevalence of certain appraisals. Mesquita and Frijda (1992) assert that this cultural differentiation may occur due to evaluating the event differently in different cultures; that particular appraisals are assigned more importance in one culture than another. Alternatively, the nature of the appraisal may differ across cultures, whereby individuals in one culture can evaluate an event similarly, however, while both may appraise the event to be unpleasant, unpleasantness may be more unpleasant for one person than for another (Mauro et al., 1992; Schimmack et al., 2002).

These tendencies to appraise events differently have been found in a number of studies. For instance the study of agency appraisal (attribution of responsibility for and control over event) has been found to differ across cultures. Those from individualistic cultures tend to appraise success through a personal sense of control, while in collectivistic cultures, agency is not valued as much but rather fate,

secondary control, adjustment to the situation, multi-determination of events and the interdependence of an individual and their social environment are stressed (Mesquita & Walker, 2003). Furthermore, studies have found that these cultural differences have even been observed when comparing those from individualistic and collectivistic cultures living in a Western, individualistic culture (e.g. Australia, USA; Jobson, 2009; Jobson & O'Kearney 2008; Mesquita & Karasawa, 2002; Wang & Ross, 2005).

As demonstrated throughout the empirical studies, independent and interdependent cultures appear to differ on appraisals of agency. This particular appraisal dimension has a significant impact on psychological well-being. Sastry and Ross (1998) investigated the relationship between the sense of personal control and psychological well-being using a sample of Westerners, Asian Americans and Asians in Asia (Japan, South Korea, China and India). The study found a negative relationship between personal control and psychological well-being for Westerners. However for the Asian Americans and Asians both reported lower levels of perceived control, which they found, might not be related to psychological well-being. Reasoning for these relationships were believed to be reflective of individualistic and collectivistic values and its emphasis on the importance of personal autonomy (Hofstede, 1980). Specifically, when compared to individualistic Western cultures, Asian collectivistic cultures emphasize family and community, which could result in decreased levels of personal control. Further, within collectivistic cultures, high levels of personal control could very well be a norm violation; therefore it may have relatively little effect on psychological well-being for non-Western ethnic groups (Sastry & Ross, 1998). More recently, Imada and Ellsworth's (2011) study on cultural differences in appraisals and corresponding emotion found that in success situations, Americans reported stronger self-agency emotions (e.g. proud) than Japanese, who conversely reported stronger situation-agency emotions (e.g. lucky). This could possibly be due to Choi, Nisbett, and Norenzayan (1999) proposition that, when compared with Westerners, East Asians hold stronger ''situationism'' or beliefs in the importance of the behavioral context. That is, East Asians tend to view the world and reason holistically, and attribute causality to interactions between objects and the world. In other words, they may be highly aware of the various situational and causal factors that influence their judgments and behaviors.

3.3.2 Self-Concept

Self-concept (i.e. one's identity) is a key component when examining whether cultural differences may influence the development and maintenance of PTSD. Self-concept is at the very core of who one is and plays an important part in how an individual navigates through life (Abernathy, 2008). As discussed above, cross-cultural research indicates that people in different cultures have strikingly different understandings of the self, of others and the interplay of the two (Markus & Kitayama, 1991). Wang and Ross (2005) propose these conceptual representations of the self vary across cultures due to differing values and social orientation. These cultural differences in self understanding can influence how individuals view and evaluate themselves (i.e. their self-concept), their goals, and appraisals of everyday events including traumatic ones. In relation to perceiving the self to be independent of other, autonomous and unique, empirical evidence on dispositional information found individuals from individualistic cultures were reluctant to consider information external to themselves in explaining the behavior of others (Wang & Ross, 2005). While research on those from collectivistic cultures found that they too attend to dispositions of individuals, however, they do so less than their individualistic counterparts (Choi, Nisbett & Norenzayan, 1999).

Research on the contradictory, changeable, and holistic nature of the East Asian self-concept as previously detailed, has found naïve dialecticism to provide a comprehensive theoretical framework for understanding these differences. Empirical work by Choi, Koo and Choi (2007) support this framework, reporting significant associations between general beliefs about contradiction (as measured by the Attitude toward Contradictions subscale of the Analysis-Holism Scale) and general beliefs about change (as measured by the Perception of Change subscale) differed culturally. Specifically, the Korean participants in their study who endorsed change were also generally more inclined to endorse contradiction items than the American participants who took part.

In relation to well-being, self-concept consistency is less central to psychological well-being among East Asians (Heine & Lehman, 1999; Spencer-Rodgers et al., 2009) and a stronger predictor of subjective well-being for Westerners (Church et al, 2008; Suh, 2002). For instance Suh's (2000) study on culture, identity consistency and subjective well-being found consistency across situations was associated with greater degrees of well-being for their American participants, but this

relationship was weaker for their Korean participants. Campbell et al (1996) found Japanese participants had weaker correlations to their Canadian counterparts in self-concept clarity (a construct capturing consistency of the self across situations and time) and self-esteem. Thus research demonstrates that instead of leading to maladaptive adjustment, inconsistencies in self-concept could be adaptive in dialectical cultural contexts (Spencer-Rodgers et al., 2009), as reflected by higher self-esteem and subjective well-being (Spencer-Rodgers et al., 2010). Much empirical work supports these contentions concerning self-consistency views. Kanagawa, Cross and Markus (2001) on their study investigating the cultural psychology of self-concept found Japanese respondent to provide self-descriptors that varied significantly depending who was in their room than the American respondent, demonstrating the ease with which the Japanese participants were able to switch between multiple selves. In a similar vein, Suh (2002) asked Koreans and American to evaluate themselves on a number of traits in relation to hypothetical situations. They found the Americans showed relatively little change in their self-descriptors across situations, suggesting a need to maintain a consistent self. The Koreans conversely viewed themselves in highly variable terms, again suggesting that maintaining self-consistency is not as important to this group. Peng and Nisbett (1999) found that when two contradictory propositions were presented to their participants, the Chinese were moderately accepting of both propositions, whereas the American participants were polarized in their views, yet again demonstrating cultural differences in approach to self-consistency and tolerance for contradictions in self-views.

Thus, it is imperative to explore the links among culture, self-concept inconsistency (or flexibility) and psychological well-being. As Spencer-Rogers et al. (2009) propose, self-coherence is regarded as a fundamental human motive in Western psychology and according to self-verification theory (Swann et al., 2003), people strive for internal consistency and temporal stability in their thoughts, feelings, and actions. While these qualities may be viewed as normative and desirable in independent cultures, and are generally associated with psychological well-being (Suh, 2002), it need not necessarily be a fundamental motive for those from collectivistic cultures. Instead coherence may be achieved in a strikingly different manner, whereby for those in dialectical cultures, individuals may be striving for *equilibrium* (i.e. balancing positive and negative attributes, traits or characteristics)

(see Kitayama & Markus, 1999). Thus cultural differences in self-construal and traditional belief systems can serve to provide a comprehensive and theoretical framework for understanding cultural differences in well-being outcomes.

3.4 Linking theory and empirical findings with PTSD models

The cross-cultural theorists (e.g. Markus & Kitayama, 1991; Mesquita & Walker, 2003) reason that diverging self-construal impact on and in many cases govern the very concepts believed to be critical in understanding the development and maintenance of PTSD. Specific to this thesis these key concepts are appraisals and self-concept. This section of the thesis aims to generate issues and concerns that arise when theories of cultural variation in self-construal and associated research are applied to PTSD models. Hence a number of questions arise, which will be addressed in the next chapter.

The appraisal model put forth by Ehlers and Clark (2000) propose that appraisals differ between those with adaptive adjustment from those with maladaptive adjustment. Dysfunctional and negative cognitive appraisals centering on the self, world and others and trauma sequelae can lead to the development and maintenance of PTSD, due to a sense of continued an on-going threat perceived by the trauma survivors. Additionally, Mesquita and Walker (2003) have illustrated both theoretically and empirically that cultural differences in one's self-construal influence the manner in which events, situations and life encounters are interpreted, evaluated and appraised. In short, individualistic cultures appraise situations as being under personal agency while those in collectivistic cultures appraise these same events in interdependent with others and their social environment is stressed. The sense of agency which is valued in individualistic cultures is not stressed or heavily weighted here. Additionally, cultural differences in self-construal have found to influence one's affective responses in a culturally systematic manner. For instance, individualistic cultures tend to achieve positive affect as a subsequence of agency in a situation, conversely, collectivistic cultures do not. Therefore, due to cultural specific appraisal tendencies being evidenced for everyday events, in addition to the key role appraisals play in PTSD development and maintenance, fundamental questions as to whether similar culture specific appraisal tendencies will occur following a traumatic event are raised. Specifically, how do cultural differences in self influence autobiographical memories of trauma appraisals? How do these differences in appraisals compare to

cultural differences in appraisals of other types of autobiographical memories (i.e. positive and negative memories)? How do these differences impact on posttraumatic psychological adjustment (PTSD)?

Berntsen and Rubin (2007), in their centrality of trauma approach argue that trauma can become central to self-concept. Markus and Kitayama (1991) have espoused self-construal differs across cultures. In independent cultures self-definition is derived from a set of internal personal attributes, whilst in interdependent cultures, self-definition is derived from others and relationships with others. Whilst SMS (Conway, 2005) DRT (Brewin, 2001) and the centrality of trauma approach (Berntsen & Rubin, 2006) delineate the deleterious effects of trauma on self-concept, they also promote self-consistency in their models. Suh (2000; 2002) theorizes that self-coherence and self-consistency needs are culturally variable. This then leads to questions concerning the influence of cultural variation in self-construal on the relationship between trauma and self-concept. Specifically, what are the cultural differences in self-concept following trauma? Further, how do cultural differences in self-concept influence posttraumatic psychological adjustment?

Socio-cognitive models (e.g. DRT, Brewin, 2001; SMS, Conway, 2005; appraisal model, Ehlers & Clark, 2000) suggests trauma threatens the self, appraisals, self-goals and motivation of the autobiographical memory system. Further research suggests, appraisals and self-concept are related, as negative and dysfunctional appraisals can impact negatively on self-concept, whist both are implicated in PTSD. Moreover, cultural variations in self have been found to moderate all these aspects. This then raises questions as to the relationship between appraisals, self-concept and culture. Specifically, does culture influence the relationships between appraisals, self-concept and posttraumatic adjustment? These questions make up the crux of this thesis and are addressed in Chapter 4's conceptual framework.

3.5 Culture and Clinical Implications

In addition to the conceptual considerations outlined, there is a practical element for conducting this research, namely to arrive at culturally appropriate treatments for trauma exposed individuals. However, research examining the relationship between culture and psychopathology has not reached equilibrium in cross-cultural clinical research thus far, even though literature points to a number of cultural differences in a number of cognitive processes linked to maladjustment and

PTSD. Draguns & Tanaka-Matsumi, (2003) concluded that the interrelationship of culture and psychopathology should be studied in context as to not do so can have negative implications for clinical psychology. The socio-cognitive theories of PTSD have been founded in research conducted primarily in individualistic populations. Therefore it remains largely unknown as to whether these same cognitive theories are culturally adaptable in order to accommodate cultural disparities in self.

Emergent research in this area has far reaching clinical implications for multicultural Western societies such as the United Kingdom, for psychosocial work with populations at risk of trauma exposure (e.g. refugees, asylum seekers, unique populations) and for work in non-Western cultures. Finally, there is a general need to refine, prevention and treatment measures to make them more culturally appropriate.

3.6 Overall Chapter Summary

There is a resolute link between trauma and aspects of the self. As outlined in the chapter, culture does indeed influence conceptions of the self and further on the processes the socio-cognitive models of PTSD elucidate to be predictive of PTSD development and maintenance; specifically appraisals and self-concept. The chapter commenced with a summary of the prominent cultural theories of self-construal. These theories posit that people in different cultures have strikingly different understandings and interpretations of the self. The overarching consensus is that while individuals are made up of both an independent and interdependent self-construal, individualistic cultures emphasize an independent self-construal which is defined as separate from the social context, promoted private aspects of self and aims to be autonomous, unique and self-reliant. Conversely, collectivistic cultures emphasize an interdependent self-construal, which is defined, as connected with the social context and others, promoted external and public aspects of self and aims to belong (i.e. promotes group relatedness/group harmony). Subsequently, an investigation into the influence self-construal had on appraisal and self-concept from an everyday perspective was undertaken which found cultural distinctions in both process. This subsequently raises fundamental questions as to the influence culture will have on these two component processes when the event is traumatic, in addition to its subsequent implications for posttrauma adjustment. The objective of Chapter 4 is to develop a conceptual framework to amalgamate the socio-cognitive models of PTSD

with current understandings of cultural differences in self-construal and self-understandings.

Chapter 4
Conceptual Framework

The "struggle to transcend the effects of trauma is among the noblest aspect of human history" (McFarlane & van der Kolk, 1996, p. 574).

4.1 Review

As detailed in Chapter 1, PTSD diagnoses and criteria have undergone much change and modification since its inception and inclusion in the American Psychiatric Association's (APA; 1980) third edition of its Diagnostic and Statistical Manual of Mental Disorders (DSM-III). Further, whilst PTSD was once included to provide an account for the mental health issues faced by Vietnam Veterans, this is no longer its predominant focus. Since the disorder's establishment, it is now predominantly used as a diagnosis in civilian populations.

Chapter 2 provided an account of the prominent socio-cognitive models of PTSD. In the majority of these models a central focus has been on the role of appraisals and self-concept in distinguishing between those with and without disrupted adjustment following trauma. It is important to note, that although not the focus of this thesis, these models also emphasize that other cognitive concepts such as autobiographical memory, world-views, schema and non-cognitive concepts such as emotions, goals and motivation play a role in distinguishing between those trauma survivors who go on to develop PTSD from those who do not.

Chapter 3 provided an overview of the prominent theories of cultural differences in self-construal. The chapter demonstrated that the cultural distinctions in self have repeatedly been found to impact on appraisals and one's self-concept, self-consistency needs, autobiographical memory, goals, motivation, schema and emotion: the very processes posited to play a role in the development and maintenance of PTSD.

The purpose of Chapter 4 then, is to bring together these prominent cognitive models of PTSD with these theories of cultural differences in self-construal into a conceptual framework. The conceptual framework will provide a context from which to base the consequent studies detailed in this thesis. Accordingly, these studies will allow for the investigation of the influence of culture on the proponent features of

appraisals and self-concept and examine the implications for the development and maintenance of PTSD.

4.2 Conceptual Framework

Many propose that using Western therapeutic interventions cannot be simply transported and used in a non-Western context, due to differing cultural understandings of trauma, appraisals of trauma, appraisals of self, and understandings of self-concept and personhood. The recommended treatment for PTSD is trauma-focused cognitive behavioral therapy (TF-CBT; National Institute of Clinical Excellence, 2005). TF-CBT is generally an individual focused therapy that is based on theoretical models that propose that the key factors in PTSD are disturbances in autobiographical memory and negative appraisals associated with the trauma (see Ehlers & Clark, 2000; Resick, 2001). However, the basis for these modes of intervention, which have been found to be relatively effective in Western cultures (Brewin & Holmes, 2003; Ehlers & Clark, 2000), has tended to be developed in the UK and the USA and hence influenced by Western cultural norms. However, as previously stated many people who experience trauma and develop PTSD and thus require treatment do not share the same cultural backgrounds, norm and practices (Friedman et al 2011; Marsella & White, 1989). In fact as mentioned above, appraisals and self-concept have been found to differ across cultures (Markus & Kitayama, 1991). Therefore, it is potentially incongruent to simply apply Western therapeutic interventions to the needs of traumatized populations from non-Western cultures. Using such techniques and practices could delay or at its worst impede recovery (Summerfield, 1999). Therefore, providing traumatized populations from non-Western cultural backgrounds with interventions that are more tailored to their cultural requirements are needed if trauma survivors from these cultures are to be provided with effective psychological care posttrauma.

Consequently, it is both timely and necessary to expand our current understanding of PTSD and cognitive models of its etiology by incorporating cultural elements to arrive at culturally appropriate treatments. This issue is critical as it applies to multicultural societies such as the UK. Further, it applies to the global situation as the majority of trauma survivors are from non-Western cultures. Subsequently, for those being treated in-country by foreign health workers, understanding the trauma within the context of the country and culture is needed to

provide the traumatized individual with unbiased and culture specific care. Finally, it applies to refugees and asylum seekers, who go on to seek asylum in countries such as the UK.

The objective of this chapter is to unite current cognitive models of PTSD and theories of cultural differences in self-construal. It has been established in Chapter 3 that people in different cultures have strikingly different understandings of the self, of others and the interplay of the two (Markus & Kitayama, 1991). Wang and Ross (2005) propose these conceptual representations of the self vary across cultures due to differing values and social orientation. What is more, these cultural differences in self understanding can influence how individuals view and evaluate themselves (i.e. their self-concept), their self-goals, self-appraisals and appraisals of everyday events. In fact, culturally diverging self-construal have been found in many cases to govern the very nature of individual experience, including appraisals, self-concept, self-goals, autobiographical memory and emotion; the very elements central to the understanding and treatment of PTSD (Jobson, 2009; Jobson & O'Kearney 2009; Markus & Kitayama, 1991). Therefore, fundamental questions arise, as to whether these contentions also hold true following a traumatic event or situation.

Of the various models relevant to understanding PTSD, the conceptual framework outlined in this thesis is based on Ehlers and Clark's (2000) cognitive appraisals model, Berntsen and Rubin's (2006) trauma as central to identity (i.e. self-concept) model, and Brewin's (e.g. 2011) notions of the impact of trauma on self. The thesis argues these models not only allude to conceptualizations of the self but that the self is an integral part of these models, consequentially making them sympathetic to cultural considerations. The conceptual framework argues that culture serves as a pervasive context from which to understand PTSD, cognitive models of its etiology and posttrauma adjustment. In addition, culture will influence on these two component processes (i.e. self-concept, appraisals) and their impact on PTSD and adjustment.

4.3 Linking Cultural Differences in Self-Construal and Trauma Appraisals

Ehlers and Clark's (2000) cognitive appraisal model provides an initial framework from which to derive and inform this thesis. First, they theorize that the context in which the trauma occurs and the state of the individual influences cognitive processing during the trauma, which subsequently influences trauma appraisals and/or

its sequelae. This then leads the individual to feel a sense of current threat. Here the very first component in their models (refer to Figure 1) – "characteristics of the trauma and/or its sequelae, prior experiences, beliefs, coping and state of the individual" focuses on the conceptual self and environmental factors, which consequently draws upon a cultural element. For instance, when highlighting "characteristics of the trauma and/or its sequelae" and "prior experiences", the model is calling upon the environment (or cultural domain) in which the trauma event occurred and its characteristics, such as the social climate in which the trauma event happened. Referring to the "state of the individuals" and their "beliefs" calls attention to the conceptual self, which includes the individual's personal characteristics, resources, cognitive abilities, personality traits and social competence (Chun, Moos & Cronkite, 2006). Mesquita and Walker (2003) propose the conceptual self is derived from its social and cultural environment, and is comprised of self-appraisals, self-schemas, possible selves, self-guides, attributes and beliefs. They further contend that these cultural differences impact on the way in which events, life situations and encounters are appraised. Consequently, it would appear that the conceptual self is also drawn upon during and follow the trauma and has an influence on the cognitive processes that occur during these times as outlined in Ehlers and Clark's (2000) cognitive appraisal model. Additionally, Markus and Kitayama (1991, 1994, 2010) in their theory of self-construal also demonstrate cultural variation in self-construal and its influence on self-appraisals, self-schemas and internal attributes. Therefore, this thesis believes that an important cultural distinction that influences the nature of the conceptual self is the distinction between an independent versus an interdependent orientation.

Second, Ehlers and Clark (2000) propose that for individuals with poor posttrauma psychological adjustment, they have dysfunctional negative appraisals, which have a reciprocal relationship with the trauma memory. Thus negative appraisals are biased with a recall of the trauma memories, thereby perpetuating their appraisals of ongoing (internal or external) threat. These appraisals are centered round the self and contribute to the maintenance of PTSD, as survivors of the trauma continue to perceive their current situation as threatening and dangerous. Further, they perceive themselves as being unable to cope and that they are inadequately equipped to deal with their current situation (e.g. "I am a lousy coper"). Additionally, Ehlers and Clark (2000) suggest appraisals about others and interpersonal relationships may

also maintain PTSD, because survivors have on-going negative appraisals of interactions with others and as a consequence withdraw from social interactions. Due to this withdrawal, they are less likely to receive social support, and are thereby unable to correct negative beliefs about themselves and others. Further, in relation to beliefs about internal threat to self, such as negative beliefs about the self (e.g., 'I am inadequate', 'I am weak'), have been found to be related to PTSD symptom severity. O'Donnell, Elliot, Wolfgang and Creamer (2007) investigation into posttraumatic appraisals in the development and persistence of posttraumatic stress symptoms found an internally driven sense of threat is a more powerful mechanism in the development and persistence of PTSD than an external sense of threat. Subsequently, not only are appraisals an important mechanism to understanding the development and maintenance of PTSD, they have firm links with the conceptual self. Consequently, with these established linked between appraisals and the conceptual self and the influence of culture on self-construal, the conceptual framework postulates that it is theoretically possible for these cultural distinctions in self to also be relevant when making appraisals of a traumatic event, life situation or encounter. Therefore, the first hypothesis is that trauma appraisals will differ across cultures and they will reflect cultural differences in the conceptual self.

Next, due to the work focusing on everyday appraisals, the conceptual framework is able to predict specific cultural differences in trauma-specific appraisals and its subsequent bearing on psychological adjustment or maladjustment posttrauma. For instance the studies of agency appraisal (attribution of responsibility for and control over an event) found those from individualistic cultures tend to appraise success through a personal sense of control. Conversely, for those from collectivistic cultures, agency is not valued as much, instead fate, secondary control, adjustment to the situation, multi-determination of events and the interdependence of an individual and their social environment are stressed (Mesquita & Walker, 2003). However, what is important to note, is that this particular appraisal dimension (i.e. agency appraisals) has a significant impact on one's psychological well-being. Sastry and Ross (1998) found a negative relationship between personal control and psychological well-being for those from interdependent cultures, which they believe to be reflective of Western values and its emphasis on the importance of personal autonomy (Hofstede, 1980; Triandis, 2001). Conversely, these strong and detrimental effects on psychological well-being (Al-Zahrani and Kaplowitz, 1993), was not found for those from

collectivistic cultures. The determinants of the sense of personal control are learned and something Asian collectivistic cultures place less weight on, therefore it may have relatively little effect on psychological well-being for non-Western ethnic groups (Sastry & Ross, 1998).

The conceptual framework expects the same culture specific appraisal tendencies to apply to trauma events, with potentially an even more pronounced influence on posttraumatic psychological adjustment to that found following everyday events. For instance, the relationship between the sense of personal control and psychological well-being has been well established (Sastry & Ross, 1998). If a lack of personal control following an everyday event can lead to psychological malcontent and perceived lack of control following a negative event can lead to lower levels of psychological well-being, then it would be expected that perceived lower levels of personal control following a traumatic experience could very well be associated with posttraumatic psychological maladjustment, such as PTSD. Indeed research on PTSD has illustrated that lack or loss of control is a predictor of the disorder. For instance Palyo and Beck (2005) in their study on PTSD symptoms, pain, and perceived life control used structured equation modeling to develop two models hypothesizing a relationship between PTSD symptomatology, pain severity, and perceived life control. They found, perceptions of life control did further explain severe PTSD symptoms by acting as a mediator between pain complaints and PTSD symptoms with disability in the domains of psychosocial and physical functioning. Furthermore, there has been ongoing examination of the theoretical-derived cognitive appraisal domains of mental defeat and control strategies. Both of which refer to survivors' appraisal of their cognitive, emotional and behavioral responses during the traumatic event. Several studies have found mental defeat and lack of control to be associated with PTSD severity (Dunmore, Clark, & Ehlers, 2001; Ehlers et al., 1998; Ehlers et al., 2000; Ehlers, Mayou, & Bryant, 1998) and mental defeat has been found to be associated with persistent PTSD following assault (Dunmore et al., 2001). Ehlers et al. (2000) found that when compared to political prisoners without PTSD, political prisoners with chronic PTSD were more likely to perceive mental threat; while Ehlers, Clark, et al. (1998) found that rape survivors whose memories reflected mental defeat or the absence of mental planning/control strategies showed little improvement following exposure therapy.

Research has detailed that a sense of personal control is a learned, generalized expectation that events and circumstances that happen to an individual are contingent on their personal choices and actions (Sastry & Ross, 1998). Individuals from individualistic cultures have been found to have high perceived personal control (e.g. mastering and altering their environment and determine outcomes in their lives); while those low in personal control such as those from collectivistic cultures do not value primary control, again due to learned generalizations that outcomes of situations are determined by external forces to oneself, such as powerful others, luck or fate (Sastry & Ross, 1998). Additionally personal control amongst those from collectivistic cultures may be seen as norm violations, as they are encouraged to subordinate their personal goals to the family and community (Triandis, 1986). Therefore, it is predicted that such appraisals will reflect the interdependence of the trauma survivors and their social environment and will subsequently moderate psychological adjustment. Specifically, given the importance of control in PTSD and to those from individualistic cultures, it is hypothesized that perceived personal agency, personal control (i.e. ability to change the environment to adapt to the self) and responsibility will be more important to trauma survivors from individualistic cultures, and their subsequent psychological adjustment than those from collectivistic cultures. Those from collectivistic cultures will instead appraise personal agency to be less relevant in the trauma than their Western counterparts.

4.4 Linking Cultural Differences in Self-Construal and Self-Concept Posttrauma

Berntsen and Rubin's (2006) trauma as central to identity model also informs this thesis and provides further structure to the conceptual framework's development. Their model proposes that the trauma can become central to self-concept because the memories of the trauma event(s) become highly accessible and easily evoked. Subsequently, the trauma event is perceived as "a major causal agent … [and] thus a highly salient turning point in the person's life" (2006, p. 221). Similarly, Brewin (2011) suggests that in those with PTSD self-concept can become fragmented, altered and dominated by thoughts and memories of the trauma. It is proposed in this thesis that there will be some universally in the aftermath of trauma, namely, the trauma memory of those with PTSD will not align with the desired goals of the self-concept and will be hard to integrate with previously held assumptions about the self and world (Conway, 2005). Consequently, the trauma becomes central to people's mental

life as they struggle to resolve these discrepancies resulting a great deal of time being spent recalling these events and ruminating about them (Brewin, 2011; Horowitz, 1976, Janoff-Bulman, 1992). As a result, the trauma becomes highly associated with self-concept (Brewin, 2011) and the traumatic event forms a turning point in people's construction of their own identity and a cognitive reference point for the organization of autobiographical knowledge (Berntsen & Rubin, 2006).

Culture is instrumental in self-concept construction; it is at the very centre of who an individual is and how they will make sense of themselves, of others and the world and their place within it, as well as in understanding the situations and events which they encounter and experience (Abernathy, 2008; Stone, 2006) including traumatic experiences. Based on the notions related to the influence of trauma on self-concept and cross-cultural literature on self-construal, the conceptual framework suggests self-concept will be impacted in a number of ways. First, the pervasive and ubiquitous nature of trauma will act as a salient turning point in the life story for individuals from both individualistic and collectivistic cultural groups. There has been much research in the way of clinical case studies and theoretical literature on trauma pertaining to the trauma event causing disturbances to self-concept, instability of self-image, identity confusion and poor or negative self-representations (Briere, 1992; Reviere & Bakeman, 2001). Therefore, it is proposed that regardless of culture, trauma creates a disruption in the continuity and stability of the self and one's experiences. That is not to say that there are no cultural differences in one's self-consistency needs (which will be discussed shortly), but rather, trauma forces one to make sense of their experiences (Abernathy, 2008; McAdams, 1993; Neimeyer, 2006) and as individuals engage in meaning-making to gain perspective on what happened they use the trauma to re-narrate their stories, finding not only new meaning but a new sense of themselves (Abernathy, 2008; Brennan, 2001). In this way, trauma can become central to this new sense of self and remain a pivotal and referential point in their life story. Thus the trauma may become what Pillemer (1998) refers to as an 'anchoring event' for the attribution of meaning to other everyday experiences (Berntsen & Rubin, 2006). Further, based on previous research, it is proposed that if trauma does become central to one's self-concept, it will lead to PTSD and post-trauma maladjustment. This has been well evidenced in independent cultures, for example Sutherland and Bryant's (2005) study found those with PTSD had greater trauma-centered self-definition, while Robinaugh and McNally (2011) found

increased trauma centrality to be associated with PTSD symptom severity in adult survivors of childhood sexual abuse. However, as yet, little work has been done with interdependent cultures, nonetheless, research does point to those from collectivistic cultures developing PTSD following trauma events, while self-concept is also implicated. The development of PTSD symptomatology has been evidenced in a study by Kato, Asukai, Miyake**,** Minakawa and Nishiyama (1996) on post-traumatic symptoms among younger and elderly evacuees in the early stages following the 1995 Hanshin-Awaji earthquake in Japan. They found both groups experienced sleep disturbances, depression, hypersensitivity and irritability in the first assessment. In a more recent study, Chen, Wang, Zhang & Shi (2012) used a structured equation modeling approach to the Wenchuan earthquake. They found the effect of trauma exposure was partially mediated by self-esteem (a measure of self-concept), which subsequently affected coping strategies and posttraumatic stress symptomatology. Again suggesting that if trauma becomes central to self-concept, negative affect and maladaptive psychological adjustment will occur.

Next, the conceptual framework further proposes that there are culture specific differences in self-consistency needs, which as delineated by Suh (2000) in Chapter 3 is culturally variable. Here it is proposed that self-consistency needs apply most especially following a trauma, as one is compelled to make sense of the conflicting information caused by the event. Further, cultural differences in self-consistency needs will impact differently on psychological well-being. This contention is based on the contradictory and changeable nature of the interdependent self-concept, and research on naïve dialecticism. In relation to well-being self-concept consistency is less central to psychological well-being among collectivistic cultures (Heine & Lehman, 1999; Spencer-Rodgers et al., 2009) while being a stronger predictor of subjective well-being among individualistic cultures (Church et al, 2008; Suh, 2002). Thus when it comes to PTSD, as research demonstrates, instead of leading to maladaptive adjustment, inconsistencies and ambivalence in self-concept could be adaptive in dialectical cultural contexts (Spencer-Rodgers et al., 2009), reflected in higher self-esteem (Paulhus & Martin, 1988) and subjective well-being (Spencer-Rodgers et al., 2010). Thus, it is imperative to explore the links among culture, self-concept inconsistency (or flexibility) and psychological well-being. As Spencer-Rogers et al. (2009) propose, self-coherence is regarded as a fundamental human motive in Western psychology and according to self-verification theory (Swann et al.,

2003), people strive for internal consistency and temporal stability in their thoughts, feelings, and actions. While these qualities may be viewed as normative and desirable in independent cultures and are generally associated with psychological well-being (Suh, 2002), it need not necessarily be a fundamental motive for those from collectivistic culture. Instead coherence may be achieved in a strikingly different manner, whereby for those in dialectical cultures, individuals may be striving for equilibrium (see Kitayama & Markus, 1999). The conceptual framework therefore proposes there will be cultural differences in self-concept consistency posttrauma. Namely, those from individualistic cultures will be motivated to resolve inner conflicts resultant from the trauma, while those from collectivistic cultures will be more tolerant of inconsistencies and ambivalence resultant from the trauma. Therefore it is hypothesized that collectivistic cultures will have a more ambivalent self-concept while individualistic cultures will identity as having either a positive or negative self-concept. Those who identity as having an ambivalent self-concept will have greater posttrauma maladjustment and will be associated with PTSD. However, this is not necessarily the case for those from collectivistic cultures.

4.5 Linking Cultural Differences in Self-Construal, Appraisals and Self-Concept

Lastly, the conceptual framework proposes that there is a relationship between appraisals and self-concept and these relationships differ across cultures due to cultural differences in self-construal. Referring back to Ehlers and Clark's (2000) cognitive appraisal model it is illustrated that appraisals of the trauma experience and/or its sequelae function to maintain a sense of current threat. These appraisals fall broadly into two classes, those that concern the self and those that concern the world (Karl, Rabe, Zollner, Maercker & Stopa, 2009). Karl et al. (2009) illustrate that negative self-appraisals following a trauma can and do affect self-concept, as these negative appraisals focus on enduring negative changes to the self, for instance "I will never recover" or "I will never be the same person again". This is also somewhat evocative of the trauma as central to identity model as these cognitive appraisals are reflective of a trauma-centered self-concept and serves as a salient feature from which to base future expectations concerning self and other experiences. Finally, it is proposed that negative self-appraisals will be related to distorted and or trauma-centered self-concept and this will in turn be related to PTSD. In support of this, research has demonstrated that negative self-appraisals, negative world appraisals and

self-blame are highly related with, and predictive of, PTSD (Bryant & Guthrie, 2007, 2005; Field, Norman, & Barton, 2008).

However, to date, research has not examined the relationship between distortions and disruptions in self-concept (such as self-ambivalence, trauma-centered self-perceptions and discrepancies in self-concept) and trauma-associated appraisals in those with PTSD. It is predicted that the two will be related and that maladaptive appraisals may even mediate the associations between distorted self-concept and poor posttrauma psychological adjustment (as explained further in Chapter 5). Lastly, these relationships may differ due to cultural differences in self-construal's influence on appraisals and self-concept. Specifically, cross-cultural research has indicated that those from collectivistic cultures have a greater tolerance of discrepant and contradictory self-relevant information (Spencer-Rodgers et al, 2009); whilst those from individualistic cultures value self-consistency and are not tolerant of negative self-relevant information (Spencer-Rodgers et al, 2009; Suh, 2000). Further, self-discrepancy and inconsistency and negative self-evaluations have been linked to adverse psychological well-being for those from individualistic cultures but not for those from collectivistic cultures (Spencer-Rodgers et al., 2010). Therefore, with such cultural differences in self-conceptions and evidence indicating trauma appraisals to be predictive of PTSD, it would be expected that maladaptive appraisals would be associated with, and mediate the relationship between, distortions in self-concept and PTSD for those from individualistic cultures but not necessarily for collectivistic cultures.

4.6 Main Summary Points of the Conceptual Framework

Cultural differences in how individuals create identities or forge new ones following trauma and how identity impacts on posttrauma psychological adjustment is not well researched. Despite this lack of research, its role is extremely important, as it is central to how individuals adapt to trauma. The conceptual framework draws together psychological theories from the trauma and cross-cultural literature. In sum, it is proposed that cultural differences will influence underlying processes (i.e. appraisals and self-concept) in PTSD development and maintenance. Specifically, these relate to the following three hypotheses that will be investigated throughout the course of this thesis:

Appraisals of trauma:

1) It is predicted cultural differences in self-construal will influence trauma appraisals, particularly in regard to agency (i.e. perceived control and responsibility in relation to the trauma) appraisals. Specifically, it is hypothesized that those from individualistic cultures will value agency appraisals to a greater extent in the trauma memory than those from collectivistic cultures and will in turn influence posttrauma psychological adjustment.

Self-concept following trauma:

2) It is predicted that trauma will impact one's self-concept and that this will differ across cultures.

Appraisals, Self-concept and Culture:

3) It is predicted that appraisals and self-concept will be related, however, it is not yet known whether these relationships are culturally distinct due to cultural-specific appraisal tendencies and cultural differences in self-construal.

4.7 Studies

Following the thesis conceptualizations of how cultural differences in self-construal influences appraisals and self-concept posttrauma, the following seven studies have been developed to empirically test the three hypotheses derived from the conceptual framework. Further, the framework is revisited and discussed more thoroughly in the introduction of each individual study, allowing for more precise hypotheses to be generated. In addition, it will be returned to in Chapter 8's general discussion to consider whether the framework is appropriate regarding the role of culture in trauma appraisals, self-concept posttrauma and subsequent posttraumatic psychological adjustment.

Part 1 of the thesis (Studies 1 and 2) will focus on the trauma event in a non-clinical sample. Specifically, the first study will explore how cultural differences in self influence appraisals of trauma and its subsequent impact on psychological adjustment. The second study will explore the impact of cultural differences in self on posttraumatic self-concept, self-definition and psychological adjustment. Part 2 of the thesis (Study 3) will focus on the interdependent perspective regarding trauma appraisals, the meaning and understanding placed on trauma, and trauma's

consequences for affected individuals. This will be gained using a qualitative design and employing focus groups comprised of trauma survivors from collectivistic cultures recruited from the general population. In addition, key informant interviews with mental health practitioners who routinely work with trauma survivors from collectivistic cultures will be used. Lastly, a new measure will be derived from these focus groups and key informant interviews, to measure cognitive appraisals from a more interdependent perspective. Part 3 will focus on the trauma event in a sample of trauma survivors from individualistic and collectivistic cultures with and without PTSD to extend the ecological validity of Part 2 and 1. Specifically, Study 4 will explore how cultural differences in self influence appraisals of trauma and its subsequent impact on psychological adjustment. It will further consolidate findings from Study 1 and will pilot the new measure derived in Study 3. Study 5 is an extension of Study 2 and will explore the impact of cultural differences in self on posttraumatic self-concept and psychological adjustment. Study 6 will also focus on posttraumatic self-concept, however it will focus on cultural differences in self-ambivalence and psychological adjustment. Lastly, Study 7 investigates how the new measure developed in Study 3 is associated with posttraumatic self-concept and posttraumatic psychological adjustment.

4.8 Conclusion

The introduction addressed the three objectives stated in Chapter 1. First, Chapter 2 outlined the current prominent socio-cognitive models of PTSD. The importance of appraisals and the conceptual self in distinguishing between those with and without PTSD is undeniably central to most of these models. Additionally, another important process, namely, posttraumatic self-concept was identified as being central in understanding the etiology and maintenance of PTSD. Second, Chapter 3 explored cultural distinctions in the self in terms of an independent and interdependent self. It was demonstrated that although individuals are motivated to achieve both aspects of the self, independence is emphasized in individualistic cultures, such as the United Kingdom, and interdependence is emphasized in collectivistic cultures, such as Asian cultures. This cultural distinction in self-construal has been found to impact on appraisals and self-concept and it is in these cultural differences that the culturally emphasized self is reaffirmed. Therefore, given that this cultural distinction in self impacts on these two key processes in PTSD

development and maintenance, it became obvious that PTSD models need to consider cultural variations in self. This is already alluded to and appears to be underpinning many of the models; however, it has not been fully acknowledged as an integral and constituent part in these models or empirically investigated. In response to this, the third aim of the introduction was to develop a conceptual framework that accounted for cultural differences in appraisals and self-concept and their potential influence on the development and maintenance of PTSD. The studies developed in this thesis are designed to empirically test this conceptual framework and shed further light on the influence of culture on these component processes in PTSD development and maintenance.

Part 1

Investigating Cultural Differences in Trauma Appraisals, Self-Concept and Autobiographical Remembering following Trauma and Implications for Posttraumatic Psychological Adjustment in a Non-Clinical Sample

Chapter 5

Cultural Differences in Trauma Appraisals, Self-Concept and Autobiographical Remembering following Trauma and Implications for Posttraumatic Psychological Adjustment in a Non-Clinical Sample

5.1. Overview

As outlined throughout the thesis, cognitive appraisals and self-concept are central to understanding the development, maintenance and treatment of PTSD. However, cross-cultural psychology research has demonstrated that cultural differences in self-construal influence how one appraises an event and how one perceives the self. The question remains, therefore, how do cultural differences in self-construal influence appraisals of trauma, posttrauma self-concept and what are the implications of this for PTSD? The conceptual framework contends these cultural distinctions impact on trauma appraisals and that trauma will influence self-concept, which will subsequently be linked to posttrauma maladjustment. The aim of this research is to explore these issues in a non-clinical sample. It is highlighted that while the same participants are used in this research, the findings have been separated into two studies to aid in the reporting of findings. Study 1's aim is to investigate whether there are cultural differences in the appraisals of everyday and trauma events and the implications for posttraumatic psychological adjustment. The objective of Study 2 is to investigate the relationships between discrepancies in self-concept, self-appraisals and PTSD symptoms and to examine whether these relationships differ depending on one's cultural background.

5.2. Study 1

Appraisals of Everyday and Trauma Events and Implications for Posttraumatic Psychological Adjustment

An impressive body of literature identifies several factors that impede post-trauma recovery, maintain posttraumatic symptoms and predict the development of on-going PTSD (see Brewin, Andrews, & Valentine, 2000; Ozer, Best, Lipsey, & Weiss, 2003, for reviews). One such factor is negative cognitive appraisals (Kleim, Ehlers, & Glucksman, 2007). Cognitive appraisals are of particular interest because they are central to influential clinical cognitive models of PTSD. Ehlers and Clark (2000) emphasize that self-relevant appraisals of the trauma experience and/or its sequelae function to maintain a sense of current threat in the survivor's life and are instrumental in promoting the use of maladaptive strategies, which in turn, maintains current symptoms. Empirical evidence supports these theoretical assertions and suggests that cognitive factors are the most useful of a set of pre-trauma factors, trauma specific factors and other predictors for identifying chronic PTSD (Kleim et al., 2007). Moreover, appraisals are potentially modifiable and thus, provide important targets for treatment (Resick, 2001). However, the majority of our understanding regarding the role of appraisals in PTSD is informed by research using Western populations. Despite the increase in recognition that PTSD is observed in many different societies and cultures, little is known about the etiology, maintenance and treatment of PTSD in non-Western cultures (Foa et al., 2009). Given the central role of cognitive appraisals in PTSD, it is important to consider the influence of culture on the relationship between cognitive appraisals and PTSD and the use of culturally adequate and valid assessment of trauma-related appraisals in PTSD research and clinical practice (Su & Chen, 2008).

The question of whether culture influences how a given everyday event is experienced has received some attention in cross-cultural psychology research where it has been found that culture influences appraisals (Mesquita & Walker, 2003). Research has demonstrated that Western/individualistic cultures report more appraisals of perceived control, responsibility and anticipated effort than Asian cultures (e.g., Matsumoto, Kudoh, Scherer, & Wallbott, 1988; Mauro et al., 1992; Mesquita & Markus, 2004; Scherer, 1997) as Western cultures attach more value to personal responsibility, agency and a personal sense of perceived control (Fiske, Kitayama, Markus & Nisbett, 1998, Markus & Kitayama, 1991, Nisbett, Peng, Choi,

& Norenzayan, 2001). In contrast, personal agency and perceived control have less applicability in Asian cultures rather interdependence of an individual and their environment is stressed (Mesquita & Walker, 2003). Culture also influences how people react to different cognitive appraisals so that reactions generally correspond and reinforce cultural norms (e.g. Kim, 2002; Kitayama, Mesquita & Karasawa, 2006; Leu et al., 2010; Mesquita & Markus, 2004; Mesquita & Walker, 2003). Appraisals of personal responsibility, autonomy and perceived control have been found to predict positive affect in Western cultural groups but less so for those from Asian cultures (Mesquita & Karasawa, 2002; Mesquita & Walker, 2003). Sato (2001) suggests that diminished levels of personal agency and perceived personal control can result in depression and/or anxiety in those holding a strong independent self-construal. In contrast, alienation and isolation may be more associated with depression and/or anxiety in those holding an interdependent self-construal (see Chapter 3 for further details regarding cultural differences in the appraisals of everyday events). Study 1 aims to investigate whether the same cultural differences are evident in the appraisals of trauma and if so, what are the implications of these differences for PTSD.

The cross-cultural literature has investigated the influence of culture on ten cognitive appraisal dimensions in relation to everyday events. These ten cognitive appraisals include pleasantness (result of having what one desires), attentional activity (strong motivation to attend closely to an event), certainty (predictability, certainty and understandability of the situation), coping ability (ability to cope with situation), perceived control (level of personal perceived control in the event), responsibility (personal responsibility for the event), anticipated effort (anticipate needing to expend energy or effort in the event), goal-need conduciveness (level of importance and perceived obstacles in the event), legitimacy (perceived fairness of an outcome of an event) and norm/self compatibility (appropriateness of own behavior, feelings, thoughts and actions in the situation) (see Mauro et al., 1992). However, to date, research has not investigated these cognitive appraisal dimensions in relation to one's trauma memory. The trauma memory potentially differs from other autobiographical memories as, by definition, it results from an extremely stressful or traumatic event and is generally associated with an increase in emotional arousal, intensity and schema violations (Rubin, Boals, & Berntsen, 2008). Moreover, this is of particular relevance for those with PTSD as certain dysfunctional appraisals are central to the understanding of PTSD (Brewin, 2011; Brewin, Dalgleish, & Joseph, 1996; Ehlers &

Clark, 2000). Therefore, the first aim of Study 1 was to explore these cognitive appraisal dimensions in relation to trauma and to examine the relationships between these appraisals and PTSD symptoms in British and Asian participants.

The Posttraumatic Cognitions Inventory (PTCI; Foa et al., 1999) was developed as a 33-item self-report questionnaire that is now widely used to assess negative trauma-specific cognitive appraisals. It includes three factors: negative cognitive appraisals about the self, negative cognitive appraisals about the world and self-blame. While the PTCI is widely used, only one study has to date investigated the reliability and validity of the PTCI for use in Asian populations. Su and Chen (2008) reported the factor structure and psychometric properties of a Chinese version of the PTCI and its relationship with PTSD symptoms. They used a sample of 240 traumatized Taiwanese university students. Their confirmatory factor analysis suggested adequate replication of the original three-factor (i.e. negative self, negative world and self-blame) structure of the PTCI after eliminating four cross-loaded items. Their 29-item PTCI was found to have good psychometric properties and had moderate to high correlations with PTSD symptoms. This initial study suggests that similar negative cognitions contribute to PTSD development in Asian samples. The second aim of Study 1, therefore, is to further investigate the influence of culture on trauma-specific negative cognitive appraisals. This will be achieved through examining whether there are cultural differences in these trauma-specific dysfunctional cognitive appraisals and the relationships between these trauma-specific cognitive appraisals and PTSD symptoms.

In light of the above and as reflected in the conceptual framework, it is hypothesized that there will be cultural differences in the appraisals dimensions related to the trauma event. Second, given Su and Chen's (2008) findings that similar negative trauma-specific cognitions (as indexed on the PTCI) contribute to PTSD development in Asian samples, it is hypothesized that similar dysfunctional appraisals will be associated with PTSD symptoms in both British and Asian participants.

5.2.1 Method

5.2.1.1 Participants

Participants were recruited from the Psychology Research Participation Panel at the University of East Anglia. An email was sent to those on the panel and those who were interested contacted the researcher. The inclusion criteria for the sample

included participants being 18 years and over, having experienced a traumatic or extremely stressful event, to have the language ability to complete the study in English and lastly to self identify as either British or Asian. Participants received £5 for participation. An a priori power calculation revealed that a sample size of 92 was required for independent t-tests to have 80% power for detecting large size effect when employing the traditional .05 criterion for statistical significance. GPower software revealed that a sample size of 111 participants was needed for the study for conducting ANOVA and a sample size of 64 was required 80% power for detecting medium effect size when employing the traditional .05 criterion of statistical significance for correlation analyses.

5.2.1.2 Measures

5.2.1.2.1 Psychological adjustment.

Impact of Event Scale-Revised (IES-R; Weiss & Marmar, 1997).

Posttraumatic stress symptoms were assessed using the widely used self-report questionnaire, Impact of Event Scale-Revised (IES-R; Weiss & Marmar, 1997). The IES-R is a standard measure used to assess PTSD symptomatology. It consists of three subscales assessing avoidance, intrusions and hyperarousal symptoms relating to a specific event. The IES-R is a 22-item self-report measure designed to access current subjective distress for any specific life event. Respondents are asked to rate each item on a scale of 0 (*not at all*) to 4 (*extremely*) according to the past seven days. Participants received a score for each scale and a total score. In this case the specific event was the trauma memory disclosed prior to the Appraisal Inventory (see below). The rationale for using the IES-R was based on it being a prominently selected measure to assess trauma symptomatology, it parallels the DSM-IV (APA, 1994) criteria for PTSD and is hence comprised of avoidance, intrusions and hyperarousal subscales. Further it has adequate psychometric properties (Weiss & Marmar, 1997) and has been used in previous cross-cultural research (e.g. Jobson & O'Kearney, 2006). The clinical cut off score for the IES-R is 33 (Creamer, Bell & Failla, 2003). According to Amone-P'Olak (2005) the intrusion and avoidance subscales in the IES-R can be categorised into four clinical levels according to the degree of symptoms and reactions: scores 0 – 8 (sub clinical range), 9 – 25 (mild range), 26 – 43 (moderate range), and 44 (severe range). In the current study the total scale and subscales demonstrated good internal consistency (Cronbach's α of .87).

Depression (HSCL-25; Derogatis, Lipman, Rickels, & Cori, 1974).

Depression was measured using Part II of the Hopkins Symptom Checklist (HSCL-25), which has 15 items that assess depression symptoms (Derogatis, Lipman, Rickels, & Cori, 1974). Participants are required to indicate how much each symptom bothered or distressed them in the past week, including today from 1(*not at all*) to 4 (*extremely*). The depression score is the average of the 15 depression items, the clinical cut-off score of 1.75 is used an indication of symptoms equivalent with an anxiety or depressive disorder (Sandanger, Moum, Ingebrigtsen, Dalgard, Sorensen, Bruusgaard, 1998). The rationale for using this measure is based on the high comorbidity between depression and PTSD (Brewin & Holmes, 2003) and depression has been found to impact on autobiographical memory retrieval. The HSCL-25 depression score has been consistently shown in several populations to be correlated with major depression as defined by the DSM-IV (1994). Further, it has good psychometric properties and is regularly used in cross-cultural research (e.g., Jobson & O'Kearney, 2006). In the current study the depression subscale demonstrated good internal consistency (Cronbach's α of .89).

5.2.1.2.2 Appraisals

Appraisals Inventory (AI; Mauro et al., 1992). Participants were asked to recall a positive and a trauma memory. The trauma event was subjectively selected by the participant as the most traumatic event in their life and thus, not all events fulfilled PTSD criterion A (American Psychiatric Association, 2000). To encourage participants to think deeply about each memory, they were then asked to describe the event in detail. Following each memory, participants completed the AI inventory. The AI inventory was originally developed by Mauro et al. (1992) to investigate cross-cultural differences in emotional responses. It consists of 28 questions around ten appraisal dimensions related to specified events (i.e. the pleasant and trauma/distressing event specified). The ten appraisals dimensions consisted of pleasantness (*e.g. How certain were you that you would get what you wanted?*), attentional activity (*e.g. To what extent did you try to devote your attention to what was going on?*), certainty (*e.g. As the situation was beginning, how certain were you, in advance, about what was going to happen?*), coping ability (*How certain were you that you would be able to cope with what was happening?)*, perceived control (*e.g. To what extent did you feel that anyone (either yourself or someone else) was controlling*

what was happening?), responsibility (*e.g. How responsible did you feel for having caused what was happening?*), anticipated effort (*e.g. To what extent did you feel a need to exert yourself (mentally or physically) in order to deal with this situation?*), goal/need conduciveness (*e.g. To what extent did you feel that there were obstacles standing in the path between you and getting what you wanted?*), legitimacy (*e.g. How fair did you feel this event was?*) and norm/self-compatibility (*e.g. How appropriate do you think it was for you to feel what you felt in this situation?*). Participants scored responses on seven-point scales from 1 (*not at all*) to 9 (*very much*). The rationale for using this measure was based on this questionnaire being routinely (Mauro et al., 1992; Scherer, 1997) used in the cognition, emotion and cross cultural research to assess cultural differences in appraisals and has adequate psychometric properties (Mesquita & Walker, 2003).

Post-traumatic Cognitions Inventory (PTCI; Foa et al., 1999). The PTCI is a 33-item inventory assessing appraisals related to trauma. The PTCI has three subscales; appraisals about negative self, negative world and perceived self-blame regarding the trauma and uses seven-point scales from 1 (*totally disagree*) to 7 (*totally agree*). The rationale for using the PTCI was due to it being a well-established inventory (Beck et al., 2004; Foa et al., 1999; van Emmerik, Schoorl, Emmelkamp, & Kamphuis, 2006) and has been used cross-culturally (Su & Chen, 2008) to evaluate negative self-cognition. Further it has excellent psychometric properties and is routinely used in trauma research and has also been used on student samples (Foa et al., 1999). In addition, current accounts surrounding post-trauma recovery place prominence on the role of negative and dysfunctional cognitions in the development and maintenance of PTSD (Beck et al., 2004). The PTCI is a measure of such negative and dysfunctional thoughts and beliefs. In the current study the total scale and subscales demonstrated good internal consistency (Cronbach's α of .80)

5.2.1.2.3. Demographics

Participants were also asked to provide their age, ethnicity, gender, time in the UK. Following this, participants were asked how hard they found the study on a 10-point scale from 1 (*not at all*) to 10 (*extremely*) and their English language skills on a 10-point scale from 1 (*not very good*) to 10 (*extremely good*).

5.2.1.3 Procedure

Ethical approval was obtained from University of East Anglia, Faculty of Heath Research Office, Reference Number 2009/10-029 (see Appendix A). Data for the two studies was collected in the same experimental session. Each session took approximately 60 minutes. Participants met with the researcher and following written informed consent procedures, participants were asked to complete the AI in relation to the trauma memory and positive memory. The positive and trauma memories were counterbalanced so as to control for order effects that could potentially influence the results. The procedure used to counterbalance the memories were to ask half of the British and half of the Asian participants to first recall a negative memory followed by a positive memory. The remaining half of the British and Asian groups were asked to recall first a positive memory followed by a negative memory. Participants were asked to recall their positive memories as follows; "*Please think about a positive event that has occurred in your life. Please write about this event in as much detail as you can. All your writing will be completely confidential. As you write do not worry about punctuation or grammar, just write as much as you can and include thoughts, feelings, reflections etc* ". Participants were asked to recall their negative memories as follows; "*Please think about the most traumatic event that has occurred in your life. Please write about this event in as much detail as you can. All your writing will be completely confidential. As you write do not worry about punctuation or grammar, just write as much as you can and include thoughts, feelings, reflections etc"*. Participants also completed the IES-R, PTCI and HSCL-25 followed by their demographic information.

5.2.1.4. Results

Data achieved normality for all variables with the exception of the IES-R and the PTCI. Transformations did resolve issues of skewness and kurtosis for the PTCI but not for the IES-R. For analysis using the IES-R variable, non-parametric correlations were used to investigate associations between trauma appraisals with the IES-R for PTSD symptoms (see Table 4).

5.2.1.4.1. Participant Characteristics

The British sample comprised of 6 males and 28 females. The Asian sample included 9 males and 32 females and comprised of Chinese (n = 27), South Asian (n =

9), and South-East Asian (n = 5) participants.

As Table 2 shows, the two groups did not differ in terms of age. Unsurprisingly, the British group had lived in the UK for a significantly longer time than the Asian participants and rated their English language skills as more proficient than the Asian group. However, there was no significant difference between groups in self-reported task difficulty. In regards to posttrauma adjustment, Asian participants reported significantly higher trauma appraisals (PTCI total), PTSD symptoms (IES-R total) and depression symptoms (HSCL) than the British. When PTSD scores were included as a covariate, the two groups did not differ on the PTCI and its subscales.

Table 2

Mean and (Standard Deviations) for Participant Characteristics and Group Comparisons

	British	Asian	*t*	*p*
Age (years)	23.00 (6.27)	23.02 (4.18)	.20	.98
Time in UK (years)	20.56 (6.71)	1.39 (2.00)	16.08	< .001
Self-rated English ability	9.06 (1.15)	5.78 (1.90)	9.18	< .001
Task difficulty	4.35 (2.19)	5.12 (1.85)	1.65	.10
IES-R	16.65 (17.33)	30.44 (15.50)	.36	.001
HSCL	1.90 (.58)	1.60 (.47)	2.47	.02
Years since trauma	7.88 (6.91)	6.49 (6.57)	.86	.39
Years since pleasant event	3.45 (3.99)	3.63 (4.73)	.16	.88
Trauma type (n)	Death/illness = 12; Accident = 3; Assault = 7; Life stressor = 12	Death/illness = 9; Accident = 9; Assault = 5; Life stressor = 18	-	-
Positive type (n)	Achievement = 20; Relationship= 12	Achievement = 28; Relationship = 7	-	-

Note: IES-R = Impact of Event Scale-Revised. HSCL = Hopkins Symptom Checklist. Life Stressor included academic stress, relationship stress or stress associated with moving.

The trauma narratives were classified into the following trauma type category; DSM-IV-TR (APA, 2000) criterion A trauma type (i.e. witness death, serious physical injury to self or to others, sexual assault) (British *n* = 22; Asian *n* = 23) and life stressor (included academic stress, relationship stress or stress associated with moving) (British *n* = 12; Asian *n* = 18). The positive narratives were classified as success/achievement (British *n* = 20; Asian *n* = 28) and family/relationship (British *n* = 12; Asian *n* = 7). The groups did not differ in type of trauma, $\chi^2(3, N = 75) = 4.35$, $p = .23$, or positive event, $\chi^2(2, N = 75) = 5.51$, $p = .06$, disclosed.

5.2.1.4.2. Hypothesis 1: Cultural differences in the appraisal dimensions related to the trauma event

Table 3 shows the means for each of the appraisal dimensions for both British and Asian groups. A 2 (between subjects; culture: British vs. Asian) x 2 (within subjects; memory: positive vs. trauma) mixed analysis of variance (ANOVA) was used with each appraisal type as the dependent variable. The findings were similar when the IES-R and depression was included as a covariate suggesting that group differences in level of posttraumatic stress did not influence the findings.

Pleasantness. There was a memory main effect, $F(1, 73) = 17.26$, $p < .001$, $\eta_p^2 = 0.19$; unsurprisingly, the pleasant memory was appraised as being more pleasant than the trauma memory. There was also a significant culture main effect, $F(1, 73) = 6.07$, $p = .02$, $\eta_p^2 = 0.08$; the British group had lower levels of pleasantness appraisals than the Asian group. The interaction was not significant.

Coping ability. There was a memory main effect, $F(1, 73) = 33.30$, $p < .001$, $\eta_p^2 = 0.31$; the pleasant memory was rated as being associated with greater ability to cope than the trauma memory. The culture main effect and interaction were not significant.

Anticipated effort. There was a memory main effect, $F(1, 73) = 14.89$, $p < .001$, $\eta_p^2 = 0.17$; the pleasant memory was rated as having less anticipated effort appraisals than the trauma memory. The culture main effect was significant, $F(1, 73) = 5.26$, $p = .03$, $\eta_p^2 = 0.07$; the British group reported greater anticipated effort appraisals than the Asian group. The interaction was not significant.

Table 3

Mean and (Standard Deviation) for the Asian and British Group on Appraisals for Pleasant and Trauma Experiences

	Asian		British	
	Pleasant	Trauma	Pleasant	Trauma
Pleasantness	5.85 (2.19)	4.41 (2.11)	4.91 (2.57)	3.35 (2.55)
Coping Ability	5.88 (1.91)	4.39 (2.41)	6.29 (2.25)	3.91 (2.27)
Anticipated effort	11.85 (3.94)	13.49 (2.68)	12.85 (4.47)	15.26 (2.29)
Legitimacy	15.00 (2.53)	8.66 (4.37)	15.21 (4.04)	5.94 (4.01)
Norm/Self	12.49 (2.96)	11.34 (3.66)	16.65 (1.79)	14.21 (3.37)
Goal/Need	19.27 (3.79)	19.44 (4.59)	19.29 (4.83)	19.94 (4.74)
Attentional activity	25.41 (4.14)	20.95 (4.25)	28.09 (4.82)	22.59 (6.54)
Certainty	27.44 (7.68)	23.39 (7.77)	25.94 (10.07)	22.29 (10.26)
Responsibility	22.32 (3.91)	21.39 (4.95)	26.21 (5.59)	21.85 (5.89)
Perceived control	21.71 (3.95)	19.32 (4.29)	23.94 (5.92)	18.62 (6.40)
PTCI-Total	-	9.19 (1.73)	-	8.07 (1.82)
PTCI-Self	-	6.66 (1.65)	-	5.84 (1.39)
PTCI-World	-	4.89 (1.15)	-	4.22 (1.30)
PTCI-Self blame	-	3.80 (.81)	-	3.33 (1.10)

Note: PTCI = Posttraumatic Cognitions Inventory

Legitimacy. The interaction was significant, $F(1, 73) = 5.07$, $p = .03$, $\eta_p^2 = 0.07$. As illustrated in Figure 6, post-hoc comparisons revealed that while the cultural groups did not differ in terms of legitimacy of the pleasant memory, $t(73) = .27$, $p = .79$, $d = 0.06$, the Asian group reported the trauma memory was more legitimate than the British group, $t(73) = 2.78$, $p = .01$, $d = 0.65$.

Norm/self compatibility. There was a memory main effect, $F(1, 73) = 17.83$, $p < .001$, $\eta_p^2 = 0.20$; the pleasant memory was rated as having greater norm/self compatibility appraisals than the trauma memory. The culture main effect was also significant, $F(1, 73) = 38.07$, $p < .001$, $\eta_p^2 = 0.34$; the British group had higher levels of norm-self compatibility appraisals than the Asian group. The interaction was not significant.

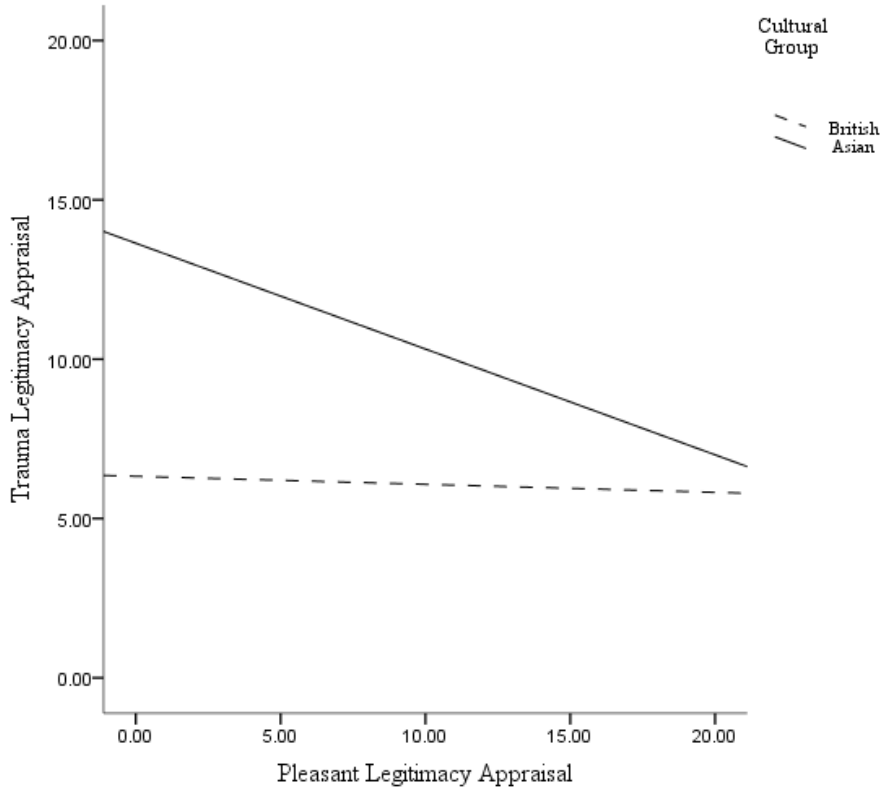

Figure 6. Interaction effect between trauma and pleasant legitimacy appraisals and cultural group.

Goal/Need Conduciveness. The main effects and interaction were not significant.

Attentional activity. There was a memory main effect, F (1, 73) = 39.89, p < .001, η_p^2 = 0.35, η_p^2 = 0.17; the pleasant memory was rated as having lower levels of attentional activity appraisals than the trauma memory. There was a culture main effect, F(1, 73) = 6.64, p = .01, η_p^2 = 0.08; the British group had higher levels of attentional activity appraisals than the Asian group. The interaction was not significant.

Certainty. There was a memory main effect, F(1, 73) = 14.82, p < .001, η_p^2 = 0.17; the pleasant memory was rated as being associated with greater certainty appraisals than the trauma memory. The culture main effect and interaction were not significant.

Responsibility. The interaction was significant for appraisals of responsibility, F(1, 73) = 5.80, p = .02, η_p^2 = 0.07, and can be seen in Figure 7. The British group had significantly higher levels of appraisals of responsibility than the

Asian group for the pleasant memory, $t(73) = 3.54$, $p = .001$, $d = 0.80$. The cultural groups did not differ in terms of the trauma memory, $t(73) = .37$, $p = .71$, $d = 0.08$, and the British group reported lower levels of responsibility in the trauma memory when compared to the pleasant memory, $t(33) = 3.86$, $p < .001$, $d = 0.76$. The Asian group did not differ significantly in terms of levels of responsibility in the trauma memory when compared to the pleasant memory.

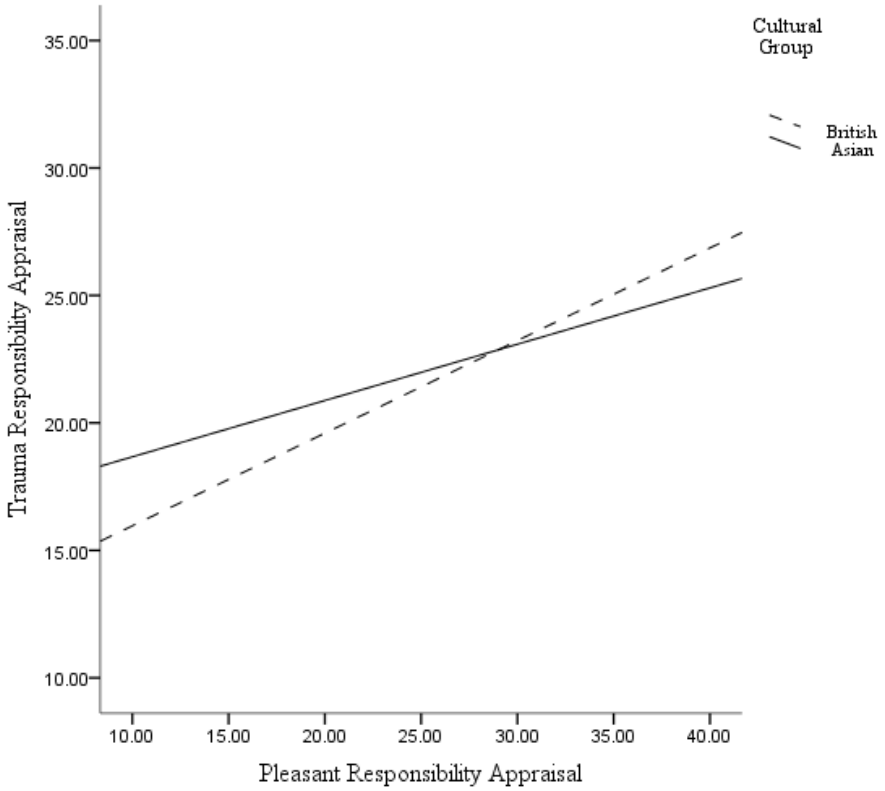

Figure 7. Interaction effect between trauma and pleasant responsibility appraisals and cultural group.

Perceived control. There was a memory main effect, $F(1, 73) = 24.56$, $p < .001$, $\eta_p^2 = 0.25$; the pleasant memory was rated as having greater perceived control appraisals than the trauma memory. The culture main effect and interaction were not significant.

PTCI. A MANOVA was carried out with the total PTCI and three subscales as dependent variables. The multivariate effect of Group was not significant, Wilks' Lambda = .92, $F(3, 71) = 2.16$, $p = .10$, $\eta_p^2 = .08$.

5.2.1.4.3 Hypothesis 2: Associations between trauma appraisals and PTSD symptoms

Given the IES-R was not normally distributed and transformations did not achieve normality, Spearman correlations were used. Table 4 shows a significant negative correlation was found between perceived control and PTSD symptoms for the British group. In contrast, the Asian group had a significant correlation between attentional activity and PTSD symptoms. Table 4 shows that all of the British and Asian correlation coefficients did not differ significantly.

Table 4 also shows that for the British group, PTSD symptoms and PTCI total, PTCI negative self and PTCI world were all significantly correlated. Additionally, the PTCI significantly predicted PTSD symptoms, (R^2 = .18, β = .42, *SE* = .09, *t* = 2.65, *p* = .01). In contrast, for the Asian group, even though this group had higher levels of PTSD symptoms, only PTCI negative self subscale was significantly correlated with PTSD symptoms and the PTCI did not significantly predict PTSD symptoms, (R^2 = .06, β = .25, *SE* = .14, *t* = 1.62, *p* = .11). This result suggests that the PTCI may better account for PTSD symptoms in the British group than the Asian group.

These correlations were again explored for the Asian group excluding the items (3 items from negative self-subscale and 1 item from the self-blame subscale) that were excluded from the Chinese version of the PTCI (Su & Chen, 2008). When this was the case PTSD symptoms were now just significantly correlated with PTCI total, $r_s(41) = .31$, $p = .02$, and still significantly correlated with PTCI self, $r_s(41) = .38$, $p = .01$. However, self-blame still did not significantly correlate with PTSD symptoms, $r_s(41) = .05$, *ns*. The PTCI also now significantly predicted PTSD symptoms, (R^2 = .10, β = .17, *SE* = .08, *t* = 2.09, *p* = .04).

Table 4

Spearman Correlation Coefficents (two-tailed) between Trauma Appraisals and PTSD symptoms for the British and Asian Cultural Groups and Z scores Comparing Correlation Coefficients.

	British	Asian	*Z* score
Pleasantness	.03	-.22	1.20
Attentional Activity	-.33	-.50**	.97
Certainty	.14	-.05	.90
Coping Ability	-.21	-.13	-.39
Perceived Control	-.35*	-.17	-.91
Responsibility	-.10	-.17	.34
Anticipated Effort	.04	.13	-.43
Goal/Need	-.01	.12	-.57
Legitimacy	-.16	-.09	-.34
Norm/Self	.18	.12	.29
PTCI Total	.40*	.29	.59
PTCI Self	.49**	.38*	.64
PTCI World	.39*	.07	1.61
PTCI Self-Blame	.15	.01	.67

Note: * $p < .05$. ** $p < .01$.

5.2.1.5. Discussion

Study 1 found that unsurprisingly pleasant and trauma memories were appraised differently. Despite this, the British group, regardless of memory type, reported higher levels of anticipated effort, attentional activity and norm-self compatibility appraisals and lower levels of pleasantness appraisals than Asian participants. This aligns with previous cross-cultural research and supports the conceptual framework and its hypothesis pertaining to appraisals. This is reflected through British participants valuing agency in this first study, assuming their reactions are typical and being less concerned about discrepancies with the reactions of others (Markus & Kitayama, 2010; Mesquita & Walker, 2003). The trauma memory was only unique in terms of legitimacy and responsibility appraisals. The Asian group

reported the trauma memory was more legitimate than the British group. This may reflect Asian cultures having greater acceptance of situation outcomes and fate (Mesquita & Walker, 2003), again supportive of the first hypothesis derived in the conceptual framework. The British group, as in previous research, had significantly higher levels of appraisals of responsibility than the Asian group for the pleasant memory, once again reflective of research on agency appraisals. However, this did not continue to account for the trauma memory, as the British group did not differ from the Asian group. Instead the British group had reduced their appraisals of responsibility to a level equivalent to the Asian group. Whilst this was unexpected and not as hypothesized, it can be seen as an important appraisal dimension for purposes of coping and recovery following trauma. Given the importance of responsibility in Western cultures, participants from British cultures may not want to feel responsible for trauma events, which may challenge and threaten the independent self.

Further, a significant negative correlation was found between lower levels of perceived control and PTSD symptoms for the British group. Appraisals of control are valued in Western cultures and the violation of expectations/cultural norms in appraisals can lead to distress (Mesquita & Walker, 2003). Therefore, for British participants less perceived control may be associated with posttraumatic distress. While for the British group, PTCI appraisals were significantly correlated with, and predicted, PTSD symptoms, for the Asian group, the PTCI did not significantly predict PTSD symptoms. This result suggests that the PTCI may better account for PTSD symptoms in the British group than the Asian group. One possibility for this may be the PTCI assesses individualistic-type appraisals (e.g. I am a weak person, I have permanently changed for the worse, I can't rely on myself, I am inadequate) rather than interdependent, public (i.e. social roles and identities) and communal (relationships and interdependence) appraisals, which are emphasised in Asian cultures. However, when only the items on the Chinese version of the PTCI (Su & Chen, 2008) were used, the PTCI did significantly correlate with and predict PTSD symptoms. This suggests that the 29-item PTCI may be more appropriate in Asian samples.

On the final two notes, it is also worth highlighting that the groups did significantly differ in HSCL-25 scores, reflecting a significant difference in mood between the two groups, with the Asians above the clinical cut-off for depression and

the British below the clinical cut-off point for depression. This difference in mood could very well influence responses made on the appraisal inventory as research denotes that mood affects ones self-appraisals; namely, negative mood influences one's appraisal of the self during an event negatively (Abele & Hermer, 1993). Thus the significant difference in mood state between the British and Asian groups could have impacted on findings. For instance the lower levels of attentional activity appraisals and anticipated effort appraisals expressed by the Asian group compared to their British counterparts could have been influenced by their depressive mood state.

Additionally, mood states could have also influenced memories that were recalled. For instance, while there were no group differences in trauma memory events, the positive memory events were almost culturally distinct. This could be understood as a reflection of cultural differences on what constitutes a positive event. For instance Wang and Ross (2005) propose that those from individualistic cultures hold more autonomous memories while those from collectivistic cultures place greater emphasis on memories of significant others, focusing on interpersonal relationships. Yet in this instance, the Asian group provided greater autonomous (success/achievement) related memories, and fewer interpersonal (family) memories compared to the British group (see Table 2). This could be attributed to differences in mood between the two groups. The Asian group had significantly greater depression symptoms, which could potentially have influenced the type of positive memories recalled. This would support Yuan, Peng, Liu and Zhou's (2011) assertion that negative moods could potentially influence one's attention and the type of memory one attends to.

5.3. Study 2

Discrepancies in Self-Concept, Posttraumatic Appraisals and Posttraumatic Psychological Adjustment

Current cognitive models of PTSD posit that an individual's self-appraisals post-trauma can be largely dominated by negative perceptions of the self (e.g. "I am weak", "I will never be the same again") that can maintain PTSD as they create a sense of current internal threat to self (Dunmore et al., 1997; Ehlers & Clark, 2000; Ehlers et al., 1998; Karl et al., 2009; Matthews et al., 2009). This sense of continued current threat results in an individual engaging in cognitive and behavioral coping strategies to reduce perceived threat. While such strategies may reduce distress in the short term, in the longer term they function to maintain the disorder as they prevent cognitive change (Agar, Kennedy, & King, 2006; Ehlers & Clark, 2000). As previously noted, the important role negative appraisals play in the maintenance of PTSD is well substantiated by empirical work (e.g. Bryant & Guthrie, 2005; Ehlers & Steil, 1995; Foa & Riggs, 1993). However, while such maladaptive appraisals serve as a risk factor for the maintenance of PTSD, dysfunctional and negative appraisals have not as yet been thoroughly explored in relation to self-concept: which not only includes evaluative aspects (i.e. self-appraisals) but also descriptive content about the self (Leary & Tangney, 2005).

As outlined in Chapter 2 and 3, self-concept is of great significance to one's personhood and acts as the reference point from which all else draws meaning (Combs & Snygg, 1959; Krech & Crutchfield, 1948). It is an active, continuous and changing array of accessible self-knowledge and a framework for the perception and organization of one's life experiences (Markus & Wurf, 1987). Moreover, self-concept is influenced by a range of contextual factors (Leary & Tangney, 2005); one such influential factor is culture (Abernathy, 2008; Stone, 2006). Indeed research suggests that people in different cultures have strikingly different understandings of the self (Markus & Kitayama, 1991, 1994, 2010). Individualistic cultures (typically Western) tend to emphasize the independent side of the self (i.e. perceive the self to be unique, independent, autonomous and separate from others). In contrast, Asian cultures tend to emphasize the interdependent aspect of self (i.e. perceive the self to be interdependent with others and emphasize relatedness of group norms and group harmony) (Markus & Kitayama, 1991, 2010 and see Chapter 3 for further details).

In the context of trauma, self-concept is of significant importance to psychological well-being as the trauma acts as a catalyst for a re-defining or re-evaluating one's self-concept, as one is prompted to make sense of the experience. Finding meaning in an otherwise incomprehensible situation potentially leads to a possible schema change, and in so doing, one's possible selves are subject to change and potentially result in a new or discrepant self-concept (Brennan, 2001; Brewin, 2011; Janoff-Bulman, 1992). As outlined in Chapter 3, Western psychological theories purport such inconsistencies and discrepancies in self-concept (i.e. a fractured or incongruent self) have been linked with various forms of psychological maladjustment (Brewin, 2011; Higgins, 1996; Strauman & Higgins, 1987; Sutherland & Bryant, 2008). However, while self-consistency is valued in Western cultures, it has been found to be less valued in Eastern cultures (Heine, 2001; Heine & Lehman, 1997, 1999; Markus & Kitayama, 1994; Suh, 2002). Research suggests that Asians hold a more inconsistent self-concept than Westerners and self-discrepancies are not as problematic for Asian cultures in regards to self-concept and well-being (Church, Anderson-Harumi, et al., 2008; English & Chen, 2011; Suh, 2000).

As outlined in Chapter 3, self-concept, in Higgins' (1987) influential self-discrepancy theory, is divided into three domains, the 'Actual' (representation of the attributes that one believes they actually possess and is one's basic self-concept), the 'Ideal' (representation of the attributes that someone would like to possess) and 'Ought' (representation of the attributes that someone believes they should or ought to possess such as duty, obligations and responsibilities). Higgins delineates that when these domains are discrepant from one another negative affect can occur (e.g. Strauman, 1990; Strauman & Higgins, 1987). Again it has been found that Asians have a more flexible self-concept than their Western counterparts and are more tolerant of apparent contradictions in self-concept (Choi & Choi, 2002). It is not surprising then that research has found that those from collectivistic cultures have higher self-discrepancy scores than those from an individualistic culture (Cukur, 2002). Therefore, it is proposed that those from Asian cultures will have greater self-discrepancy scores than those from individualistic cultures.

Research has now demonstrated that trauma can have a negative impact on self-concept; specifically for some trauma survivors, self-concept and self-definition can become trauma-centered. These alterations or distortions in self-concept have been found to be associated with disrupted posttraumatic psychological adjustment (e.g.

Berntsen & Rubin, 2006, 2007; Sutherland & Bryant, 2006) (see Chapter 2 and 3 for greater detail). Further, as the self-concept (or the perceived actual self) can become trauma-centered, it seems likely that this in turn will result in discrepancies between the perceived actual self and the ideal and ought selves and such self-discrepancies will be associated with distress. In support of this, Sutherland and Bryant (2008) found that PTSD participants reported that their actual self was more discrepant to their ideal and ought self, compared to non-PTSD participants. Additionally, as trauma becomes central to self-concept, it seems likely that this will result in a greater trauma themed self-definition. In support of this, Sutherland and Bryant (2005) found those with PTSD reported more trauma related and negatively valenced self-defining memories compared to those without PTSD and control participants.

To date, while research has investigated self-appraisals and discrepancies in self-concept following trauma, the relationships between maladaptive appraisals and distortions in self-concept (i.e. trauma-centered and discrepancies in self-concept) have not been investigated. It is predicted that the two will be related and that self-appraisals may even mediate the relationship between self-distortions and PTSD symptoms. That is, if the actual self becomes trauma-centered, resulting in self-discrepancies, it is likely that this will result in negative appraisals of the self (e.g. 'I am weak', 'I can't cope'), which have been found to maintain PTSD symptoms. Therefore, Study 2 aims to investigate the relationships between self-discrepancy, self-appraisals and PTSD symptoms and to examine whether these relationships differ depending on one's cultural background.

In light of the above, it is hypothesized that those from Asian cultures will have greater self-discrepancy than those from individualistic cultures. Second and referring back to the conceptual framework, that trauma, regardless of one's cultural background, will influence one's self-concept and this will be related to PTSD symptoms. This hypothesis is based on literature, which proposes self-concept undergoes a continuous adaptation process based on experiences. Therefore, regardless of culture, individuals will try to process and make sense of their traumatic experience, which in turn has implications for one's current or 'actual' self-concept. If the processing of the trauma experience influences one's self-concept in a negative manner (e.g. distortions in self-concept) this will have a subsequent effect on posttrauma adjustment. Third, it is hypothesized that a trauma-centered actual self or

trauma-centered self-definition will be related to greater self-discrepancies for both cultural groups. Fourth and reflective of the conceptual framework, it is predicted that regardless of one's cultural background, disruptions in self-concept (e.g. self-discrepancy, trauma-themed self-concept and trauma-centered self-definition) will be related to negative trauma-related self-appraisals as negative appraisals will arise when the self is perceived to be in danger (greater self discrepancies). Finally, it is hypothesized that negative self-appraisals will mediate the relationship between disruptions in self-concept (e.g. self-discrepancy, trauma-themed self-concept and trauma-centered self-definition) and PTSD symptoms.

5.3.1 Method

Participants were the same as those recruited from the Psychology Research Participation Panel at the University of East Anglia in Study 1. The same power analysis revealed a sample of 92 was required. In addition to the measures completed in Study 1, participants also completed the Selves Questionnaire (SQ; Higgins, 1987) and the self-defining memory task (Singer & Salovey, 1993).

5.3.1.1 Selves Questionnaire (SQ; Higgins, 1987). Higgins' (1987) SQ was used to elicit self-discrepancies. Participants were instructed to make a list of one-word attributes that 'describe the type of person you think you *Ideally* would like to be'; that 'describe the type of person you think you *Actually* are'; and that 'describe the type of person you think you *Ought* to be'. The rationale for using the SQ is based on it having been used in several other studies that have investigated the influence of trauma on self-concept (e.g. Sutherland & Bryant, 2008), thereby providing a measure of one's self-concept. The self-discrepancy scores were coded according to the instructions of Sutherland and Bryant (2008); attributes were coded as a synonym, antonym or non-relational according to Roget's Thesaurus. To derive an ideal self-discrepancy score the total number of matches was subtracted from the total number of mismatches between the list of actual and ideal self-attributes. Comparatively, for ought self-discrepancy score the total number of matches were subtracted from the total number of mismatches between the list of actual and ought self-attributes.

The Actual Self attributes were also used as index of trauma-centered self-concept. Specifically, trauma-centered actual self was coded as participant's actual self-descriptions that were clearly and directly trauma focused (e.g. trauma victim,

traumatized, afraid). The total number of trauma-themed actual self-descriptions was divided by the total actual self-descriptions provided, thereby calculating a trauma-centered actual self-ratio.

5.3.1.2 Self-defining memory task (Singer & Salovey, 1993). The self-defining memory task is a method routinely used in autobiographical memory and trauma research (e.g. Jobson & O'Kearney, 2008; Sutherland & Bryant, 2008). The rationale for using this measure is to provide another means of eliciting one's self-concept in addition to acting as a measure of trauma-centered self-definition, as used in previous research (e.g. Jobson & O'Kearney, 2008; Sutherland & Bryant, 2005). Participants were instructed that, " a self-defining memory is a memory from your life that you remember very clearly, is important to you and leads to strong positive or negative feelings. It is the kind of memory that helps you to understand who you are, and conveys powerfully how you have come to be the person you currently are". Participants were asked to provide up to five self-defining memories. These memories were coded as being trauma themed if they were clearly and directly related to trauma (e.g., I was in a road traffic accident, someone close to me died, I am so depressed since the event happened, etc.). The total number of trauma-themed self-defining memories were tallied for each participant and then divided by the number of memories retrieved, to provide them with a trauma themed ratio.

5.3.2. Procedure

Ethical approval was obtained from University of East Anglia, Faculty of Heath Research Office, Reference Number 2009/10-029 (see Appendix A). Data for the two studies was collected in the same experimental session. Each session took approximately 60 minutes. Participants met with the researcher and following written informed consent procedures, participants were asked to complete the self-defining memory task, the measures outlined in Study 1 and lastly the SQ.

Interrater-reliability procedure

Interrater reliability procedure was determined by the Principal Investigator going through all data booklets and coding all the self-discrepancy (SQ) responses and self-defining memory responses. An independent Asian rater (blind to hypotheses and group status) was given 20% of the data booklets and also coded the self-discrepancy (SQ) responses and the self-defining memory responses. The kappa

coefficient of interrater reliability was 1.00 for ideal self-discrepancy, .92 for ought self-discrepancy, .82 for trauma-centered actual self, and .96 for trauma-themed self-defining memories.

5.3.3. Results

Data achieved normality for all variables with the exception of the trauma-centered actual self and IES-R variables. Transformations did not resolve issues of skewness and kurtosis, therefore non-parametric analysis were employed to investigate associations between trauma-centered self with the IES-R (see Table 6) and with the PTCI (see Table 7).

5.3.3.1. Hypothesis 1: Self-discrepancies

Figure 8 shows that, as hypothesized, the Asian group had significantly greater ideal and ought self-discrepancies than the British group, $F(1, 73) = 6.62$, $p = .01$, $\eta_p^2 = .07$. The results were also evident when PTSD symptoms and depression symptoms were included as covariates.

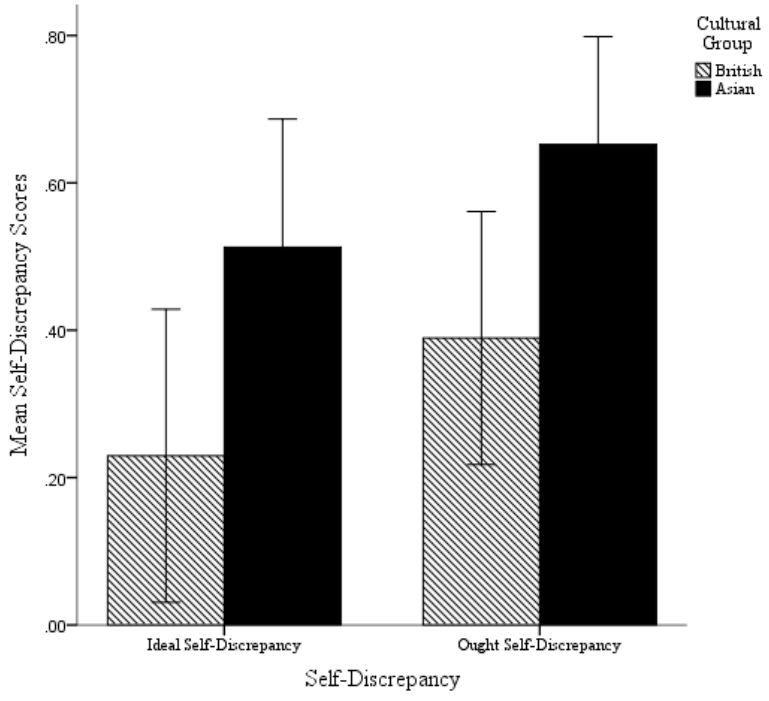

Figure 8. Mean Actual-Ideal and Actual-Ought self-discrepancy scores across British and Asian groups.

5.3.3.2. Hypothesis 2: Trauma-Centered Actual Self

As shown in Table 5 the two groups did not differ in trauma-centered actual self or trauma-centered self-definition.

Table 5

Mean Participant Self-Discrepancy Scores, Trauma-Centered Actual Self Scores and PTCI Scores

	Asian		British				
	M	SD	M	SD	*t*	*p*	*d*
IES-R	30.44	15.50	16.65	17.33	3.64	.001	.84
HSCL-25	1.90	.58	1.60	.47	2.47	.02	.57
PTCI Total	9.19	1.73	8.07	1.82	2.73	.01	.63
PTCI Self	6.66	1.65	5.84	1.40	2.32	.02	.54
PTCI World	4.89	1.15	4.22	1.30	2.37	.02	.55
PTCI Self-Blame	3.80	.81	3.44	1.10	1.61	.11	.37
Trauma-Centered Actual-Self	.08	.13	.06	.09	.69	.49	.18
Trauma-Centered Self-Definition	.12	.16	.08	.13	.98	.33	.27
Ideal SD	.52	.53	.23	.57	2.31	.02	.53
Ought SD	.65	.46	.39	.49	2.38	.02	.55

Note: PTCI = Post-traumatic Cognitions Inventory, IES-R = Impact of Event Scale-Revised, HSCL-25 = Hopkins Symptom Checklist – 25, Ideal SD = Ideal Self-Discrepancy, Ought SD = Ought Self-Discrepancy

Given trauma-centered actual self ratio was not normally distributed, Spearman correlations were used to examine the relationship between trauma-centered actual self, posttrauma appraisals and PTSD symptoms. Figure 9 illustrates the relationship between trauma-centered actual self and PTSD symptoms. It was found that as predicted for the British group trauma-centered actual self ratio was significantly correlated with PTSD symptoms, *rho*(34) = .29, *p* = .02 (one-tailed). However, contrary to our hypothesis, for the Asian group there was no significant correlation between trauma-centered actual self and PTSD symptoms, *rho*(41) = .12,

ns. This consequently highlights a greater tolerance for negative information even trauma information without adverse psychological adjustment for this group. Specifically, for the Asian group, even with the inclusion of trauma related information being a part of the individual's perception of their actual self-concept, they are potentially able to hold this information without it being detrimental to their psychological health, as their trauma-related actual self was not related to PTSD symptoms, thus potentially highlighting this group to have a greater tolerance of negative self-relevant information. This was not the case for the British group, their trauma-related actual self-perceptions were related to PTSD symptoms, thereby illustrating that the British group are not as tolerant of holding negative self-relevant information without it resulting an adverse manifestation (i.e. PTSD symptoms).

However, it needs to be noted that 25 participants provided trauma-centered self-descriptions, thereby bringing to light the limited variance this variable has. Further, the limited variability in the data gathered on this one variable could very well reduce the power of statistics on the correlation analysis conducted between this variable and the variable measuring PTSD symptoms (IES-R), thus impacting on findings which need to therefore be viewed in a much more tentative light.

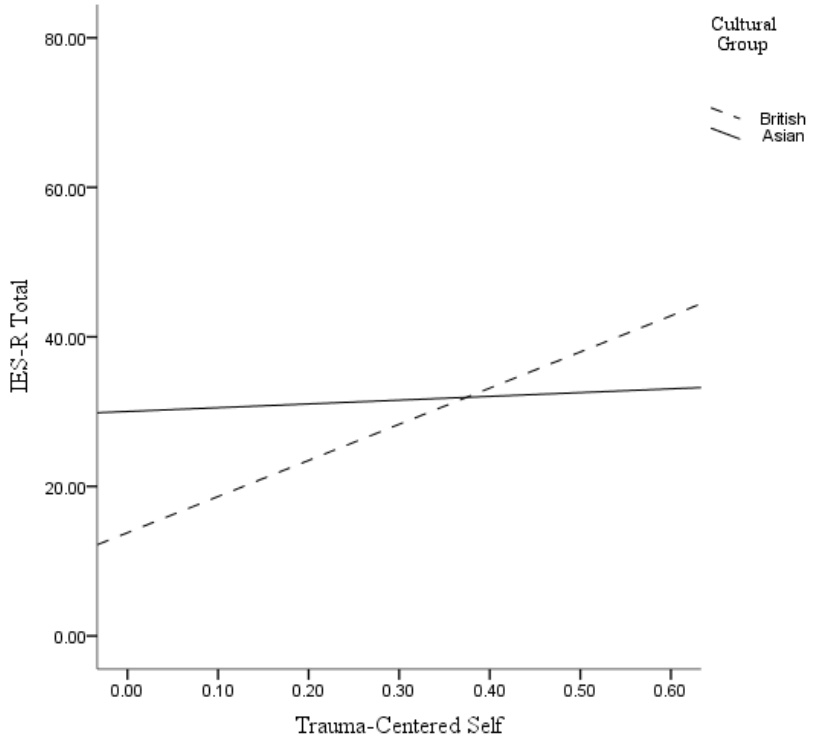

Figure 9. Trauma-centered self-descriptors associated with PTSD symptoms for British and Asian groups.

Additionally, trauma-centered self-definition findings were contrary to hypothesis. For the British group trauma-centered self-definition was not significantly correlated with PTSD symptoms. Whilst for the Asian group, there was a negative association between trauma-themed self-definition and PTSD symptoms (see Table 6).

Table 6

Correlation Coefficients (one-tailed) for Trauma-Centered Actual-Self, Trauma-Centered Self-Definition and PTSD symptoms

	Trauma-centered actual self				Trauma-centered self-definition			
	British	Asian	Z*diff*	*P*	British	Asian	Z*diff*	*P*
IES-R Total	.29*	.12	.74	.23	.13	-.29	1.77	.04
IES-R Intrusion	.20*	.10	.42	.34	.19	-.21	1.68	.05
IES-R Avoidance	.30	.08	.95	.17	.15	-.33	2.04	.02
IES-R Hyperarousal	.32*	.13	.83	.20	.03	-.23	1.09	.14

Note: *$p < .05$. IES-R = Impact of Event Scale - Revised; Spearman correlations were used for all correlations.

Further, Table 6 shows the Z difference scores (and associated *p*-values) between the two cultural groups for each correlation coefficient. Here we find the *Z*scores differ significantly for trauma-centered self-definition and IES-R total and avoidance and intrusion subscales. Thereby suggesting that self-concept posttrauma may have differing implications for adjustment for British and Asian cultures.

5.3.3.3. Hypothesis 3: Relationship between Trauma-Centered Actual Self, Trauma-Centered Self-Definition and Self-Discrepancy

Spearman correlations were used to investigate the correlations between trauma-centered actual self, trauma-centered self-definition and self-discrepancy in each cultural group separately. As hypothesized, for the British group, it was found that trauma-centered actual self-ratio was significantly correlated with ideal self-discrepancy, *rho*(34) = .31, $p = .04$ (one-tailed), and ought self-discrepancy, *rho*(34) = .34, $p = .02$ (one-tailed). Similarly, for the Asian group, trauma-centered actual self ratio was significantly correlated with ideal self-discrepancy, *rho*(41) = .42, $p = .01$ (one-tailed), and approaching significance for ought self-discrepancy, *rho*(41) = .21, $p = .09$ (one-tailed).

Contrary to the hypothesis there were no significant associations between trauma-centered self-definition and ideal or ought self-discrepancy for the British group. Again for the Asian group, trauma-centered self-definition was not significantly associated with ought self-discrepancy but was approaching significance with ideal self-discrepancy, *rho*(41) = .23 , *p* = .07 (one-tailed) (see Table 6)**.**

5.3.3.4. Hypothesis 4: Relationship between disruptions in self-concept (e.g. self-discrepancy and trauma-themed self-concept) and appraisals

As shown in Table 7, for the British group, trauma-centered actual self was significantly correlated with PTCI Total, PTCI Self, and PTCI World. For the Asian group, trauma-centered actual self significantly correlated with PTCI Total and PTCI Self. Table 7 also shows that, as hypothesized, British participants' ideal and ought self-discrepancy scores were significantly correlated with PTCI Total, PTCI Self and PTCI Self-Blame (i.e. negative self-appraisals). For the Asian group, ideal and ought self-discrepancy scores were also significantly correlated with PTCI Total and PTCI Self. Ought self-discrepancy scores were also found to be significantly correlated with PTCI World. Conversely, trauma-centered self-definition was not significantly associated with PTCI or any of its subscales for either British or Asian groups. Further, Table 7 details the Zscores (and associated *p* values) between cultural groups for each correlation coefficient. It was found that trauma-centered actual self differed on the world subscale, while ideal and ought self-discrepancy differ on the self-blame subscale.

Table 7

Correlation Coefficients (one-tailed) for Trauma-Centered Actual-Self, Self-Discrepancies and PTCI Scores

	PTCI-Total				PTCI-Self				PTCI-World				PTCI-Self-blame			
	British	Asian	Z*diff*	*P*	British	Asian	Z*diff*	*P*	British	Asian	Z*diff*	*P*	British	Asian	Z*diff*	*P*
Trauma-centered actual self	.34*	.50**	*-.18*	*.21*	.33*	.49**	*-.80*	*.21*	.06	.47**	*-1.86*	*.03*	.24	.21	*.13*	*.45*
Ideal SD	.38**	.38*	*0*	*.50*	.45**	.32*	*.63*	*.26*	.16	.23	*-.30*	*.38*	.12	.49**	*-1.72*	*.04*
Ought SD	.31*	.43*	*-.58*	*.28*	.24*	.35*	*-.50*	*.31*	.24*	.29	*-.22*	*.41*	.08	.52**	*-2.05*	*.02*
Trauma-centered self-definition	.09	.02	*.29*	*.39*	*.10*	*.18*	*-.34*	*.37*	*-.03*	*.11*	*-.58*	*.28*	*-.04*	*-.20*	*.67*	*.25*

Note: *$p < .05$. **$p < .01$. Ideal SD = Ideal Self-Discrepancy Score; Ought SD = Ought Self-Discrepancy Score; Spearman correlations were used for all correlations.

5.3.3.5. Hypothesis 5: Do Appraisals Mediate the Relationship between disruptions in self-concept (e.g. self-discrepancy and trauma-themed self-concept) and Posttraumatic Psychological Adjustment?

Multiple mediation (see Table 8) analyses examined whether the relationship between disruptions in self-concept (e.g. self-discrepancy and trauma-themed self-concept) and PTSD symptoms were mediated by appraisals using bootstrapping procedures for the British and Asian groups separately (Preacher & Hayes, 2008). The rationale for using multiple mediation analysis was to identity and understand the relationship between disruptions in self-concept and posttraumatic psychological adjustment as a causal relationship was suspected between the factors of interest based on previous research. The mediation analysis was conducted using Baron and Kenny's (1986) paper introducing mediation analysis, which has been cited over 9,000 times (Gelfand, Mensinger & Tenhave, 2009), and employs a regression-based method. Further, in the analyses 5,000 bootstrap resamples of the data with replacement was used. Statistical significance with alpha at .05 is indicated by the 95% confidence intervals not crossing zero. It was found that for the British group, trauma-related appraisals mediated the relationship between ought self-discrepancy and PTSD symptoms with a 95% bootstrap confidence interval of 0.92 to 15.63 and between ideal self-discrepancy and PTSD symptoms with a 95% bootstrap confidence interval of 1.25 to 13.27 (equivalent findings were found when self-appraisals were substituted as the mediator; ought self-discrepancy, 95% confidence interval of .01 to 12.74; ideal self-discrepancy, 95% confidence interval of .33 to 11.65). It was found that for the Asian group, appraisals mediated the relationship between ought self-discrepancy and PTSD symptoms with a 95% bootstrap confidence interval of 0.44 to 8.74, but not between ideal self-discrepancy and PTSD symptoms, 95% bootstrap confidence interval of -.67 to 7.74. However, self appraisals mediated the relationship between both ought self-discrepancy, 95% confidence interval of .66 to 9.57, and ideal self-discrepancy and PTSD symptoms, 95% confidence interval of 1.19 to 9.71. Finally, it was found that for neither the British nor the Asian group did trauma-related appraisals mediate the relationship between trauma-centered actual self-concept or trauma-centered self-definition and PTSD symptoms.

Table 8

Summary of Results of the Mediation Analyses where Self-concept (i.e. trauma centered self and self-discrepancy) is the Independent Variable, Trauma-Related Appraisal (PTCI Total) is the Mediator and PTSD symptom (IES-R) is the Dependent Variable.

	Asian				British			
	B	*SE*	*t*	*p*	*B*	*SE*	*t*	*p*
Trauma-Centered Self								
Trauma-Centered Self to Mediator (a path)	2.48	1.83	1.36	.18	10.57	2.84	3.72	.01
Direct Effect of Mediator on PTSD symptoms (b path)	2.59	1.43	1.81	.07	3.89	1.85	2.11	.01
Total Effect of Trauma-Centered Self on PTSD symptoms (c path)	5.05	16.78	.30	.77	48.36	31.18	1.55	.13
Direct Effect of Trauma-Centered Self on PTSD symptoms (c' path)	-1.36	16.69	-.08	.88	7.27	35.47	.21	.29
Ideal SD								
Ideal SD to Mediator (a path)	1.17	.47	2.52	.02	1.26	.52	2.43	.02
Direct Effect of Mediator on PTSD symptoms (b path)	2.20	1.50	1.47	.15	4.11	1.68	2.45	.01
Total Effect of Ideal SD on PTSD symptoms (c path)	5.59	4.42	1.27	.21	5.05	5.30	.95	.35
Direct Effect of Ideal SD on PTSD symptoms (c' path)	3.01	4.69	.64	.52	-.14	5.37	-.03	.98
Ought SD								
Ought SD to Mediator (a path)	1.21	.56	2.14	.03	1.25	.62	2.03	.05
Direct Effect of Mediator on PTSD symptoms (b path)	3.03	1.46	2.08	.04	4.07	1.64	2.48	.02
Total Effect of Ought SDon PTSD symptoms (c path)	-1.71	5.35	-.32	.75	5.43	6.16	.88	.34

Direct Effect of Ought SD on PTSD symptoms (c' path)	5.37	5.43	-.99	.33	.34	6.07	.06	.96
Trauma-Centered Self-Definition								
Trauma-Centered Self-Definition(a path)	.43	1.75	.25	.80	.87	2.42	.36	.72
Direct Effect of Mediator on PTSD symptoms (b path)	2.67	1.33	2.00	.05	4.09	1.55	2.65	.01
Total Effect of Trauma-Centered Self-Definition on PTSD symptoms (c path)	-27.54	15.09	-1.82	.06	3.95	23.03	.17	.86
Direct Effect of Trauma-Centered Self-Definitionon PTSD symptoms (c' path)	-28.70	14.55	-1.97	.06	.40	21.17	.02	.99

Note: PTCI = Posttraumatic Cognitions Inventory; IES-R = Impact of Event Scale-Revised; Ideal SD = Ideal Self-Discrepancy Score; Ought SD = Ought Self-Discrepancy Score

5.3.5. Discussion

The aim of Study 2 was to investigate the relationships between disruptions in self-concept (e.g. self-discrepancy and trauma-themed self-concept), self-appraisals and PTSD symptoms and to examine whether these relationships differ depending on one's cultural background. It was found, in line with previous research (Cukur, 2002), that Asian participants had greater discrepant self-concepts than British participants. Second, as expected, for the British group trauma-centered actual self-ratio was significantly correlated with PTSD symptoms. However, contrary to the hypothesis, for the Asian group trauma-centered actual self-ratio was not significantly correlated with PTSD symptoms. Third, it was found, as hypothesized, that trauma-centered actual self was significantly correlated with greater self-discrepancies for both cultural groups. Fourth, for the British group, self-discrepancy scores were significantly correlated with PTCI Total, PTCI Self and PTCI Self-Blame. Similarly, for the Asian group, self-discrepancy scores were significantly correlated with PTCI Total and PTCI Self. Finally, self-appraisals were found to mediate the relationship between self-discrepancies and PTSD symptoms in both cultural groups.

The findings therefore support the notion that trauma can become central to self-concept which in turn has detrimental effects on post-traumatic psychological adjustment (i.e. PTSD symptoms and trauma-related appraisals). However, the results indicated that while this may be the case for British participants, for Asian participants trauma-centered self-concept was not significantly correlated with PTSD symptoms and in some instances had negative associations. Both Berntsen and Rubin (2006) and Conway (2005) suggest self-change following trauma is motivated by a need for self-consistency. Cross-cultural research suggests, however, that self-consistency needs are culturally variable (Kanagawa, Cross, & Markus, 2001; Suh, 2000, 2002). An internally coherent and consistent self-identity is essential for mental health in Western independent cultures as this coincides with independent cultures' emphasis on the individual as the anchor of behaviour, thoughts, and feelings (Suh, 2000). Suh (2000) suggests that this is not the case in Asian cultures where the focus is the social context, rather than on the individual, and people are much more capable of flexibility between social roles and tolerant of differences in their self in these roles. Initial research (e.g. Jobson & O'Kearney, 2006, 2008) has found support for a cultural distinction in self-change following trauma; namely, while those with PTSD from individualistic cultures tend to have a greater trauma-defined self, this

relationship is less evident in those from collectivistic cultures. This study provides further support for a lack of correlation between trauma-themed self-concept and PTSD symptoms in those from Asian cultures. Further, negative associations between trauma-centered self-definition and PTSD symptoms were first brought to light by Jobson and O'Kearney (2006, 2008). This study provides further support that for Asian participants, a traumatised self-concept is not necessarily associated with psychological maladjustment. Significant Z scores further consolidated there to be cultural differences in self-concept posttrauma and associations with PTSD symptoms. However, these analyses' results were preliminary due to the nature and size of the sample.

Despite some cultural differences in the relationship between trauma-centered self and PTSD symptoms, the findings also suggest many cultural similarities in trauma-centered actual self being related to greater self-discrepancies. Thus findings only partly support the hypotheses derived in the conceptual framework. Results suggest that if trauma becomes central to perceived self-concept, people are likely to perceive their self-concept as not being in line with the way they feel their self-concept should and would ideally like to be. This, in turn results in negative self-appraisals which over time has been found to be involved in the maintenance of PTSD symptoms (Dunmore, Clark & Ehlers, 1997; Ehlers & Clark, 2000); discrepancies in self-concept perpetuate negative self-appraisals which in turn perpetuates PTSD symptoms. It is worth noting that for only the British group, self-discrepancies were associated with self-blame appraisals. This may be the result of those from individualistic cultures valuing responsibilities of personal control and responsibility more than those from collectivistic cultures (Mesquita & Walker, 2003). Additionally, for the Asian group, ought self-discrepancy scores were also significantly correlated with negative world appraisals (e.g. feelings of alienation, not being able to rely on others, etc.). This may reflect ought self-discrepancy being not living up to others expectations, which may relate to appraisals of alienation (Jobson & O'Kearney, 2009).

5.4. General Discussion

There is an urgent need to improve our understanding of the influence of culture on the onset and maintenance of PTSD. This is further emphasized by the substantial evidence, which indicates that appraisals and self-concept, central to the understanding and treatment of PTSD, are found to differ across cultures. Study 1 therefore examined the role of culture on the cognitive appraisals of everyday and trauma events and associated implications for posttraumatic psychological adjustment. Study 2 investigated the relationship between perceptions of self and trauma-related appraisals and whether culture influences this relationship.

Overall, the results of Study 1 tend to confirm the hypotheses derived from the conceptual framework. First, findings support the prediction that due to differences in self-construal there are cultural differences in appraisals dimensions related to everyday and trauma events. Specifically, there were cultural differences in how a person appraises an everyday and trauma event that seems to reflect an emphasis on agency, independence and achievement in the British group. The trauma event had further differences in appraisals of legitimacy and responsibility. Second, the prediction concerning adjustment post-trauma in relation to appraisals tended to not be supported, as there were cultural differences in the relationship between cognitive appraisals and PTSD symptoms. Specifically, the PTCI was associated with PTSD symptoms more strongly in the British group than in the Asian group, which suggests that the PTCI may not be culturally sensitive to collectivistic cultures unless adjustments are made.

Fourth, the findings suggest that due to cultural differences in self-appropriation and dialectic philosophies of thinking, there are differences in the manner in which groups perceive their actual self, ideal and ought self-domains. Findings supported this prediction, namely that those from Asian cultures had greater discrepancies in their self-concept than those from British participants. Fifth, findings partially supported the hypothesis that trauma would influence one's actual/current self-concept and that this would be related to PTSD symptoms, trauma-related self-appraisals and greater discrepancies in self-concept. Specifically, while this did occur for the British group (trauma-centered actual self was significantly correlated with PTSD symptoms, trauma-related appraisals and greater self-discrepancies), this was not found in the Asian group (trauma-centered self was not found to be significantly correlated with PTSD symptoms or trauma-related appraisals and trauma-centered

self-definition was negatively associated with PTSD symptoms). Such findings perhaps suggest, stronger self-definition centered on trauma does not necessarily predict poor post-traumatic psychological adjustment and maintenance of symptoms within Asian cultures. However, for the Asian group, their trauma-centered actual self was found to be significantly correlated with self-discrepancies, which were in turn related to trauma self-appraisals. Sixth, the prediction that negative self-appraisals would mediate the relationship between self-discrepancy and PTSD symptoms was supported. Thereby supporting the notion that discrepancies in self-concept can influence self-appraisals that are involved in the maintenance of PTSD.

There are several theoretical and clinical implications that can be drawn from these findings. First, current findings support cognitive models of PTSD that posit that an individual's self-appraisals post-trauma can be largely dominated by negative perceptions, which can maintain PTSD. Further, findings from the current study suggest discrepancies in self-concept can influence self-appraisals involved in the maintenance of PTSD and highlights the importance of considering self-concept in therapeutic interventions. Moreover, understanding cultural differences and sensitivities in self-concept can help facilitate a healthy self-concept through its aid in the alleviation of negative and dysfunctional cognitive self-appraisals.

The limitations of the study are acknowledged. First, sample sizes were modest which potentially limits statistical power and generalizability of the results. Additionally, participants were university students and thus, while they were responding in relation to their most traumatic and distressing life experience, of which a significant number would classify as APA (1994) criterion A type trauma, future studies need to examine these relationships using trauma survivors and in particular trauma survivors with PTSD. Second, the study was cross-sectional which precludes causal explanations. Third, participants were asked to complete all tasks in English, which may have impacted on appraisals and identity for participants in the Asian group. Moreover the Asian international students were considered as a single, collectivistic population, with the British group on the extreme individualism side. Although there is support for this approach from previous literature (e.g. Hofstede & Hofstede, 2004), the inclusion of a measure for interdependent and/or independent orientation would have provided better support for conclusions. Further, the limitations of using multiple mediation analysis as outlined by Baron and Kenny (1986) include a number of theoretical and empirical concerns about the application

of this method of assessing mediation, including association, temporal order and the confirmatory-exploratory distinction (Gelfand, Mensinger & Tenhave, 2009). In light of this findings need to be considered more tentatively. Notwithstanding these limitations, the results of the study document salient and cross-cultural differences between appraisals of trauma and everyday events which could go on to influence the relationships between trauma–related appraisals and PTSD symptom. It is also one of the first investigations into the relationship between discrepant self-concepts and the PTCI, producing findings that warrant further investigation into how self-concept can influence PTSD recovery. To address the limitations and to extend external validity and clinical inferences of this study a second study examining appraisals and self-concept measures in a general community sample comprised of trauma exposed adults with and without PTSD, from British and Asian cultures is needed.

Part 2

Exploratory Analysis of Trauma-Associated Appraisals in Trauma Survivors from Collectivistic Cultures

Chapter 6

6.1 Study 3: Exploring Trauma Associated Appraisals in Trauma Survivors from Collectivistic Cultures: Examining Implications for the Posttraumatic Cognitive Inventory and the Development of the Public and Communal Self Appraisal Measure (PCSAM)

As continuously stressed in this thesis, appraisals are a key feature in understanding an individual's experience; this is especially important when the experience is a traumatic one. Appraisals enable an individual to derive or construct meaning from a traumatic event that is potentially meaningless and arbitrary. Thus the manner in which the trauma is appraised is of paramount importance as it allows for evaluation of how the individual navigates through a series of novel and unwanted experiences, thoughts, emotions and behaviors. Appraisals aid in the understanding of posttraumatic psychological adjustment and recovery, along with what impedes its progress (e.g. Kleim et al., 2007).

PTSD has received substantial clinical and empirical focus in the last two decades. As highlighted in Chapter 2, much of the literature on trauma and posttraumatic stress is based on cognitive models of PTSD, which emphasize the effects of trauma on the primary victim (i.e. the individual directly experiencing the traumatic event) (Brewin & Holmes, 2003; Ehlers & Clark, 2000). However, it can be argued that the culture in which the primary victim(s) are oriented in plays a crucial role in their experiencing and appraisals of the trauma event. Shaler (2005) supports this assertion and purports traumatic events to be perceived as traumatic when it is both emotionally and personally meaningful. Moreover, Shaler (2005) puts forth that a traumatic event should not be viewed as affecting individuals; instead it should be viewed as affecting humans in their context. One's culture provides such a context, namely the context in which humans reside, from which they draw meaning, and determines whether particular explanations, appraisals and cognitions make sense. Thus following traumatic events, these cognitive understandings of the world are called into question and have the potential to have extremely detrimental effects on an individual; namely PTSD (Ehlers & Clark, 2000). Also, and importantly, culture influences how others within one's culture would appraise the traumatic event. This potentially affects an individual's support system, either enabling or disenabling it at the group level. Thus, the relationship between trauma and culture is an important one

and warrants further investigation for several reasons; not least of which is to arrive at culturally informed and appropriate PTSD models and treatments for those who have experienced trauma from non-Western, collectivistic cultures (Jobson, 2009; Jobson & O'Kearney, 2006; Jobson & O'Kearney, 2009).

The importance of considering culture's influence on trauma-associated appraisals and the implications for PTSD was highlighted in Chapters 3 and 4. Additionally, Study 1's findings support this assertion. Specifically, when the original PTCI was used it was not significantly associated with or predictive of PTSD symptoms in the Asian group but was significantly correlated with and predictive of PTSD symptoms for the British group. Thus Asian/collectivistic cultures potentially appraise situations differently or hold different appraisals to be important in the aftermath of trauma than that of trauma survivors from Western cultures, which in turn can go on to influence PTSD symptom severity and maintenance. Therefore, examining the responses and interpretations of trauma related thoughts and beliefs as put forth by the PTCI would be insightful.

Thus far both PTSD theories and treatments have been developed somewhat independently of cross-cultural research. This extends to PTSD assessment measures such as the PTCI. Furthermore, the PTCI has consistently been used in trauma research predominately using participants from Western, individualistic cultures. As it stands, many of the PTCI items appear to be focused on individualistic-type cognitions (e.g. I am a weak person, I am inadequate) (Foa et al., 1999); therefore a greater focus on interdependent and collectivistic cognitions may be required. To the author's knowledge, the PTCI has only been explored in relation to cultural appropriateness in collectivistic cultures by Su and Chen (2007). Their study reported the factor structure and psychometric properties of the Chinese version of the PTCI (PTCI-C), as well as its relationship with PTSD symptoms with a traumatized college sample in Taiwan. They found the measure displayed good internal consistency, test–retest stability, concurrent validity, and discriminative validity.

However, questions still remain as to the PTCI's suitability for use in non-Western and collectivistic populations. This study therefore endeavored to examine how a greater focus on interdependent and collectivistic cognitions may influence this measure. Accordingly, the inclusion of the PTCI as a measure examining whether or not the items are appropriate, how they are interpreted and responded to by those from collectivistic culture is potentially valuable. For instance the language used to form

each item may not coincide with how each item should be expressed outside of independent cultures. The PTCI could provide information and insights on an under-researched area, namely, on non-Western populations evaluation of trauma appraisals and measures used to assess for PTSD. As stated above, the PTCI is routinely used in clinical and research work and has been found in Western cultures to be predictive of the onset and maintenance and treatment outcome of PTSD (Kleim et al., 2007). Consequently, it is imperative to improve our understanding on its applicability when used in non-Western cultures in order to improve culturally appropriate assessments and treatment plans.

There has been much quantitative and empirical research delving in to the impact trauma appraisals have on the development and maintenance of PTSD. However, the same cannot be said from a qualitative viewpoint. There are very few published studies addressing trauma appraisals using qualitative methodologies. Research is even more diminutive when looking at the interaction between trauma appraisals and culture in relation to PTSD. Therefore, the use of qualitative methodologies to understand the interplay of culture and trauma (i.e. trauma appraisals) is important as it could provide valuable information to improve standards of care and access to services for those from non-Western populations. Study 3 therefore aims to help bridge this gap. To accomplish this, the study will focus on exploring the perceptions, understandings and interpretations of trauma of trauma survivors from different cultural groups through the use of focus groups and interviews, as these are particularly sensitive to cultural variables and should highlight the dynamic nature of people's understandings (Kitzinger, 1994). Participant selection will be based on community members from collectivistic cultures who have experienced a trauma and mental health practitioners who specialize in working with trauma survivors from collectivistic cultures. This should provide multiple perspectives, which are essential if insights into questions exploring this topic are to be gained.

Therefore, in order to gain further understanding of cultural differences in perceptions and appraisals of trauma, Study 3 aims to a) investigate what meaning(s) community members from collectivistic cultures attach to trauma (and in particular appraisals typically generated in such groups) and whether this is influenced by culture (i.e. do these appraisals differ to those associated with individualistic cultures); b) use key informant interviews to further elicit insights on the influence

culture has on trauma appraisals within interdependent/collectivistic cultures; and c) to investigate the appropriateness of the PTCI as a measure to assess trauma-related appraisals and cognitions within collectivistic cultures.

6.2. Method

6.2.1. Design

The study used a mixed design with three qualitative focus groups with community members from collectivistic cultures and three qualitative individual key informant interviews with mental health practitioners. The qualitative components explored and elicited perceptions, appraisals, understandings and opinions surrounding trauma, posttraumatic psychological adjustment, and the three sub-scales of the PTCI (i.e. negative cognitions about self, negative cognitions about the world and self-blame). The appropriateness of the PTCI and its subscales will be informed by the quantitative component of the study, whereby both the community sample and the mental health practitioners were asked to complete a modified version of the PTCI questionnaire which investigates PTCI item appropriateness. A power analysis was not performed; instead research denotes that between 3 or 4 participants per focus group (Morgan, 1997; Krueger, 1994) are sufficient when they have specialized knowledge and/or experiences to discuss in the group, as is the case here. Krueger (1994) has endorsed the use of very small focus groups, what he terms "mini-focus groups" for such instances.

To provide context for the research process, it is important to note that data analysis and reporting was conducted in a team based approach. The team consisted of the primary investigator (A.E./doctoral student) and secondary investigator (L.J./primary supervisor).

6.2.2. Participants

Research points to using samples that can discuss and comment on the research topic from personal experience (Powell et al., 1996) or to have had a specific experience of or opinion about the topic being investigated (Merton & Kendall, 1946), because those who have had contact and experience with the subject being discussed can shed real light on the topic (Fern 2001). It is with this in mind that the study samples were chosen:

6.2.2.1. Community Members. All participants (*N* = 11; male *n* = 8, female *n* = 3) for the focus group were recruited from the general community in Norwich by using posters at Bridge Plus a non-profit charity based in Norwich and internal bulletins to its members and affiliates. Bridge Plus has a number of aims; these are predominantly centered on improving community cohesion through a social networking community center; in addition to empowering community members with knowledge and information to aid integration in to their new communities.
Notices called for participants who were from collectivistic communities, were aged over 18 years and who could complete the study in English. Focus group participants were Chinese (*n* = 2), Vietnamese (*n* = 1), Indian (*n* = 2), Sri Lankan (*n* = 3), Ethiopian (*n* = 1), Jordanian (*n* = 1) and Slovakian (*n* = 1). All identified as being from non-Western cultures. According to Hofstede's and Hofstede's (2004) Individualistic/Collectivism continuum, all fell within the collectivistic range 20 to 52. Focus group participants ranged in age from 20 – 29 years; all participants were unemployed and enrolled in higher education courses. Participants had been in the UK between 1 and 2 years. Further, participants had a range of trauma experiences (see Table 9). All participants identified as being trauma survivors, while no measures of PTSD or depression were included, participants had a range of trauma experiences, the majority having been a road traffic accident (RTA, *n* = 8) in addition to witnessing a death (*n* = 1), involved in an accident resulting in serious injury (*n* = 1) and being persecuted (*n* = 1). All incidences had been experienced in the participant's country of origin and prior to them arriving in the UK to commence their academic courses.

6.2.2.2. Key informant interviews. All participants (*N*=3) for the key informant interviews were mental health practitioners identified by the research team as having experience in this area (i.e. mental health practitioners working at the Refugee Council or Red Cross, psychologists working in the NHS and working for trauma organizations such as the Trauma Clinic and Medical Foundation) and were therefore routinely working with trauma survivors from collectivistic cultures. The mental health practitioners all identified as British which amounts to a score of 89 on Hofstede and Hofstede's (2004) Individualistic/Collectivism continuum and ranged between 40 – 45 years.

6.3. Data Collection and Measures

Semi-structured, in-depth interviews were used based on a topic guide. The rationale for this was to enable a detailed exploration of trauma appraisals from a collectivistic sample's views, perspectives and experiences. Table 9 details the focus group and interview protocol; the three guiding question topics and sub-questions are derived from the Centre for Addiction and Mental Health (2009) which classified them as being pertinent issues surrounding trauma appraisals. In addition, research demonstrates that following a trauma, appraisals or re-appraisals of the self, world and others (Ehlers and Clark, 2000; Foa et al., 1999) are frequent and key influencing cognitive appraisals related to the development and maintenance of PTSD. Consequently these were included in the interview topic guide below forming specific but open-ended questions. All focus group sessions and key informant interviews were audio taped, transcribed verbatim and checked for accuracy. The moderator (A.E.) also took notes on interpersonal dynamics and nonverbal communication among participants that could not be captured by audio recording (Kitzinger 1995; Krueger & Casey 2000). The transcripts also revealed that the moderator sometimes asked follow up questions that were subsidy to the topic guide, however these questions were still not specific to the trauma event the participant experienced, rather it was to clarify a response or encourage participants to provide more information on the general topic questions put forth.

Table 9

Interview topic guide

Questions
1. What does trauma mean in your culture? (Focus group) What does trauma mean in collectivistic/interdependent cultures? (Key informal interviews) 2. What typical thoughts do people have after a trauma? 2.1. About themselves? 2.2. About the world in which they live? 2.3. About their future? 2.4. About their relationships with others? 3. How do these thoughts influence adjustment? 4. Please complete the modified PTCI questionnaire 5. What are your thoughts about the PTCI items/questions? How appropriate did you find them?

6.3.1. The Posttraumatic Cognitions Inventory (PTCI; Foa et al., 1999).

The PTCI was modified in that instead of asking participants to rate how strongly they believe each cognition, participants were instructed, "The PTCI is designed to assess the thoughts and beliefs of people who have been through a stressful life event. It has compiled a number of items, which are listed below. Please read each item and then indicate how appropriate you think it is to ask these items. Please circle the appropriate response". Participants will rate each item on its appropriateness from 1 (*totally inappropriate)* to 7(*totally appropriate).* At the end of the questionnaire participants are asked to, "Please add any items that you feel would be appropriate to ask someone who has experienced a stressful life event". The rationale for using the modified PTCI was to keep focus on dysfunctional trauma-related thoughts and beliefs but to find how appropriate these questions are for those from collectivistic cultures, considering its prominent use in trauma research (Foa et al., 1999).

6.4. Procedure

Ethical approval for Study 3 was obtained from NRES Committee East of England – Hertfordshire REC, Reference Number 10/H0311/56 (see Appendix B).

6.4.1. Focus Groups. Those who contacted the researcher were invited to the focus groups. Potential participants for the focus groups were randomly allocated to Focus Group 1 (n = 4), Focus Group 2 (n = 4), or Focus Group 3 (n = 3). Focus groups were run on separate days. Participants were informed about the study's purpose, limits of confidentiality and the right to withdraw. Following written informed consent procedures, those who agreed to take part then commenced the focus group sessions, which lasted approximately 1 hour. The focus groups took place in a pre-booked room at the University of East Anglia and were led by the primary investigator A.E (moderator). At the start of the focus groups and prior to audio recording, participants introduced themselves to each other, and disclosed demographic information pertaining to their ethnic identification, age, employment, education and time in the UK (see Table 10). The participants provided this information without prompting; they wanted to feel more at ease within their focus groups before starting. After introductions were made, the moderator called the focus group to a start and guided the sessions according to the open-ended questions delineated in Table 9, and the modified PTCI questionnaire that participants were encouraged to freely discuss once completed. At the end of the study participants spoke privately with the moderator and disclosed their trauma event of their own violation and any thoughts they had regarding the study. At the end of the focus group session participants were given £15 to compensate them for their time.

Table 10

Focus Group Demographic Information

Focus Group	Participant Number	Age	Gender	Ethnicity	Trauma Event	Education	Employment	Time in UK	Collectivism (Hofstede & Hofstede, 2004)
1	P1	25	Female	Jordan	RTA	Masters	Student	< 1 year	38
1	P2	29	Male	Indian	RTA	Masters	Student	1 year	48
1	P3	28	Female	Slovakian	RTA	Masters	Student	2 years	52
1	P4	20	Female	Chinese	RTA	BSc	Student	2 years	20
2	P5	28	Male	Indian	RTA	Masters	Student	< 1 year	48
2	P6	26	Male	Sri Lankan	Witness Death	Masters	Student	< 1 year	---[1]
2	P7	26	Male	Sri Lankan	RTA	Masters	Student	< 1 year	---
2	P8	27	Male	Sri Lankan	RTA	Masters	Student	< 1 year	---
3	P9	22	Male	Chinese	Accident/Injury	Masters	Student	1 year	20
3	P10	23	Male	Vietnamese	RTA	Masters	Student	1 year	20
3	P11	29	Male	Ethiopian	Persecution	A-Levels	Student	< 1 year	20

Note: RTA = Road Traffic Accident.

[1] Sri Lanka has not been given a collectivism score as Hofstede and Hofstede (2004) have done for the other countries. However, Sri Lanka is considered a collectivistic culture.

6.4.2. Key informant interviews. Those indentified were contacted directly by email and invited to take part; respondents were then given further information on the study, those who elected to take part met with the researcher (A.E). Demographic information pertaining to key informant interviewee's are detailed in Table 11. Interviews were conducted in the interviewee's offices. The interview commenced following the informed consent protocol. The interviews lasted approximately 1 hour and were guided by the same open-ended questions as those used in the focus group sessions, the modified PTCI questionnaire which participants were encouraged to freely discuss.

All focus group and interview sessions were audio-recorded in order to transcribe verbatim and check for accuracy. Participants were notified of this from the start, prior to filling out consent forms. At the end of transcription, all recordings were destroyed.

Table 11

Key Informant Interviewee's Demographic Information

Key Informant Interview	Participant Number	Age	Gender	Ethnicity	Occupation	Work Experience
1	P12	45	Male	British	Clinical Psychotherapist	> 15 years
2	P13	40	Female	British	Clinical Psychologist	> 10 years
3	P14	40	Male	British	Counseling Psychologist	> 10 years

6.5. Data Analysis

Data analysis consisted of two separate yet related functions. The first section of the data analysis was undertaken using Template Analysis to code the focus groups and key informant interviews. This is a particularly apt method of analysis because it has been designed to analyze textual data including responses to open-ended questions as employed in this study (King, 2008).

Template Analysis allows for the narrowing of extensive information captured by the focus group and key informant interviews. It further allows for the development of a coding template, which goes on to summarize themes identified by the researcher as important in a data set, focuses on patterns formed by words, themes and perspectives that emerge throughout the sessions, along with being able to organize them in a meaningful and useful way (King 2008). The second data analysis function used SPSS version 18.0 for the analysis of the modified PTCI.

6.6. Reliability

For the research design and analysis stage there were two checks of reliability and validity. First, a topic guide was used to ensure a similar range of topics was discussed with each participant. Second, the formal analysis and development of taxonomy was completed by the primary researcher (A.E); additionally some of the transcripts were coded by a second rater to ensure trustworthiness (L.J). Discrepancies between raters were resolved through discussion before arriving at a final coding framework. Additionally, although there was only a small number of focus groups and key informant interviews data saturation (i.e. where no new themes were emerging) was achieved after the first 2 focus groups and 2 key informant interviews and confirmed with the final focus group and final key informant interview.

6.7. Results

6.7.1. Development of the Template

Step 1. A priori themes were developed, these were based on the interview guide and prior research which delineates that negative changes to views of the self and others, world perception, future perceptions to be predictive of PTSD maintenance (Ehlers & Clark, 2000; Foa et al., 1999). The initial themes were a) traumatized self, b) altered perceptions to worldview, c) changes to future, and d) dysfunctional relationships.

Step 2. Interviews and focus groups were then transcribed and read through for familiarization.

Step 3. Initial coding was carried out on the first focus group. The parts of the data that were relevant to the research questions were identified when they fell within the scope of the a priori theme. A code was then designated to this section of the transcript. While reading the transcript if there was no relevant theme that fit the

section of textual data, a new theme was devised. Additional themes added at this point were: a) trauma perceptions b) trauma symptoms, c) cultural and social roles, and d) external attributions.

Step 4. Initial coding was then carried out on all transcripts. During this process, identified themes were grouped in to a smaller number of higher order codes, which described the broader theme in the data. This led to the initial template (see Table 12, Appendix D).

Step 5. The template was developed by applying it to the full data set. Whenever a relevant piece of text did not fit with the existing themes comfortably a change to the template was needed. This was achieved through a) emergent themes in the data that were not anticipated, b) adding new codes to reflect these themes, c) restructuring how the different codes fit together, and d) deleting a theme because it was better covered by another (see Figure 10).

Figure 10 demonstrates that the initial themes 1 (trauma perceptions) and 2 (trauma symptoms) were amalgamated and became established as the first theme in the final template (trauma and adjustment). Subsequently, the initial third theme (cultural and social roles) became the final second theme with a couple of added subthemes. Following on from this, the initial fourth theme (traumatized self) became theme 3 in the final template and had subthemes added. Further, initial themes 5 (world) and 6 (external attribution) were amalgamated and became the final fourth theme (external attribution) with further subthemes added. Lastly, the initial themes 7 (future) and 8 (relationship) subsequently became final themes 5 and 6. The final themes 7 (education) and 8 (language) were additions, as they did not fit any other theme. The Figure 10 also presents the new code and sub-codes added to the final template.

Step 6. Final template is used on the full data set to interpret findings (see Appendices E - J for transcripts with annotation and coding).

Step 7. At stages 4 and 5 a quality check was taken to ensure analysis was not being distorted by preconceptions and assumptions. This was achieved through independent scrutiny of the analysis by another member of the research team (L.J) as detailed above to ensure reliability and trustworthiness.

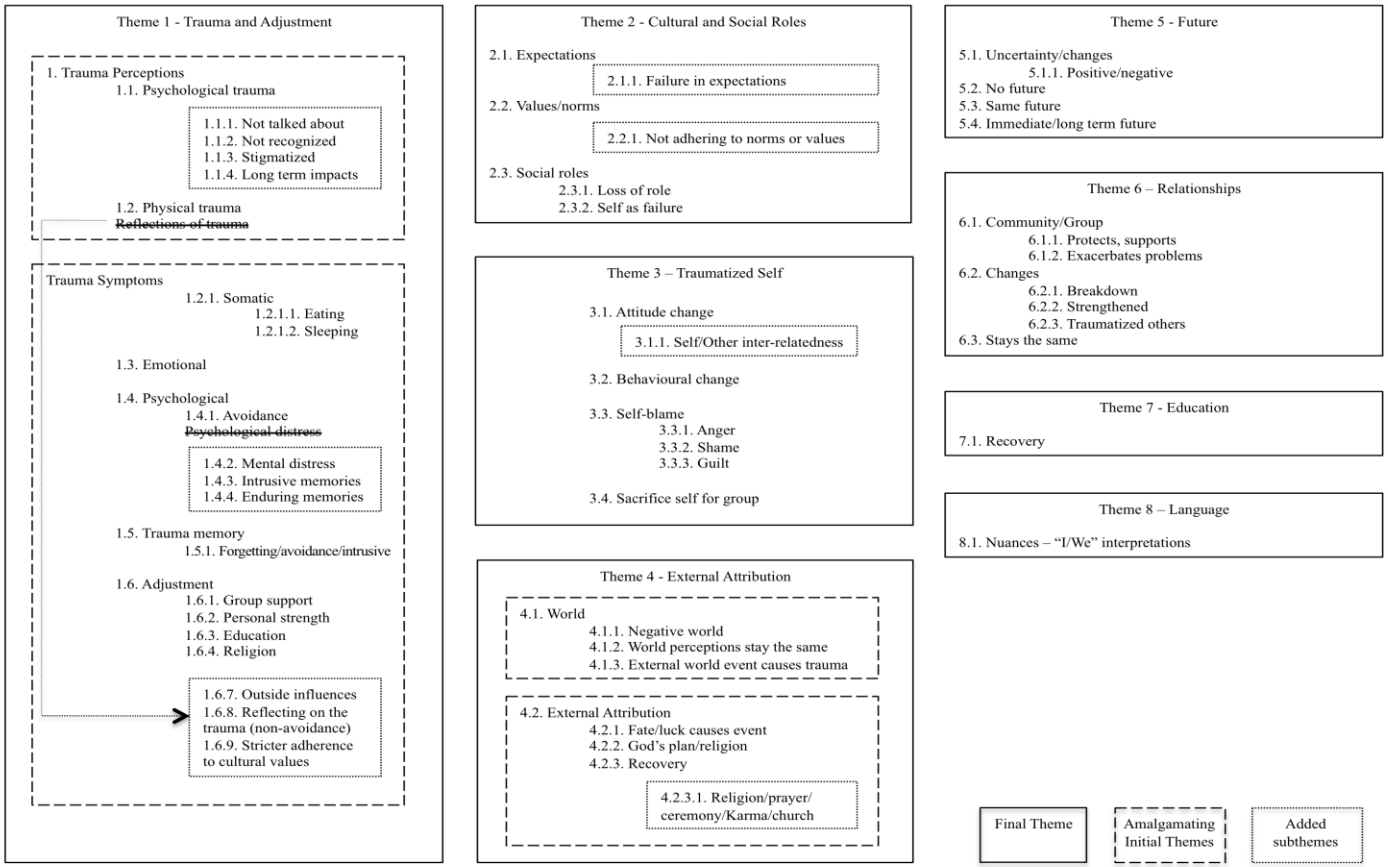

Figure 10. Development of the Final Template

6.7.2. Qualitative Interview Results

The final Template identified eight emergent themes within the qualitative data sets. To provide an understanding of our coding and interpretation of data, the findings are presented according to analytical typologies. Verbatim quotes from the study are from the focus groups or key informant interviews identified by participant number (e.g. P1).

6.7.2.1. Trauma and Adjustment. Throughout the focus group sessions, trauma was predominantly thought of in terms of physical health while mental health or psychological health was not appraised to be of equal importance.

> *"I think in my culture, the trauma mostly means the physical injury like when people have an accident or something, erm, now its increasing about trauma meaning, many people also aware that the trauma can be the mental problem, … but mainly, most people in my country think its trauma just physical erm problem"* (P10).

> *"normally we never mention this word [trauma]… its not concerned with the mental, its from the outside … the body … Yes the physical not the mental, I think that's all"* (P4).

However, when participants predominantly talked about the physical manifestation of trauma, they brought to light somatic symptoms following the trauma event (e.g. cannot eat, cannot sleep) *"they can't have a good sleep and they can't eat anything*" (P2).

A small portion of participants did report trauma to be a mental imbalance caused by a negative event, "*according to my understanding trauma means the state of mind after some disastrous event"* (P9), however this stance was not widespread.

Subsequently, key informant interviews put great importance on meanings of trauma in collectivistic cultures as affecting the group and relationships within that group. Key informant interviewees denoted that trauma is experienced in an interdependent manner, as the rupturing of social and interpersonal bonds:

"if you're from a collectivistic culture then bonds are everything, so it's [trauma] something which break the family, breaks relationships, breaks your bond to society" [P13]. Additionally, it is "*experienced at the group level*" (P14) trauma is explained as a collective trauma *"what's important is what happened to the group and how the group responded, the family, the party, the village, the town, or whatever it is, the [group] as a whole"* (P14).

In regards to adjustment there did appear to be an emphasis on group support.

> *"the community, erm if one exists … are extraordinary in how they look after each other … the group, which is the community and feeling it can go to help very quickly. And so once you get your head around the way it works, you have to put something in and you get an awful lot back, lot of support"* (P14).

> *"people draw strength from getting support from other, feeling that they belong within a group, erm, feeling that they're being helped and supported, and that gives them the motivation to put things right and to start you know trying to rebuild, er, it also helps them with the grieving process if they're lost friends close family, erm, and again you could maybe draw strength by seeing that other people have been through a very similar situation, so you can sort of go through it together, erm, so, yeah I think the sort of beliefs I'm talking about are positive ones, because I feel that these beliefs have been formed with close knit societies that their cultures have been formed in adversity over a long period of time so its there for a purpose, you know, it's a tried and tested way of existing and its evolved in relation to adversity as a way of supporting people and getting them through these crises"* (P12).

However, when the group does not help for whatever the reason then *"adjustment is coming from outside … from different ideas, that's what I see because that's where I'm located, outside"* (P13). In addition to group support participants talked about posttraumatic adjustment in terms of relying on personal strength, reflecting on the event and drawing life lesions, whereby *"adversity activated developments such as ideas of posttraumatic growth, resilience, and whereby people*

eventually grow when they come to realize and perceive themselves as survivors" (P14).

6.7.2.2. Social and cultural roles. Participants emphasized societal and cultural impact factors and endorsed the importance of social and cultural expectations and roles. For instance, following a trauma, *"its not only your own expectations but it what other people expect from you"* (P1) that is important especially when trying to promote adjustment posttrauma.

From the narratives it seemed that it was important for participants to meet and adhere to cultural and societal expectations, values and norms and to act in accordance to cultural dictums. As one participant denotes *"[there are] expectations from society on you … you are expected to behave in some way and you sometimes are afraid of doing something different from what your parents want you to do"* (P3). When these expectations are not met, the individual feels traumatized because they are in direct conflict with these expectations.

Cultural values and norms are important to an individual because they guide members of a given group or culture. This seems to hold further significance in terms of healing and recovery, as participants bring to light that some cultural values, expectations and norms should not be violated, and such violation results in a traumatized self.

"I think in my culture, you can't, you start to feel traumatized when you feel like the value that you gain in your home, from your family, is really conflicted in some way, its kind of like if you brought up with certain values and then you broke [them] … then you start to feel traumatized …[because] this is not the right way that I was brought up to be. So I think when your value, the thing that conflicts with the situation, you start to feel traumatized" (P1).

Moreover, from the responses it seemed that one's culture assigns roles to its members; when individuals experience a trauma these social and cultural roles (e.g. I am a father/provider/caregiver) undergo change that can result in loss or damage to the self. For instance, individuals *"don't say I've lost my role but men … typically …*

are … are rather saying or one way or another you're led to a thought that this is somebody who had a place in the family, a place in society, erm, had a role who now doesn't. So you know, going from provider and head of the family to being the one who is looked after because he's … you know, he's traumatized" (P13).

When the self is thought of in terms of failure, or rather failing in its role, it can have very negative connotations, individuals *"think of themselves as very weak and not very strong to face these problems [resultant from the trauma event]"* (P6). *While the culture in which they reside can also place greater strain on the individual "I work with people here, who talk about being blamed and judged by members of their community because of their misfortune"* (P14).

Conversely, if individuals feel they have adhered to cultural and societal expectations and acted appropriately, yet still experience a trauma, they may see themselves as *"being cruelly marked out … why me? … I've done everything right, … I've been a good citizen, I've followed my religion, I've fitted in, I've been a good citizen, why has this happened?"* (P12). The protective features of one's culture has not shielded the individual from suffering or pain, it has failed them, and subsequently challenged their beliefs, rendering previously held schemas for safety, trust and dependency as redundant and/or contested.

6.7.2.3. Self

6.7.2.3.1. In relation to others. Study participants found it very difficult to talk about themselves following a trauma. Instead they continually brought the conversation back to others and their relationship to others, in addition to the challenges and changes a trauma could play in their relationships to their family and community at large.

"Its very common in my culture that family tie is very, very, very high" (P9).

Those from collectivistic cultures would be concerned about others over and above themselves, whereby the family or the group is their raison d'être. They would sacrifice the self for the group, *"because if you have … a sense of a bigger group, then the bigger group can survive even without you"* (P13). Whereby, the individual

is no longer the focus, they are not thinking of themselves, their individual future is over but their family's future won't be if they sacrifice their needs: *"I don't care for myself but I've got children now"* (P13).

6.7.2.3.2. Self-blame. All study participants mentioned being highly emotive with appraisals centering around self-blame:

> *"The Kosovan women I've worked with totally self-blame"* (P13).

Many accounts highlighted feelings of guilt:

> *"they have guilty feelings … that you feel responsible … if someone else is suffering because of you then you will be extremely guilty about what happened"* (P6).

> *"Yeah the guilty ones at the end, the event happened because of the way I acted, you hear that a lot, unrealistic guilt. We had a client who had been beaten unconscious by a group of soldiers who attacked his family and then his mother was killed, so he was actually unconscious at the time she was killed, so there was nothing he could have done and he was wracked by guilt"* (P14).

Other accounts highlighted pertinacious sense of shame:

> *"I'm thinking about young Tamil women who I've worked with over the years, who have been raped … shame coming into this at quite a communal level as an example … [abduction of women community assumes] you would have been raped. And so what we discovered was happening, was that then because you had been raped shame falls on you and your family erm and women would talk to us about feelings that they were impure, they were never able to get married erm and as we got into it more and more we discovered that actually what would often happening is that they would have to flee for their own safety and their family would have to entirely relocate because of the sense of shame"* (P14).

6.7.2.4. Future. Participants talked about the future in terms of:

6.7.2.4.1. Uncertainty. Uncertainty appraisals appear to have a impact on adjustment, it appears that one is not simply uncertain as to what is happen or why an event is happening. The trauma event perpetuates this uncertainty and potentially influences appraisals of future events.

> *"I think this is one of the reasons why they are traumatized, because they are worried about their future. So after the trauma they are worried about what could happen to me, but they do not have answer, normally, they are worried because of the future, but still they won't plan anything. They'll be too much worried about the world for some time"* (P2).

6.7.2.4.2. Attitude changes. Trauma can cause a revision of attitude concerning life choices and how one pursues their future, for instance:

> *"If the trauma is a hard experience it may change their attitude towards life, so think, er, I must take time to enjoy my life, not spend or waste my time out walking or something, so maybe they will change their attitude, I think it depends on the extent of their experience, how bad they had to face"* (P4).

6.7.2.5. Relationships/Others. As mentioned through the study, participants placed emphasis on others/ the group they felt they belonged to, and focusing on the importance of their relationships with them. The group protects, motivates, supports and helps:

> *"To recovery, I think the help from the family is very important … the family have the sole responsibility to the people who have the problem"* (P11).

Conversely, the groups can also exacerbate problems the individuals face by judging and pressurizing them:

"I'm no longer a believer in one's lovely culture is a lovely place to be, there's a lot of crap in one's cultural pressures" (P13).

"I work with people here, who talk about being blamed and judged by members of their community because of their misfortune, they've been tortured, or somebody's been killed, or whatever, they've been blamed for it, because of what they did in a previous life" (P14).

Additionally, following a trauma relationships undergo change, they can be strengthened or broken down and filled with mistrust:

"No if anything they [relationships] could be strengthened I'd have thought, you know in adversity people draw closer together, to gather strength from each other, erm, that's my sort of observation of the recent events in Japan, that people seem to pool together and look after each other" (P12).

6.7.2.6. External Causes. Participants cited several perceived external causes as precipitous to the trauma incidents occurrence. All focus group participants brought this forward, it was alluded to in one key informant interview.

6.7.2.6.1. Fate. Fate attribution came up in all focus group session, with a number of respondents believing trauma events to be arbitrary and random, not necessarily brought on by anything the individual may have done. For instance, P4, and P10 both highlight that in their cultural groups, individuals base causality of events as a result of fate:

"fate … sometimes we think fate [must have caused the event to happen], and there was a reason so … it must be something you had to experience" (P4).

"Yes because of fate it's happened, some people blame themselves but some other people think it's because of fate" (P10).

Further, it would appear that such attributions have a bearing on perceived agency at the time of the event and subsequent links to self-blaming. For some, they

do not necessarily feel they are to blame or are responsible for the trauma, perhaps this external attribution alleviates self-blame:

> *"yes [they think] it's the signs that's responsible [for what happened]" (P8).*
> *"they blame fate" (P7).*
> *"Yes it's a cultural thing … if someone blames fate" (P6).*

6.7.2.6.2. Religion. Religion was another subtheme and looked at external attribution from a slightly different point of view. Again, some participants place causality on an external source, however it appears the implications are somewhat different, and again have implications to self-blame appraisals that can occur following a trauma. For instance P1 asserts, *"in my culture, my religion says that everything has happened is a plan from god and its kind of a test".* However, what needs to be borne in mind is how one perceived they may have done on such a test? If they feel they have failed this can have detrimental future effects for the self. Further, one places their faith and trust in their religion, would they feel alienated from their religion and their beliefs in their god after having experienced a traumatic?

Other views pertaining to beliefs, attributes causality to karma, believing positive or negative events occur as a result past behaviors. Again this appears to have implications for self-blaming.

> *"we've had cultures who have a belief in karma, the Hindu's they believe in karma and reincarnation, hence the idea that if something horrible happens to you in this life its because you did something terrible in the previous life"* (P14).

Further, individuals revert to cultural beliefs on rituals and ceremonies to aid in recovery. For instance, P4 brings to light that Chinese undergo a cleansing ritual every year, namely Chinese New Year. This is a time when they clean their homes and sweep away not just bad luck but any bad experiences they had over the year.

> *"for example, in New Year it's very serious in China. Yeah erm we try to create a cleaning environment so for anything bad, when this is finished, all is returned to normal, everything changed … so its, how to say, closure"* (P4).

Additionally, others highlight the solace they take from their religion in aiding recovery.

> *"in the Hindu religion they try to er, do certain curses, ceremonies … which is to bring hope, those kind of things are very common after a traumatic situation … these kind of what you call puja's are religious ceremonies, they are very common, which take place after this traumatic event … they believe that something really happened from us, and we are really sorry, maybe we are accepting it, we're praying god to give more strength to us, that really happens, and after this cleans your spirit, we could see there is a change in their mental belief … that's very common, in our religion".* (P5)

6.7.2.7. Education. Although not widely talked about, education did come up as a theme for Focus groups 1 and 2, whereby they thought it was important for a person to think about what happened to them in order to make sense of it and if they were going to move on from the trauma.

> *"like how much their exposure is to education, because if someone is really educated, he is aware of the world and things happening around"* (P2)
> *"[if educated] they can think what went wrong"* (P6)

Additionally, participants thought adjusting from the trauma would be harder if education was lacking. For instance, *"I think it [trauma appraisal] would depend on the person and also if they are educated … [because if not educated] the mind would be weak"* (P5). This is also reflective of the research on PTSD susceptibility and trauma recovery (Ahmed, 2007).

6.7.2.8. Language. Language was brought up by all key informant interviews. For instance K1 states *"the "we" is more important than the "I" and if; I speak Turkish and Kurdish and certainly the Kurdish people are speaking to each other in either of those languages, the words they use are "we", "us" and "our" … you very rarely hear anyone say "I", "me", … it can be quite unusual to hear somebody talking very directly about themselves or me as an individual"* (P14). Subtle differences in languages, or use of colloquialisms could result in changing the

interpretation of how the questions are understood and therefore how they are responded to; which could subsequently impact on assessment interpretations.

In addition, this inter-relationship between self and other depicted by language as mentioned above holds true throughout the focus group sessions, where participants found questions in relation to trauma affecting the self as a difficult concept to conceive, and participants in the focus group sessions found it very difficult to talk about themselves. Instead it was married to how trauma affected them in relation to their significant other, family and society. Subsequently this is why one of the themes mentioned above is 'self in relation to others'.

6.8. PTCI item appropriateness

Data achieved normality for all variables. PTCI item appropriateness (for Total and all subscales) was rated as 'very appropriate' by the key informant interviewees. PTCI Total and Self-subscale item appropriateness was rated as 'neutral' by the focus group participants, while they rated the World and Self-Blame subscales as 'very appropriate' (see Table 13). This indicated a good consensus on PTCI item appropriateness.

Table 13

Mean PTCI Scores

	Focus Groups		Key Informant Interviews	
	M	*SD*	*M*	*SD*
PTCI Total	3.99	1.49	5.91	.91
PTCI Self	3.55	1.78	5.87	1.07
PTCI World	4.95	1.45	5.81	1.09
PTCI Self-Blame	4.49	1.07	6.20	.72

Note: PTCI = Posttraumatic Cognitions Inventory

6.9 Discussion

This qualitative study aimed to explore the influence of culture on appraisals of trauma within interdependent/collectivistic cultures, and to investigate the appropriateness of the PTCI as a measure to assess trauma related appraisals and cognitions within collectivistic cultures. In reverse order, the PTCI can be deemed suitable to use on individuals from collectivistic background, all participants rated the PTCI and its subscales as being 'neutral' or 'very appropriate'. Additionally, over the course of the focus groups and key informant interviews a strong number of emergent themes arose (in addition to those covered on the PTCI) that also had significant consequences for post-trauma psychological adjustment and recovery. In general, members from collectivistic cultures appraised trauma as a predominantly physical stressor, while some did acknowledge psychological distress. This is reflective of previous research conducted with refugees from non-Western cultures, which has shown them to commonly somatize their symptoms. Indeed, several PTSD criteria, such as somatization, are relatively common among Southeast Asian cultures (Eisenhruch, 1991).

Further, those in the focus groups felt that admitting to suffering from any adverse psychological maladjustment would lead to stigmatization by the community they belonged to. Considering how important the group is to the individual and the desire to belong and live in commune and harmony with the group, revealing psychological stress as a result of trauma can be a cause of consternation and apprehension. Subsequently, this could potentially hamper posttrauma recovery, as support systems would not necessarily lend support to those in need. Indeed, a lack of support and negative attitude towards the trauma victim could potentially impede recovery due to the trauma victims feeling isolated, separate from their group and a general sense of not belonging. Further, and worryingly, research has found these factors to obstruct access to health services for ethnic minority groups (Street et al, 2005). Consequently, in sum, for collectivistic cultures, it can be surmised that support is available from the community for physical trauma but not as widely for psychological trauma, even when acknowledged that this type of trauma is worrying and potent. This theme therefore bears weight on understanding how the trauma is appraised, dealt with and its potential consequences for recovery.

Another theme that resonated and warrants further scrutiny was the impact of trauma on the group; specifically, its impact on family members. Also, very notable,

the community members found it increasing difficult to talk about the trauma in terms of themselves and how it had impacted on them. Their immediate concerns after the trauma tended to be centered around important others, such as the impact on children, spouses, parents and so forth. Thus, as one of the mental health practitioners asserted, 'trauma broke social bonds and therefore impacted on relationships, which was of paramount concern. What is more, the individual derives its strength and support from the group, from the family and even community, however, with the trauma impacting at the group level, support systems are also now at risk and in need of support themselves'.

The group and one's interconnectedness with the group was very much emphasized with the self (or traumatized self) as a secondary feature of trauma consequences. If considered in terms of the self, one's social role was called into question, in particular whether the individual could function as part of the group and retain their role within it, or if the trauma had caused a loss or damage to this role; thereby de-valuing the individual as a member of the group. This displacement and feelings of being outside the group, potentially results in extremely poignant feelings of dejection, as the group or family is the individual's reason for being in many instances. Thus if one is not an active and reciprocal member of the group, the self is devalued on both an individual and collective level, making the trauma's impact twofold.

The self is a major component for Western clinical practices in alleviating negative appraisals and restoring a healthy self-concept. However, here it is found that in order to help restore a healthy self-conception, relatedness needs to be taken in to account. Namely, relatedness with one's groups, at either the family or community level is the overarching factor is self-redefinition and reducing self-blame. To address and redress dysfunctional trauma appraisals of the self, focus may need to be given to alleviating distortions concerning how the self impacted on the needs of others.

Thus it appears that there is a public appraisal of the self (i.e. viewing the self as a proponent part of the whole and in relation to one's roles within that whole), where the self has not only been privately damaged, but also viewed as publically humiliated. These public manifestations of self-failure weigh heavily on the individual, because potentially they can no longer see how they fit in to the larger world/community or group, creating a sense of isolation and separateness. As falling away from family and society is one of the most profound facets of PTSD.

Again, there are potential practical applications that can be drawn from the data presented. For instance, to aid in trauma recovery, group therapies may be more effective for those form collectivistic cultures. Indeed, group therapies have been widely used in posttraumatic psychotherapy in Western clinical practices due to its ability to reduce psychological shame and to decrease the sense of alienation and isolation that it brings (Adshead, 2000). Additionally, the development of self-help groups has been effective in reducing shame and increasing a sense of self-empowerment, challenging passivity and helplessness (Adshead, 2000). Thus group therapy appears to be tapping into both the supportive and prejudiced attitudes the group places on the individual while either encouraging or circumventing them to aid in posttrauma adjustment.

In addition to relationships and social roles being potentially damaged or changed by the trauma, another prominent theme that emerges was that of cultural appropriateness, expectations, values and norms. For many, trauma appraisals are judged and evaluated according to these cultural standards and one is expected to act within one's cultural remit, even when dealing with the trauma and its aftermath. Thus culture appears to color one's interpretations of the events and thus trauma and what constitutes a trauma is based on a particular community's traditions, mores and values. Moreover, these cultural predilections are expected to be adhered to and act as a base from which an individual is judged. Thus when cultural or societal norms and values are violated by the trauma, it appears individuals either revert to self-blame (e.g. they could have done something to avert it such as being a better citizen). Alternatively, in other instances, these acts are seen as random and predestined by fate or God or some other external cause. This then brings to light another theme that also appears to be a cultural mechanism for coping with the traumatic event, namely, reverting to religion, prayer and cleansing rituals. These could be in keeping with cultural practices following a trauma, for instance, in some collectivistic cultures up-keeping these customs is part of what it means to be a good citizen. Thereby, by restoring these beliefs, it may help individuals align views of the self with cultural mores on appropriate behaviors and reaffirming that one did not act outside of them to incur the trauma, this could aid in recovery. Further, in terms of beliefs, religion, ceremonies and rituals, there is a rich literature, especially on fate attribution by ethnographers and cultural observers (Norenzayan & Lee, 2010). However, this domain remains largely overlooked in the psychological literature. Taking a social

cognitive approach to examining fate beliefs in an attribution framework, the implications of rituals, ceremonies and religion in trauma recovery models would be advantageous to understanding the cognitive underpinnings of such beliefs and their implications for posttrauma recovery.

Some themes were similar to that emphasized currently in the literature, for instance causal attribution came to light. Here results reflected literature on collectivistic cultures making more external attributions, for instance chance factors (Kawanishi, 1995) due to common beliefs in luck and fate as a type of external locus of control (Bond & Tornatzky 1973), while those from individualistic cultures are more likely to exercise primary control and therefore try to control or change their external environment (Chun, Moos & Cronkite, 2006). Here it appears that participants accepted the situational outcomes, for the better or worse. Other themes were similar to research found in Western populations, such as particular emotions (e.g. guilt, shame) and the notion of self-blaming. Much research into PTSD has found anger, guilt, shame, and sadness to be high posttrauma, when appraisals of blame, responsibility, and loss become paramount (Amstadter & Vernon, 2009).

On reviewing key informant interviews, similar themes were found, with prominent emphasis on: the value of the group to the individual and trauma and recovery being perceived to be experienced at the group/community level. However, what did emerge in one interview was that outside help or influences can only be introduced from the outside. Specifically, new ideas, thoughts, values and states of being allow for the discovery of new appraisal processes. This could potentially help individuals from sacrificing themselves for the group and in so doing release them from an enduring and continuous cycle of self-blame, guilt and shame. Thus while the group can be seen as a supportive, motivating and protective, it can also be self-harming, as it does not allow the individual to break free of the psychological and emotional distress they are in due to social and cultural conventions.

6.10.
Development of the Public and Communal Self Appraisal Measure (PSCAM)

Following the eight emergent themes outlined above, three warranted further investigation. These three themes were 'external attribution', 'social and cultural roles' and 'relationships' amalgamated with 'self-in-relation to significant others'. These themes were chosen, as the concepts have not been used in any other measure to assess for dysfunctional appraisals that may be linked to PTSD. Further, the themes appeared to be important to participants and were consistently highlighted by the mental health practitioners. As a result, the next step is to examine what these concepts are potentially tapping into and whether they can be developed into a new measure, which can work alongside established measures when investigating the role of dysfunctional appraisals in PTSD. Subsequently, findings from the qualitative research were used to develop a new measure, the Public and Communal Self Appraisal Measure (PCSAM). The items on the PCSAM (Table 14) represent potential dysfunctional cognitions as a result of a) trauma leading to disintegration in one's cultural/social roles (i.e. public self), b) dysfunctional appraisals about communal aspects of self and relationships (i.e. communal self), and c) dysfunctional appraisals of one's belief systems following trauma.

The 21-item measure was established via the textual data from the focus groups and key informant interviews, in addition to comments participants left on the modified PTCI measure. The first subscale's (public self) items (15 – 21) were derived from the theme 'social and cultural roles' and its implications for recovery. The rationale for the choice of wording that made up the items on the PCSAM was based on previous research, the information ascertained from the focus groups, key informant interviews and the need for the measure to determine the individual's appraisals of their traumatic experience. It is for this reason that the words "I" and "me" have been used in the items sentence structure, because while it may appear to be autonomous and individualistic in nature due to the focus on oneself, the context in which it is framed (e.g. family, society, social role) alludes to a more collectivistic and interpersonal approach on which to base ones appraisals.

The subsequent quotes were used as a foundation for the construction of the subscale:

1. '*For them the world hasn't changed, they failed*' (P13).
2. '*people would be more likely to define that [failings] in terms of their role, so erm I'm not a good father anymore'* (P13)
3. '*the event happened because of the way I acted, you hear that a lot, unrealistic guilt'* (P14)
4. *'you feel bad about, or traumatized … when these values are [in] conflict'* (P1)

The second subscale (communal self) followed on from the themes 'relationships' amalgamated with 'self-in-relation to significant others'. The following quotes prompted the constructions of items 7 – 14:

1. P3 writes that the '*relationship with others and society after the trauma [needs to be looked at]*'.
2. '*they're unable to play their part in the group any longer and this is the thing about collectivistic cultures, the group is everything'* (P14)
3. '*in adversity people draw closer together, a gather strength from each other'* (P12)
4. *'in our culture we have very strong feeling for … all people, the family members'* (P3)

In regards to the third subscale (beliefs), items 1 – 6 were put together as a result of the following quotes from the focus groups and comments on the modified PTCI forms.

1. 'fate makes these things [trauma event] happen' as a comment on other items the PTCI could include. This along with the following quotes inspired the items:
2. '*because of fate it's happened'* (P4)
3. '*everything [that] has happened is a plan from god and its kind of a test' (P1)*
4. '*we've had cultures who have a belief in karma, the Hindu's they believe in karma and reincarnation, hence the idea that if something horrible happens to you in this life its because you did something terrible in the previous life, and this is quite an active belief*' (P14)

Table 14

Public and Communal Self Appraisal Measure (PSCAM)

1. Fate or God or Bad Luck caused the event to happen
2. Since the event I have a pessimistic view of life
3. My Faith or Religion or Beliefs have been challenged by the event
4. Since the event I feel let down by the world
5. Since the event I feel let down by Fate or my Beliefs or God or my Faith
6. Since the event I do not feel like I have a place in the world
7. Since the event I have sacrificed my needs for the needs of significant others
8. Since the event I feel like I am a burden (e.g. a problem/trouble/worry) to others
9. I do not want anyone to know about the event
10. Since the event I no longer feel close to others
11. Since the event other people have become a priority
12. Since the event my relationships have been damaged or challenged
13. Since the event I find it hard to have relationships with others
14. Since the event others have made the problem worse
15. Since the event I have lost my social role/identity (e.g. as a parent, husband, wife, at work)
16. Since the event I have failed in my role(s)
17. Since the event my values have changed
18. Since the event I try harder to meet social or cultural expectations
19. Since the event I have not lived up to social or cultural expectations
20. Since the event I try hard to act appropriately
21. Since the event I do not feel I am a significant member of my culture or society or community or Group

6.11. Discussion

The aim of this section was to extend and extrapolate findings from the first part of the study to derive a new appraisal measure founded in collectivistic type cognitions. Further, while the appropriateness of the PTCI's items, as a measure of trauma related appraisals within collectivistic cultures was found to be suitable; the responses by both trauma survivors from the focus groups and interviews

demonstrated that there are important areas not yet covered and in need of further investigation. Three emergent themes were focused on due to their uniqueness in the trauma and cross-cultural literature thus far. Those themes comprised the three subscales of the PCSAM and pertained to the self, specifically the public and communal aspects of self in addition to belief systems and aimed measure both internal and external threat to the self, reminiscent of Ehlers and Clark's (2000) cognitive appraisal model.

These aspects of self (i.e. public and communal) were used to derive the PCSAM, as the focus groups and interviews found the self to be interdependent with the group, one cannot make sense of the self without recognising this relatedness (i.e. communal aspects of self). Individuals from collectivistic cultures appear to have a collective self (i.e. made up of communal aspects of self). Therefore, in order to arrive at a healthy self-concept, appraisals drawing on the group dynamics, relationships and their connection with the self may need to be focused on to aid in adjustment and recovery posttrauma. Additionally, there is not a large body of research investigating the disparities between the self with social and cultural roles (i.e. the public aspect of self). However, it would appear that this is an important component process in trying to attain a healthy self-concept following trauma. For example, one lives within and amongst their culture, when their sense of belonging to this culture is taken away, or beliefs in it are challenged, much malcontent is a result, potentially impeding recovery. It's consequent clinical implication is to restore the public aspect of the self. Finally, belief systems were focused on including self-beliefs and ideological beliefs. Thus beliefs can be either internal (e.g. self as incapable/self as failure) or external (e.g. fate, karma) and may help or impede recovery. Ideological beliefs such as attributing the trauma event to have occurred due to fate or luck, or the events were predestined or in god's plan, are very hard to change or alter. If one truly believes that their karma was bad and caused the event to happen and in so doing blame themselves, shifting this paradigm would be very challenging. Additionally, while religion, rituals and ceremonies also arose under the external attribution theme in Study 3, it was not focused on as it was outside the remit of the thesis. This thesis' primary focus is on cultural differences in self and is subsequent influence on appraisals and self-concept. The PCSAM is reflective of this. It is for this reason that religion, while acknowledged as an important factor was not further developed or investigated. In addition, private aspects of self were also discussed in focus groups

and key informant interviews. However, work in this area is already underway and well established (e.g. PTCI, private self-appraisals detailed in Ehlers & Clarks, 2000, appraisal model). It is with the above in mind that the current three themes were chosen and developed. Now, work on establishing the validity and reliability of the PSCAM as a prospective measure to assess for dysfunctional trauma appraisals is needed and will be addressed in Study 4.

6.12. General Discussion

This third study serves to highlight the relationship between trauma and culture, supporting the assertion that it is an important union that warrants further investigation to arrive at culturally informed and appropriate assessment and treatment for those who have experienced trauma (Jobson, 2008; Jobson & O'Kearney, 2006; 2009). Further the study provides much needed work on research conducted with non-Western populations (Jobson & O'Kearney 2009; Markus & Kitayama, 1991), providing valuable information and insights regarding trauma appraisals. Indeed the study underscores the many challenges collectivistic cultures face when having undergone a trauma. The findings provide a better understanding about the health-information needs and concerns of collectivistic cultures, and the ways that trauma survivors from these cultures may appraise traumatic events. Therefore, Study 3 aimed to address how individuals from collectivistic cultures appraise trauma events, reasons for its occurrence and its causation and how one can derive coping mechanisms to resolve its impact on the self and the group. At the same time, the study helps illuminate the roles for practitioners and health care settings in better serving the needs of those from collectivistic cultures. For instance, it would appear that meanings attached to trauma from community members from collectivistic cultures are centered round their interconnectedness with their group and are interpreted by their cultural values, expectations and social norms. What is more, these culturally shaped beliefs impact an individual's and even family's recovery. Further, the development of the PCSAM addresses issues that arose in the first part of the study. It therefore constructed items to measure violations to social and cultural roles (i.e. public self) and violations to relationships and interconnectedness with the group (i.e. communal self), as this appears to be part of the collectivistic self-identity. Along with items measuring violations of ideological beliefs as to why the trauma event occurred. Additionally, ideologies and beliefs are potentially intrinsic to one's sense of self as they are informed by one's cultural and society. Consequently, it is proposed that violations and disparities in these aspects of self will cause negative affect and contribute to maladjustment posttrauma.

The limitations of the study are acknowledged, the sample size was small. However, data saturation was achieved after the first two focus groups and first 2 key informant interviews. Further, all participants were relatively young and unemployed students, which could have impacted on findings. Additionally, no individualistic

focus groups were used; therefore, direct comparisons concerning the themes that emerged cannot be made. Furthermore, while all focus group members acknowledged having experienced a trauma, neither PTSD symptoms nor depression was assessed amongst the focus group participants, which may have impacted on findings. Nevertheless, this is one of the first qualitative studies investigating the interaction between trauma appraisals and culture. It is also one of the few studies investigating the appropriateness of measures such as the PTCI, which are consistently used in clinical and trauma research, where its cultural applicability may not be as highly sensitive to cultural nuances as needed. The study also resulted in the development of the PCSAM. However, further work on the PSCAM is needed to find if it is a valid and reliable measure, and if it has the potential to act as a supplement to other established measures in the field when assessing those from collectivistic cultures who have experienced a trauma event. Finally, it would also be interesting to find what results it would attain when assessing those from individualistic cultures, given those from individualistic cultures also hold public and communal aspects of self (Markus & Kitayama, 1991; Sato, 2001). These questions will be addressed in Part 3 of the thesis, using a sample of trauma survivors with and without PTSD from individualistic and collectivistic cultures.

6.13. Overall Chapter Summary

Study 3 explored the meanings and understandings attached to trauma by those from collectivistic cultures and how they subsequently appraise trauma events. From this, eight emergent themes arose; some reflective of current literature on cultural distinctions is self-construal, others demonstrating an overlap with individualistic type cognitions, while some themes appeared to be unique. Further, while a number of themes (e.g. relatedness to group, beliefs and external attribution of failure) have been highlighted in the literature they have not as yet been explored in detail in relation to PTSD and posttrauma maladjustment. The study further examined the appropriateness of the PTCI within these collectivistic cultures and found it to be suitable, as assessed by both community members and mental health practitioners. Following this, the next section extrapolated findings by expanding on three emergent themes, which were used to develop a measure to assess trauma related thoughts, beliefs and appraisals that are geared toward collectivistic cultural sensitivities. It is believed the PCSAM could potentially be used as a supplementary measure of

posttraumatic psychological adjustment and used as an adjunct to other established measures. Therefore going forward, a pilot of this measure is needed, preferably with a sample of trauma survivors with and without PTSD, to find if it is reliable, valid and able to discriminate between those with and without PTSD.

Finally, in relation to the conceptual framework, some of the results supported the assertion for cultural distinctions in trauma appraisals. For instance public and communal aspects of self are supported by the cross-cultural literature on self-construal, which this study proposed has important implications for appraisal tendencies and on posttrauma adjustment. Further, findings on private aspects of self which is also supported by previous literature and demonstrated overlap with Western, individualistic cultures, thereby not supporting cultural distinctions in self-construal when it comes to this component of self and its role in psychological maladjustment. However, it needs to be borne in mind that only collectivistic cultures were included in Study 3, therefore to make more specific and direct comparisons, individualistic cultures should also have been approached to take part in the study. Additionally, while participants were all trauma survivors, the small sample size makes all findings tentative and exploratory.

Part 3

Cultural Differences in Trauma Appraisals and Self-Identity in Posttraumatic Stress Disorder: Extending the Ecological Validity and Theoretical and Clinical Implications of Part 1 in a Clinically Relevant Sample

Chapter 7

Study 4 - 7: Cultural Differences in Cognitive Appraisals of Trauma and Self-Concept Following Trauma in those with and without PTSD

The ecological validity and clinical implications that could be drawn from Study 1 were limited as participants were students and several of the trauma events disclosed would not meet DSM-IV criterion for PTSD (American Psychiatric Association, 2004). Further, the validity of inferences about cultural differences was unclear due to cultural groupings being based solely on ethnicity without a validating measure of independence/interdependence. Studies 4-7 are an extension of Studies 1 and 2 and examine whether PTSD and culture interact to influence cognitive appraisals of trauma and trauma-focused self-concept. To extend ecological validity and clinical implications, these studies tests similar predictions to that of Studies 1 and 2 in a sample of trauma survivors with and without PTSD from individualistic and collectivistic cultures. Specifically, Study 4 aims to investigate whether cultural differences in self influences trauma-related appraisals using British and Asian trauma survivors with and without PTSD. Second, Study 4 aims to examine whether the PCSAM, developed in Study 3, is a valid and reliable measure that is appropriate to use in collectivistic. Studies 5 and 6 examine differing aspects of self-concept (Study 5 – self-discrepancy and trauma-centered self-concept; Study 6 - ambivalent self-concept) in the aftermath of trauma, how they may be culturally specified and how they are related to PTSD. Lastly Study 7 examines how the PCSAM is related to one's self-concept following trauma.

7.1. Study 4

An Investigation of Trauma-Associated Appraisals and Posttraumatic Stress Disorder in British and Asian Trauma Survivors: The Development of the Public and Communal Self Appraisals Measure (PCSAM)

As highlighted throughout the thesis, there is an impressive body of literature, which identifies the central role negative cognitive appraisals play in the development, maintenance, and treatment of PTSD (e.g., Kleim et al., 2007). However, as also previously outlined, a significant body of research has demonstrated cultural differences in the appraisals of everyday events (see Mesquita & Walker, 2003). Thus an obvious question is how does culture influence the appraisals of trauma and what are implications of these differences for PTSD? Study 1 commenced an investigation into this area. It was found that culture might influence the relationships between trauma–specific appraisals and PTSD symptoms. It was found that the PTCI was significantly associated with and predicted PTSD symptoms in the British group. However this was not found to be the case in the Asian group. Thus, the PTCI may not fully assess trauma-specific appraisals associated with PTSD in those from Asian cultures. The thesis suggests that this may be the result of the PTCI typically tapping into individualistic-type appraisals rather than more interdependent, public and communal appraisals.

Therefore, following Study 1 a qualitative study exploring cognitive appraisals that were associated with trauma and disrupted psychological adjustment following trauma in trauma survivors from collectivistic cultures (Study 3) was conducted. Key informant interviews with mental health practitioners who work with trauma survivors from Asian cultures and three focus groups comprised of trauma survivors from Asian cultures were selected to generate a greater understanding of culturally appropriate appraisals. Open-ended interviews were used to collect data. In addition participants were asked to rate the appropriateness of the PTCI items for use in collectivistic cultures. Using template analysis several strong emergent themes were elicited that focused on a) social and cultural roles following a trauma, b) relationships to others following trauma, and c) appraisals of one's belief systems following the traumatic incident. These themes seemed to align with cross-cultural research on self-construal (i.e. public and communal aspects of self) and the influence of these differences on appraisal tendencies. Further, the beliefs theme reflects cross-

cultural research on self-control and external attribution of failure (see Ji, Peng, & Nisbett, 2000; Sastry & Ross, 1998; Tweed, White, & Lehman, 2004). The findings of this qualitative research were used to develop a new measure in Study 3; the Public and Communal Self Appraisal Measure (PCSAM). The items on the PCSAM were developed to represent potential dysfunctional cognitions as a result of a) trauma leading to disintegration in one's cultural/social roles, b) dysfunctional appraisals about communal aspects of self and relationships, and c) disintegration in one's belief system.

Therefore, the current study aimed to extend this work. The overall objective of Study 4 was to investigate whether PTSD and culture interact to influence cognitive appraisals and trauma-specific appraisals (as indexed by scores on the PTCI and PCSAM). Specifically, Study 4 investigated the a) aims of Study 1 using British and Asian trauma survivors with and without PTSD and, b) reliability and validity of the PCSAM and its appropriateness for use in Asian trauma survivor populations.

In light of the above, it is hypothesized that there will be cultural differences in the appraisals dimensions related to the trauma event. Second, there will be PTSD condition differences in the appraisal dimensions related to the trauma event. Third given Su and Chen's (2008) findings that similar negative trauma-specific cognitions (as indexed on the PTCI) contribute to PTSD development in Asian samples, it is hypothesized that similar dysfunctional appraisals will be associated with PTSD symptoms in both British and Asian participants. Lastly, the PCSAM will be a good measure of dysfunctional appraisals for Asians.

7.1.2 Method

7.1.2.1 Participants

All participants (N = 95) were recruited using from the general community in the UK by posters in public places, Adult Migrant English Programs, advertisements in local and ethnic newspapers, contacts with ethnic organizations and communities and organizations that provide treatment for trauma survivors. Notices called for those who had experienced a traumatic event and identified the study as researching trauma, appraisals and culture. The Asian group was comprised of Chinese (n = 12), Japanese (n = 18), Korean (n = 2), and South Asian (n = 15) participants. An a priori power analysis using GPower software and to have 80% power for detecting large effect size when employing the traditional .05 criterion of statistical significance, revealed that a

sample size of 111 participants was needed for the study for conducting ANOVA, 128 for independent t-tests (two-tailed) and a sample size of 64 was required for correlation analyses to have 80% power for detecting medium effect size when employing the traditional .05 criterion of statistical significance.

The inclusion criteria for the clinical sample were to be over 18 years of age, to have experienced a traumatic incident which meets APA (2000) criterion A, to be able to complete the interview and questionnaires in English and to self-identify as being either Asian or British. Lastly in the British group some ex-veterans participated, this was not part of the inclusion criteria nor had it been assigned part of any exclusion criteria. There were no ex-veterans in the Asian group, although one participant had experienced a combat situation as a civilian. All participants were trauma survivors; they had experienced a range of traumas, which included road traffic accidents (RTA), natural disasters, combat, assault and witnessing a death (see Table 15). Participants were then recruited from Norwich and London, with the main body of participants being recruited from London.

Lastly, all traumas were experienced in participants' country of origin; the combat related traumas were all experienced in Afghanistan (for both Asian and British participants). The time since the traumas were experienced was a mean of 7.02 years (SD = 1.12) for the British and 5.37 years (SD = .61) for the Asians.

7.1.2.2 Measures

7.1.2.2.1 Psychological adjustment.

Depression (HSCL -25; Derogatis et al., 1974). See Study 1, Chapter 5.

Structured Clinical Interview for DSM-IV-TR AXIS-I Disorders (research Version) (SCID; First et al, 2002). PTSD diagnosis was identified using the Overview and PTSD module from the SCID-I for DSM-IV-TR Axis I Disorders (First et al., 2002). The rationale for using the SCID-I which is a semi-structured interview, was to gain a more through identification of PTSD presentation amongst participants and not focus solely on self-reports and because it is a routinely used diagnostic instrument. Interviews were audio-recorded to account for inter-rater agreement and reliability of the coding of the data. Inter-rater reliability was found to be good (Kappa coefficient of .88) and all discrepancies were resolved between raters.

PTSD checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993). The PCL is a 17-item self-report measure of the DSM-IV symptoms of PTSD (APA,

2000). Participants rate each item from 1 (*not at all*) to 5 (*extremely*) to indicate the degree to which they have been bothered by that particular symptom over the past month. The rationale for using the PCL-C was to further consolidate the results from the SCID-I as to PTSD diagnosis and identification for participants. Further, the PCL is used to screen individuals for PTSD, diagnosing PTSD and monitoring symptom change during and after treatment. Of the three versions of the PCL, the PCL-C (civilian) was used and asked about symptoms in relation to the traumatic experience the participant's referred to in Task 1 of the Structured Clinical Interview for DSM-IV-TR Axis I Disorders (SCID-I; First et al., 2002). In addition, since its introduction the PCL-C has been widely used in research and clinical settings. The PCL is scored as a total symptom severity score (range = 17-85) and has good psychometric properties (Keen, Kutter, Niles, & Krinsley, 2008). The clinical cut off score on the PCL for PTSD is a score of 50 (Blanchard, Jones Alexander, Buckley, & Forneris, 1996).

7.1.2.2.2 Appraisals.

Appraisals Inventory (AI; Mauro et al., 1992). See Study 1, Chapter 5.

PTCI (Foa et al., 1999). See Study 1, Chapter 5.

PCSAM. The items for the PCSAM were developed from the findings of the qualitative study. The original PCSAM consisted of 21 items that were thought to relate to three sub-scales; 1/ potential dysfunctional cognitions as a result of world/external causes 2/ communal and 3/ disintegration from cultural/social roles (see Table 14). Participants were asked to rate these items in relation to the trauma disclosed on the Structured Clinical Interview for DSM-IV-TR (APA, 2004) Axis I Disorders (SCID-I; First, Gibbon, Spitzer & Williams, 2002). Participants were instructed 'Please read each item and then indicate how much you agree with each statement in regards to the past seven days'. Items were rated on Likert-type rating scales ranging from 1(*totally disagree*) to 7 (*totally agree*). The rationale for using the PCSAM was to examine if it was a good measure to assess for collectivistic type cognitions in relation to dysfunctional trauma-related thoughts and beliefs.

7.1.2.2.3 Independence/ interdependence.

"I Am" Test (Khun & McPartland, 1954). Cultural independence/

interdependence was measured using a shortened version of the frequently used measure of the construct of self; the twenty statement test (TST). As in previous research instead of twenty statements, participants were asked to provide ten statements (Bochner, 1994). The rationale for using the TST was based on it being a simple and commonly used technique to assess one's sense of self or self-identification (Kuhn & McPartland, 1954). Further, the TST is a qualitative measure of the self that makes explicit how individuals mediate their social environment in different ways by indexing how self-related information is differentially organised across individuals (Kuhn & McPartland, 1954). The TST simply asks respondents to provide statements in response to the question "Who Am I?" Researchers have frequently used the TST to examine and control for cultural differences in the individual's sense of self (e.g., Wang et al., 1998; Watkins & Gerong, 1999). The responses are coded into comparable categories of the independent-interdependent dichotomy. The instrument allows researchers to observe individuals' own self-conceptualization (in a free response format) of their social relationships, role identities and personal qualifiers. The TST has been found to have high interrater reliability, criterion validity tests have generally supported the TST and researchers have shown the TST to have a fair degree of test-retest reliability (Kuhn & McPartland, 1954; Spitzer, Couch & Stratton, 1973), content validity (Kuhn & McPartland, 1954) and concurrent validity (Spitzer et al, 1973).

7.1.2.3 Demographics. Participants provided highest educational qualification, their employment status, marital status and religion during the SCID interview. The questionnaire booklet, prompted participants to provided their age, ethnicity, gender, time in the UK. Following this, participants were asked how hard they found the study on a 10-point scale from 1 (*not at all*) to 10 (*extremely*) and their English language skills on a 10-point scale from 1 (*not very good*) to 10 (*extremely good*).

7.1.3 Procedure

Ethical approval was obtained from NRES Committee East of England – Essex REC, Reference Number 12/EE/0194 (see Appendix C). Data for the four studies were collected in the same experimental session. Each session took approximately 60 - 90 minutes. Participants met with the researcher and following written informed consent procedures, participants first completed the SCID, which was audio-recorded

to account for inter-rater agreement and reliability of the coding of the data. Once this was accomplished, participants were asked to complete the questionnaire booklet in the following order; trauma memory and appraisals, negative memory and appraisals (counterbalanced) (a negative memory was selected as a comparison memory given it should be closer in valence to a trauma memory than a positive memory. Participants also completed the PCL-C, PTCI, HSCL-25 and TST, followed by their demographic information. Two weeks later the PCSAM was re-administered to examine test-retest reliability.

7.1.4 Trustworthiness and Reliability

Trustworthiness was determined by the Principal Investigator entering all scores from the questionnaire booklet and an independent Asian rater (blind to hypotheses and group status) entering 20% of the data from the questionnaire booklets.

Interrater reliability was determined by the principle investigator coding all TST and an independent Asian rater (blind to hypotheses and group status) coding 20% of the TST. The kappa coefficient of inter-rater reliability was .99 for independence and .93 for interdependence.

7.1.5 Results

Data achieved normality for all variables therefore transformations were not needed. Parametric methods of analyses were employed in this study.

7.1.5.1 Participant Characteristics

Participant characteristics are presented in Table 15. 2 (Culture: Asian vs. British) x 2 (PTSD condition: PTSD vs. non-PTSD) ANOVAs were used with each demographic variable as the dependent variable. The cultural groups did not differ significantly in terms of education or task difficulty but did differ significantly in age $F(1, 91) = 9.71$, $p = .01$, $\eta_p^2 = .10$, gender; χ^2 (1, $N = 95$) = 4.88, $p = .02$, length of time in the UK, $F(1, 91) = 145.07$, $p < .001$, $\eta_p^2 = .61$, and self-rated English ability, $F(1, 91) = 34.10$, $p < .001$, $\eta_p^2 < .01$. There was a cultural difference in trauma type χ^2 (4, $N = 95$) = 10.36, $p = .04$. The was a cultural difference in trauma type, with the Asian group experiencing more natural disasters to the British group, potentially due to geographical location and climate. While the British group experienced more combat related traumas, potentially due to the ex-veterans in this group compared to

the Asians. The traumas experienced however can be viewed as being comparable in severity as they all met PTSD criterion A (APA, 2000), in addition, there was no significant differences for the British and Asian PTSD groups as the PTSD main effect and interaction effect were not significant. Independence/interdependence was measured using the TST, as expected the Asian group (M = .37, SD = .30) had a significantly greater interdependent ratio than the British group (M = .27, SD = .28), $t(94) = 1.74$, $p = .04$, $d = .38$.

Table 15

Means and (Standard Deviations) for Participant Characteristics

	British		Asian	
	PTSD (n = 15)	No PTSD (n = 33)	PTSD (n = 19)	No PTSD (n = 28)
Gender (n)	Male = 7	Male = 18	Male = 4	Male = 10
Age (*in years*)	41.60 (12.40)	34.21 (8.30)	33.11 (10.06)	28.21 (8.83)
Years spent in UK	40.93 (12.44)	30.17 (8.45)	7.13 (10.99)	7.31 (10.01)
Task Difficulty	5.80 (2.17)	4.39 (2.21)	4.45 (1.72)	4.57 (2.39)
English Ability	9.00 (1.00)	8.58 (1.37)	6.47 (1.90)	6.96 (1.93)
Education (n)	Secondary = 7, Degree = 6, Postgrad = 2	Secondary = 10, Degree = 14 Postgrad = 9	Secondary = 10, Degree = 2, Postgrad = 7	Secondary = 7 Degree = 8 Postgrad = 13
PCL	42.47 (6.99)	22.50 (4.85)	47.70 (12.35)	23.89 (8.23)
HSCL	35.33 (8.25)	20.73 (4.98)	32.74 (9.24)	23.45 (7.69)
Trauma Type (n)	Accident = 6 Disaster = 1 Combat = 2 Assault = 4 Death = 1	Accident = 18 Disaster = 3 Combat = 6 Assault = 5 Death = 1	Accident = 6 Disaster = 6 Assault = 5 Death = 2	Accident = 13 Disaster = 6 Combat = 1 Assault = 6 Death = 2

Note: Secondary = Completed secondary school. Postgrad = Completed postgraduate degree. PCL = Post-traumatic Stress Disorder Checklist. HSCL = Hopkins Symptom Checklist. Disaster = Natural Disaster. Assault includes sexual and non-sexual. Death = witness sudden death.

Posttrauma severity was measured using 2 (Culture: Asian vs. British) x 2 (PTSD condition: PTSD vs. non-PTSD) ANOVAs with PCL and PTCI and depression (HSCL-25) as the dependent variable. As expected, those with PTSD scored significantly higher on the PCL than those without PTSD, $F(1, 91) = 154.17$, $p < .001$, $\eta_p^2 = .63$. The cultural main effect was significant with Asians scoring higher than the British, $F(1, 91) = 136.36$, $p < .001$, $\eta_p^2 = .60$. The interaction was not significant. Those with PTSD scored significantly higher on the PTCI than those without PTSD, $F(1, 91) = 60.35$, $p = .01$, $\eta_p^2 = .40$. The culture main effect was significant, Asians scored higher on the PTCI than the British, $F(1, 91) = 5.10$, $p = .01$, $\eta_p^2 = .53$; the interaction effect was not significant. Finally, in regards to depression, those with PTSD also had significantly higher symptoms of depression than those without PTSD, $F(1, 91) = 59.52$, $p < .001$, $\eta_p^2 = .40$. The culture main effect and interaction were not significant.

7.1.5.2 Hypotheses 1 and 2: Cultural differences and PTSD condition differences in appraisal dimensions

Appraisals. Table 16 shows the means for the appraisal measures. 2 (Culture: Asian vs. British) x 2 (PTSD condition: PTSD vs. non-PTSD) x 2 (Memory: Negative vs. Trauma) mixed ANOVAs were used with each appraisal type as the dependent variable.

Pleasantness. The memory main effect was significant, $F(1, 91) = 6.24$, $p = .01$, $\eta_p^2 = .06$. As in Study 1, the traumatic memory was rated as being less pleasant than the negative memory. The cultural main effect was significant, $F(1, 91) = 4.98$, $p = .03$, $\eta_p^2 = .05$. As in Study 1, the Asian group rated the memories to be more pleasant than the British group. The PTSD main effect was also significant, $F(1, 91) = 10.85$, $p = .001$, $\eta_p^2 = .11$; the PTSD group found the memories to be less pleasant than the non-PTSD group. None of the interactions were significant.

Coping ability. Only the memory x PTSD interaction was significant, $F(1, 91) = 9.36$, $p = .003$, $\eta_p^2 = .93$. Post-hoc comparisons revealed no difference between the groups for appraisals associated with the negative memory. However, in terms of the trauma memory those without PTSD had significantly higher appraisals of coping than those with PTSD, $t(93) = 4.81$, $p < .001$, $d = 1.00$. Paired comparisons found that while those without PTSD reported similar levels of coping appraisals in both the

trauma and negative memories, those with PTSD reported lower levels of coping appraisals in the trauma memory compared to the negative memory, $t(33) = 4.65$, $p < .001$, $d = 1.62$.

Table 16

Mean and (Standard Deviation) for the British and Asian Trauma Survivors with and without PTSD on Appraisals Associated with Negative and Trauma Memories

	British		Asian	
	PTSD (n = 15)	No PTSD (n = 33)	PTSD (n = 19)	No PTSD (n = 28)
Pleasantness				
Negative	2.73 (1.94)	4.03 (1.85)	4.15 (2.52)	4.82 (2.54)
Trauma	2.07 (1.39)	3.81 (2.34)	2.84 (2.48)	4.39 (2.23)
Coping Ability				
Negative	4.67 (2.50)	6.21 (2.00)	5.53 (2.39)	5.07 (1.56)
Trauma	2.80 (1.86)	5.33 (2.82)	2.79 (1.65)	5.04 (2.38)
Anticipated effort				
Negative	13.20 (3.55)	12.79 (3.14)	13.11 (3.77)	12.25 (3.22)
Trauma	15.73 (2.15)	14.85 (3.24)	15.11 (2.71)	12.14 (4.34)
Legitimacy				
Negative	7.27 (5.13)	6.39 (3.29)	7.47 (4.29)	8.82 (4.76)
Trauma	5.07 (3.90)	4.97 (3.62)	5.16 (3.64)	6.79 (4.32)
Norm/Self				
Negative	12.80 (4.13)	14.18 (2.97)	13.32 (3.81)	12.82 (3.27)
Trauma	13.26 (3.39)	14.70 (4.10)	12.74 (4.33)	13.61 (2.99)
Goal/Need				
Negative	21.00 (4.74)	20.61 (3.71)	19.47 (4.69)	18.82 (4.41)
Trauma	21.60 (3.70)	21.82 (4.23)	19.37 (5.84)	18.64 (5.13)
Attentional Activity				
Negative	24.07 (4.56)	23.06 (3.68)	23.00 (5.40)	23.54 (5.36)
Trauma	24.67 (4.10)	25.52 (5.11)	20.05 (5.67)	24.29 (5.28)
Certainty				
Negative	25.67 (6.68)	23.91 (8.38)	23.95 (7.58)	23.00 (7.99)

Trauma	16.47 (9.19)	25.30 (7.54)	17.21 (8.59)	20.68 (8.59)
Responsibility				
Negative	20.47 (5.50)	24.09 (6.16)	19.95 (7.14)	21.32 (8.18)
Trauma	19.53 (7.41)	20.21 (7.61)	20.79 (5.69)	18.36 (6.86)
Perceived control				
Negative	21.73 (6.15)	23.33 (6.36)	19.26 (7.58)	20.14 (6.55)
Trauma	15.60 (6.94)	19.48 (5.38)	19.58 (6.53)	16.00 (7.78)
PTCI-Total	109.00 (40.82)	59.82 (22.91)	129.15 (33.54)	73.04 (28.46)
PTCI-Self	64.47 (25.22)	30.27 (10.80)	76.10 (23.47)	37.78 (18.09)
PTCI-World	30.13 (13.01)	20.52 (12.28)	35.55 (10.37)	24.56 (11.65)
PTCI-Self Blame	14.40 (7.43)	9.03 (4.93)	17.50 (6.97)	10.70 (6.47)
PCSAM-Total	50.00 (17.23)	24.79 (10.34)	50.95 (10.05)	29.68 (11.98)
PCSAM-Public	16.87 (6.44)	5.64 (2.93)	14.32 (5.87)	7.64 (4.77)
PCSAM-Communal	22.13 (6.52)	12.64 (6.73)	21.58 (4.14	14.26 (7.45)
PCSAM-Beliefs	11.00 (6.81)	6.52 (3.32)	15.05 (5.95)	7.75 (3.91)

Note: PTCI = Posttraumatic Cognitions Inventory, PCSAM = Public and Communal Self Appraisal Measure.

Anticipated effort. There was a significant memory main effect, $F(1, 91) = 12.60$, $p = .001$, $\eta_p^2 = .12$. As in Study 1, greater anticipated effort was appraised in the trauma memory than the negative memory. The culture main effort was approaching significance, $F(1, 91) = 3.09$, $p = .08$, $\eta_p^2 = .03$. The direction of the culture main effect reflected cross-cultural and Study 1's findings, with British participants reporting greater appraisals of anticipated effort than their Asian counterparts. There was a PTSD main effect, $F(1,91) = 5.14$, $p = .03$, $\eta_p^2 = .05$; the PTSD group reported greater appraisals of anticipated effort than the no PTSD group. None of the interactions were significant.

Legitimacy. There was a significant memory main effect, $F(1,91) = 11.72$, $p = .001$, $\eta_p^2 = .114$; participants felt the negative memory to be fairer than the trauma memory. There was also a culture main effect, $F(1, 91) = 8.11$, $p = .01$, $\eta_p^2 = .08$; Asian participants perceived the memories to be fairer than the British group. There was no PTSD main effect and none of the interactions were significant.

Norm/Self compatibility. None of the main effects or interactions were significant.

Goal/Need conduciveness. There was only a significant culture main effect, $F(1, 91) = 7.00$, $p = .01$, $\eta_p^2 = .01$; the British group had significantly greater goal/need conduciveness than their Asian counterparts.

Attentional activity. The memory x PTSD interaction was significant, $F(1, 91) = 4.70$, $p = .03$, $\eta_p^2 = .05$. Post-hoc follow-up comparisons revealed those with PTSD reported significantly less attentional activity appraisals in the trauma memory than those without PTSD, $t(93) = 2.53$, $p = .01$, $d = .52$. However, for the negative memory there was no significant difference between groups. Paired comparisons found that those without PTSD had significantly greater appraisals of attentional activity in the trauma memory than the negative memory, $t(60) = 2.35$, $p = .02$, $d = .61$. However for those with PTSD there was no significant difference between the memories.

The memory x culture interaction was also significant, $F(1, 91) = 4.20$, $p = .04$, $\eta_p^2 = .04$. Post-hoc comparisons revealed that while the British group had significantly greater attentional activity for trauma memory than their Asian counterparts, $t(93) = 2.46$, $p = .02$, $d = .51$, no such differences were found for the negative memory. Paired comparisons found that the British group had significantly greater appraisals of attentional activity in the trauma memory when compared to the negative memory, $t(47) = 2.61$, $p = .01$, $d = .76$. However Asian participants did not significantly differ between memories. The PTSD x culture and three-way interactions were not significant.

Certainty. Only the memory x PTSD interaction was significant, $F(1, 91) = 12.08$, $p = .001$, $\eta_p^2 = .12$. Post-hoc comparisons found that those with PTSD reported less certainty in the trauma memory than the no PTSD participants, $t(93) = 3.48$, $p = .001$, $d = .72$. However, the groups did not differ significantly in terms of the negative memory. Paired comparisons found that for those with PTSD there was significantly lower levels of certainty appraisals in the trauma than the negative memory, $t(33) = 3.80$, $p < .001$, $d = 1.32$. However for those without PTSD there was no significant difference between the trauma and negative memories.

Responsibility. Only the memory x PTSD interaction was approaching significance, $F(1, 91) = 3.63$, $p = .06$, $\eta_p^2 = .04$. Post-hoc follow-up paired-comparisons revealed those without PTSD reported significantly greater personal responsibility for the negative event than trauma event, $t(60) = -3.14$, $p = .01$, $d = .81$.

However, those with PTSD reported similar levels of responsibility appraisals in both the trauma and negative memory.

Control. There was a significant three-way interaction, $F(1, 91) = 4.17$, $p = .04$, $\eta_p^2 = .04$. Post-hoc comparisons revealed that appraisals of control did not differ for Asian trauma survivors with and without PTSD for the negative or trauma memories. For British trauma survivors, while appraisals of control did not differ between those with and without PTSD for the negative memory, for the trauma memory British trauma survivors with PTSD had lower levels of control appraisals in the trauma memory than those without PTSD, $t(46) = 2.12$, $p = .04$, $d = .63$.

7.1.5.3 Hypothesis 3: Trauma Specific Appraisals

A 2 (Culture; Asian vs. British) x 2 (PTSD status; PTSD vs. no PTSD) ANOVA was used with PTCI total as the dependent variable. The PTSD main effect was significant, $F(1, 91) = 66.42$, $p < .001$, $\eta_p^2 = .42$; those with PTSD scored higher on the PTCI than those without PTSD. The culture main effect was also significant, $F(1, 91) = 6.67$, $p = .01$, $\eta_p^2 = .07$; the Asian group scored significantly higher than the British group. Contrary to Study 1, the interaction was not significant ($F < 1$); suggesting that the PTCI differentiated between those with and without PTSD regardless of trauma survivors' cultural background.

A 2 (Culture; Asian vs. British) x 2 (PTSD status; PTSD vs. no PTSD) MANOVA was used with PTCI sub-scales as the dependent variables. The multivariate effect of Group was not significant, Wilks' Lambda = .95, $F(3, 89) = 1.69$, *ns*, $\eta_p^2 = .05$. The multivariate effect of PTSD was significant, Wilks' Lambda = .53, $F(3, 89) = 26.06$, $p < .001$, $\eta_p^2 = .46$. Follow-up analyses found that the PTSD group scored significantly higher on all subscales than those without PTSD (negative self, $F(1, 91) = 74.04$, $p < .001$, $\eta_p^2 = .45$, negative world, $F(1, 91) = 14.40$, $p < .001$, $\eta_p^2 = .14$, self-blame, $F(1, 91) = 21.56$, $p < .001$, $\eta_p^2 = .19$). The multivariate effect of the interaction was not significant, Wilks' Lambda = .99, $F(3, 89) = .28$, *ns*, $\eta_p^2 = .009$. Additionally, unlike in Study 1, the PTCI correlated significantly with PTSD symptoms (PCL) in both cultural groups; Asian PTCI, $r(47) = .72$, $p < .001$, Negative self, $r(47) = .68$, $p < .001$, Negative world, $r(47) = .53$ $p < .001$, Self-blame, $r(47) = .54$, $p < .001$; British PTCI, $r(48) = .65$, $p < .001$, Negative self, $r(48) = .69$, $p < .001$, Negative world, $r(48) = .43$ $p = .01$, Self-blame, $r(48) = .41$, $p = .01$.

7.1.5.4 Hypothesis 4: PCSAM

Principal component analyses and item retention. In order to ensure that all questions on the PCSAM were measuring the same scale, the degree to which scores on each question correlated with scores on all other questions was evaluated. For an item to be retained at this stage, it had to correlate greater than $r = .30$ with at least two other items. The only item that did not meet this criterion was item number 1. Hence, this item was removed. The other 20 items were then submitted to a principal-component analysis with oblim rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO = .88 (Hutcheson & Sofroniou, 1999), and all KMO values for individual items were > .79 and thus were well above the acceptable level (Field, 2009). Bartlett's test of sphericity χ^2 (190) = 1462.52, $p <$ .001, indicated that correlations between items was sufficiently large for principal components analysis (Field, 2009). An initial analysis was conducted to obtain eigenvalues for each component in the data. Four components had eigenvalues over Kaiser's criterion of 1 and in combination explained 71.55% of the variance[2]. However, items 8, 13, 14 and 18 did not load above .40 on any of the factors and items 2 and 20 loaded equally onto two factors. Therefore, these items were removed.

Subsequently, the 14-item PCSAM was submitted to a principal-component analysis with oblim rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO = .85 (Hutcheson & Sofroniou, 1999), and all KMO values for individual items were > .75. Bartlett's test of sphericity χ^2 (91) = 912.50, p < .001, indicated that correlations between items was sufficiently large for principal components analysis. Three components had eigenvalues over Kaiser's criterion of 1 and in combination explained 70.86% of the variance. The first factor explained 49.96% of the variance and the second and third factors, an additional 11.71% and 9.19%, respectively. Visual examination of the scree plot also suggested a three-factor solution. Given the convergence of the scree plot and Kaiser's criterion on three components, this was the number of components that were retained in the final analysis. Table 17 shows the factor loadings. The items that cluster on the same components suggest that component 1 represents challenge to beliefs and belonging (5 items), component 2 represents communal aspects of self (5 items) and component 3 represents public roles and identity (4 items). Thus, the final inventory contained

[2] The first factor explained 50.54% of the variance and the second, third and fourth factors, an additional 8.78%, 7.15%, and 5.08%, respectively.

14-items and the components were similar to that derived from the qualitative study. The three PCSAM scales correlated moderately to strongly with each other (all *p*s < .001); Beliefs and Belonging and Communal, $r(93) = .49$, Beliefs and Belonging and Public, $r(93) = .60$, Communal and Public, $r(93) = .56$. The correlations with the Total Score were $r(93) = .80, .85, .85$, for Beliefs and Belonging, Communal, and Public, respectively.

7.1.6 Internal consistency. Cronbach's alphas for the three PCSAM scales and total score were as follows; total score $\alpha = .92$; Beliefs and Belonging $\alpha = .90$, Communal $\alpha = .81$, and Public $\alpha = .92$.

7.1.7 Test-retest reliability. The length of time between the test-retest reliability of the PCSAM was 2 weeks. Pearson correlations were calculated to examine temporal stability of the PCSAM. The test-retest reliability was found to be excellent overall, $r(68) = .89$, $p < .001$ and for each subscale; Beliefs and Belonging, $r(68) = .85$, $p < .001$; Communal, $r(68) = .87$, $p < .001$; and Public, $r(68) = .85$, $p < .001$[3].

[3]For each cultural group, test-retest reliability was found to be excellent overall, British $r(34) = .94$, $p < .001$; Asian $r(32) = .83$, $p < .001$, and for each subscale; Beliefs and Belonging, British $r(35) = .81$, $p < .001$; Asian $r(32) = .84$, $p < .001$; Communal, British $r(35) = .90$, $p < .001$; Asian $r(32) = .82$, $p < .001$; and Public, British $r(35) = .95$, $p < .001$; Asian $r(32) = .78$, $p < .001$.

Table 17

Pattern Matrix for Public and Communal Self Appraisal Measure

	Factor 1	Factor 2	Factor 3
Since the event I feel let down by fate/my beliefs/God/ my faith	**.92**	-.04	-.004
My faith/religion/beliefs have been challenged by the event	**.86**	-.07	.06
Since the event I feel let down by the world	**.79**	.17	.04
Since the event I feel I do not have a place in the world	**.75**	-.01	-.20
Since the event I no longer feel close to others	**.62**	.08	-.30
Since the event people have become a priority	-.12	**.86**	.11
I do not want anyone to know about the event	-.02	**.68**	-.08
Since the event I have sacrificed my needs for the needs of significant others	.30	**.66**	.08
Since the event my values have changed	.08	**.60**	-.33
Since the event my relationships have been damaged or challenged	.11	**.54**	-.33
Since the event I have failed in my roles	-.001	.01	**-.92**
Since the event I have lost my social role/identity	-.05	.09	**-.90**
Since the event I have not lived up to social or cultural expectations	.01	-.01	**-.87**
Since the event I do not feel I am a significant member of my culture/society/community/group	.21	-.06	**-.78**

7.1.8 Convergent validity. To examine the convergent validity of the PCSAM the correlations between PCSAM scores and the PTCI was examined. There were significant correlations between the PCSAM and PTCI (Table 18). To examine the relationships between cognitions and posttraumatic symptoms, Pearson correlations were conducted between the PCSAM and PCL. Table 18 shows that the PCSAM was found to significantly correlate with PTSD symptoms.

Table 18

Pearson Correlation Coefficients between PCSAM, PTCI and PCL for Total Sample/British/Asian

	PCSAM			
	Beliefs	Communal	Public	Total
PTCI				
Self	.74**/.76**/.69**	.61**/.70**/.55**	.73**/.87**/.61**	.82**/.88**/.77**
World	.61**/.70**/.50**	.52**/.46**/.57**	.49**/.52**/.44**	.63**/.61**/.63**
Self-Blame	.37**/.53**/.20	.42**/.47**/.36*	.50**/.61**/.37**	.52**/.61**/.40**
Total	.74**/.80**/.65**	.64**/.67**/.60**	.72**/.82**/.61**	.82**/.86**/.78**
PCL	.52**/.49**/.50**	.53**/.60**/.48*	.72**/.79**/.70**	.71**/.73**/.70**

Note. * $p < .05$. ** $p < .01$; PTCI = Posttraumatic Cognitions Inventory; PCSAM = Public and Communal Self Appraisal Measure; PCL = Posttraumatic Stress Disorder Checklist

7.1.9 Discriminative validity: differences between groups. To examine whether the PCSAM could discriminate between those with and without PTSD a 2 (Culture; Asian vs. British) x 2 (PTSD status; PTSD vs. no PTSD) ANOVA was used with PSCAM total as the dependent variable. For the total score, the PTSD main effect was significant, $F(1, 91) = 79.91$, $p < .001$, $\eta_p^2 = .47$; those with PTSD scored higher on the PCSAM than those without PTSD. The culture main effect and interaction were not significant.

2 (Culture; Asian vs. British) x 2 (PTSD status; PTSD vs. no PTSD) ANOVAs were used with PCSAM subscales as the dependent variables. For the Beliefs and Belonging subscale, the PTSD main effect was significant, $F(1, 91) = 33.24$, $p < .001$, $\eta_p^2 = .27$; those with PTSD scored significantly higher than those

without PTSD. The culture main effect was significant, $F(1, 91) = 6.69$, $p = .01$, $\eta_p^2 = .07$; the Asian group scored significantly higher than the British group. The interaction was not significant. For the Communal subscale, the PTSD main effect was significant, $F(1, 91) = 35.92$, $p < .001$, $\eta_p^2 = .28$; those with PTSD scored significantly higher than those without PTSD. The culture main effect and interaction were not significant. For the Public subscale, there was a significant interaction between PTSD and culture, $F(1, 91) = 4.88$, $p = .03$, $\eta_p^2 = .05$. Post-hoc follow-up comparisons found that the British PSTD, $t(46) = 8.36$, $p < .001$, $d = 2.24$, and the Asian PTSD groups, $t(45) = 4.29$, $p < .001$, $d = 1.25$, scored significantly higher than their non-PTSD comparison groups. It was found that the Asian PSTD and British PTSD groups did not significantly differ. However, the Asian no PTSD group scored significantly higher than the British no PTSD group, $t(59) = 2.01$, $p = .77$, $d = .51$.

Lastly, a discriminant function analysis was conducted to examine the specificity and sensitivity of the PSCAM subscales in identifying individuals with and without PTSD. The three obtained PSCAM factors loaded on one function which classified 80% of the sample correctly into those with and without PTSD, Wilks' $\lambda = .53$, $\chi^2 (3, N = 95) = 58.55$, $p < .001$. Sensitivity was .77 and specificity was .81. The discriminant function analyses were also conducted for the British and Asian groups separately. For the British group, the three obtained PSCAM factors loaded on one function which classified 83% of the sample correctly into those with and without PTSD, Wilks' $\lambda = .54$, $\chi^2 (3, N = 48) = 28.35$, $p < .001$. Sensitivity was .73 and specificity was .88. For the Asian group, the three obtained PSCAM factors loaded on one function which classified 79% of the sample correctly into those with and without PTSD, Wilks' $\lambda = .53$, $\chi^2 (3, N = 47) = 28.54$, $p < .001$. Sensitivity was .74 and specificity was .82.

7.1.10 Discussion

Study 4 again found that the cultural influences on appraisals tended to extend to trauma memories. Specifically, Asian trauma survivors reported higher levels of pleasantness and legitimacy appraisals and lower levels of anticipated effort, goal/need conduciveness and attentional activity than the British group. This supports previous research that suggests Western cultures generally emphasize appraisals of anticipated effort and Asian cultures tend to appraise situations to be more legitimate when compared to Western cultures (Mauro et al., 1992; Mesquita & Walker, 2003).

Given the role of appraisals in PTSD, Study 4 was also interested in appraisals that differentiated between those with and without PTSD. Those with and without PTSD did not differ in their appraisals of attentional activity, certainty and coping associated with the negative memory. However, for the trauma memory those with PTSD reported fewer appraisals of attentional activity, certainty and coping than those without PTSD. Furthermore, those without PTSD appraised less personal responsibility for the trauma event. These differences between those with and without PTSD were evident regardless of one's cultural background suggesting cultural similarities in the dysfunction appraisals of those with PTSD. The only appraisal type that differed cross-culturally was control; appraisals of control only differentiated between British trauma survivors with and without PTSD for the trauma memory. This aligns with Western cultures valuing control and violations of cultural expectations resulting in psychological distress (e.g. Jobson & O'Kearney, 2009; Mesquita & Walker, 2003).

Second, trauma-specific appraisals were examined. It was found that, unlike Study 1, those with PTSD, regardless of cultural background, scored significantly higher on the PTCI than those without PTSD. Therefore, the PTCI seems appropriate for use with Asian trauma survivors with PTSD. Those with PTSD may hold culturally similar dysfunctional negative appraisals about the self, world and self-blame. Third, the usefulness of a new measure developed to investigate trauma-associated appraisals in terms of more public and communal aspects of self was examined. The 14-item questionnaire loaded onto three factors (challenges to beliefs and belonging, communal, public and social roles). Internal consistency, convergent validity and test-retest reliability were good. The PCSAM was able to discriminate between those with and without PTSD.

7.2. Study 5: Self-Concept, Posttraumatic Appraisals and Posttraumatic Psychological Adjustment: what are the relationships?

As outlined in Study 2 and throughout the thesis, cognitive models of posttraumatic psychological adjustment have implicated both self-appraisals and self-concept in the development and maintenance of symptoms of PTSD (Brewin, 2011; Brewin, Dalgleish, & Joseph, 1996; Ehlers & Clark, 2000). Further as outlined in Study 2 in the context of trauma, self-concept is of significant importance to one's psychological well-being. In order to make sense of the experience, the trauma event acts as a catalyst for re-defining and re-evaluating one's self-concept. However, such a change can potentially result in a fractured, conflicting or discrepant self-concept. Research demonstrates such distortions in self-concept have been linked with various forms of psychological maladjustment, including PTSD (Brewin, 2011; Higgins, 1996; Strauman & Higgins, 1987; Sutherland & Bryant, 2008) as least for those from Western cultures. Research suggests that Asians hold a more inconsistent self-concept than Westerners and self-discrepancies are not as problematic for Asian cultures in regards to self-concept and well-being (Church, Anderson-Harumi, et al., 2008; English & Chen, 2011). Study 2 examined distortions in self-concept (i.e. trauma-centered self-concept and discrepant self-concept) using British and Asians students who had professed to experiencing an extremely stressful situation. The overarching aim was to investigate the relationship between these distortions in self-concept (trauma-centered, ideal and ought self-discrepancies), self-appraisals and PTSD symptoms and to examine whether these relationships differ depending on one's cultural background. The study found trauma-centered self-concept to be associated with PTSD symptoms for the British, while distortions in self-concept were significantly associated with trauma-related appraisals for both groups. Finally, trauma-related appraisals mediated the relationships between ideal self-concept discrepancies with PTSD symptoms for both groups in addition to ought self-concept discrepancies relation to PTSD symptoms for the British.

The objective of Study 5 was to investigate the same aims as that outlined in Study 2 using a group of Asian and British trauma survivors with and without PTSD. It was hypothesized that those from Asian cultures will have greater self-discrepancy than those from individualistic cultures. Second, that trauma, regardless of one's cultural background, will influence the actual self and this will be related to PTSD

symptoms. Third, that a trauma-centered actual self will be related to greater self-discrepancies for both cultural groups. Fourth, regardless of one's cultural background, disruptions in self-concept (e.g. self-discrepancy and trauma-themed self-concept) will be related to negative trauma-related self-appraisals as negative appraisals will arise when the self is perceived to be in danger (greater self discrepancies). Lastly, that negative self-appraisals will mediate the relationship between disruptions in self-concept (e.g. self-discrepancy and trauma-themed self-concept) and PTSD symptoms.

7.2.1 Method

In addition to the measures completed in Study 5, participants also completed the Selves Questionnaire (SQ; Higgins, 1987) described in Study 2. Interrater reliability was determined by the principle investigator coding all self-discrepancy scores and an independent Asian rater (blind to hypotheses and group status) coding 20% of self-discrepancy scores. The kappa coefficient of inter-rater reliability was .90 for ideal self-discrepancy, 1 for ought self-discrepancy and .97 for trauma-centered actual self.

7.2.2 Results

Data achieved normality for all variables with the exception of the trauma-centered actual self. Transformations did not resolve issues of skewness and kurtosis for this variable. Therefore, Spearman correlations (one-tailed) were used to investigate associations between trauma-centered self and self-discrepancy with the PTCI (see Table 20).

7.2.2.1 Hypothesis 1: Self-discrepancies

Mean self-discrepancy scores, trauma-centered actual self scores and PTCI scores are detailed in Table 19. 2 (culture; Asian vs. British) x 2 (PTSD status; PTSD vs. no PTSD) ANOVAs were used with actual and ought self-discrepancy scores as the dependent variables. Unlike Study 2, there was no difference in ideal self-discrepancy or ought self-discrepancy between British and Asian cultural groups. The PTSD main effect and interaction were also not significant[4]. However, when

[4] Equivalent results were reached when demographic data (English ability, Age, Gender) were included as covariates.

interdependent self-construal and length of time in the UK were included as covariates, there was a significant difference in self-discrepancy scores between British and Asian groups, with Asians having significantly greater ideal self-discrepancy, $F(1, 94) = 5.87$, $p = .02$, $\eta_p^2 = .06$, and ought self-discrepancy, $F(1, 94) = 9.01$, $p = .01$, $\eta_p^{2 =} .09$. The PTSD main effect and interaction effect were still not significant.

Table 19

Mean Self-Discrepancy Scores, Trauma-Centered Actual Self Scores and PTCI Scores

	Asian		British	
	PTSD (n = 19)	No PTSD (n = 28)	PTSD (n = 15)	No PTSD (n = 33)
Ought Self-Discrepancy	-1.11 (.73)	-1.00 (1.15	-.79 (.38)	-.77 (.93)
Ideal Self-Discrepancy	-.78 (.63)	-.62 (1.05)	-.65 (.46)	-.54 (.73)
Trauma-Centered Self	.14 (.25)	.02 (.06)	.17 (.15)	.03 (.08)
PTCI	129.15 (33.54)	73.04 (28.46)	109.00 (40.82)	59.82 (22.91)

Note: PTCI = Posttraumatic Cognitions Inventory.

7.2.2.2 Hypothesis 2: Trauma-centered actual self

A 2 (culture; Asian vs. British) x 2 (PTSD status; PTSD vs. no PTSD) ANOVA was used. The two cultural groups did not differ in trauma-centered actual self. However, the PTSD group did provide a greater trauma-centered actual self than the no-PTSD group, $F(1, 92) = 17.33$, $p < .001$, $\eta_p^2 = .16$. The interaction was not significant. Therefore, unlike Study 2, for both Asian and British trauma survivors, those with PTSD had a significantly greater trauma-centered self-concept than those without PTSD.

7.2.2.3 Hypothesis 3: Relationship between trauma-centered actual self and self-discrepancy

Given there were no cultural differences in self-discrepancy or trauma-themed self-concept, for these two variables data was collapsed across groups. Unlike Study 2, for both the PTSD and no PTSD groups, there were no significant relationships between trauma-centred actual self and self-discrepancy (all *rs* < .17).

7.2.2.4 Hypothesis 4: Relationship between distortions in self-concept and appraisals

To address this hypothesis the thesis investigated the relationships between trauma-centered self and self-discrepancies and trauma-related appraisals in those with PTSD. Correlation analyses found that, as in Study 2, for the British PTSD group trauma-centered actual self was significantly correlated with PTCI (and subscales). For the Asian PTSD group, trauma-centered actual self significantly correlated with PTCI Self (see Table 20). Table 20 also shows that the Asian PTSD group's ideal self-discrepancies scores were significantly correlated with the PTCI total and its subscales and ought self-discrepancies scores were significantly correlated with the PTCI Self-Blame. However, the British PTSD groups' self-discrepancies scores were not significantly correlated with the PTCI.

Table 20

Correlation Coefficients (one-tailed) for Trauma-Centered Actual-Self, Self-Discrepancies and PTCI Scores for the British PTSD and Asian PTSD groups

	PTCI-Total		PTCI-Self		PTCI-World		PTCI-Self-blame	
	Asian	British	Asian	British	Asian	British	Asian	British
Trauma-centered self	.22	.63**	.37*	.66**	-.10	.45*	-.10	.44*
Ideal SD	.53*	-.16	.41*	-.30	.50*	-.10	.45*	.30
Ought SD	.33	-.13	.25	-.27	.21	.02	.41*	.16

Note: *p < .05. **p < .01. Ideal SD = Ideal Self-Discrepancy Score; Ought SD = Ought Self-Discrepancy Score.

7.2.2.5 Hypothesis 5: Do appraisals mediate the relationship between distortions in self-concept (i.e. self-discrepancies and trauma-centered self) and PTSD?

The rationale for using mediation analysis was to identity whether the appraisals mediated the relationship between distortions in self-concept (i.e. ought and ideal self-discrepancies and trauma-centered self) and PTSD diagnosis, as mediation was suspected based on previous research. To strengthen analysis bootstrapping procedures were used for the British and Asian groups separately (Preacher & Hayes, 2008). In the analyses 5,000 bootstrap resamples of the data with replacement were used. Statistical significance with alpha at .05 is indicated by the 95% confidence intervals not crossing zero. It was found that for the British and Asian groups, trauma-related appraisals did not mediate the relationship between ideal and ought self-discrepancy and PTSD diagnosis. However, for the British and Asian groups it was found that trauma-related appraisals did mediate the relationship between trauma-centered self-concept and PTSD diagnosis, with a 95% bootstrap confidence interval of 1.93 to 21.92 for the British group and .90 to 17.87 for the Asian group.

7.2.3 Discussion

Firstly, when interdependent self-construal and length of time in the UK were included as covariates, the British and Asian groups differed significantly in terms of self-discrepancy scores, whereby the Asian group had greater ideal and ought self-discrepancy scores than their British counterparts. This supports previous research and suggests that interdependent sense of self and time in a Western culture may influence self-discrepancy scores. Furthermore, PTSD status did not influence self-discrepancy. However, those with PTSD, regardless of cultural background, did have a significantly greater trauma-centered actual self-concept compared to trauma survivors without PTSD. Unlike Study 2, no evidence was found to suggest significant relationships between trauma-centred self-concept and self-discrepancy. However, the findings suggested that, as in Study 2, distortions in self-concept (i.e. trauma-centered self-concept and self-discrepancies [Asian group only]) were significantly correlated with negative self-related appraisals. Lastly, while negative trauma-related appraisals did not mediate the relationships between self-discrepancies and PTSD status, they did mediate the relationship between current trauma-centered self-concept and PTSD for both British and Asian cultural groups. Study 6's findings

suggest post-trauma survivors who hold a more trauma defined self-concept have more negative self appraisals, which in turn negatively effects post-trauma psychological adjustment. A limitation of study is the use of mediation analysis which was based on the procedure outlined by Baron and Kenny (1986). This method of mediation has a number of theoretical and empirical concerns, including association, temporal order and the confirmatory-exploratory distinction (Gelfand, Mensinger & Tenhave, 2009), thus findings need to be considered somewhat tentatively.

7.3. Study 6: Investigating Cultural Differences in Self-Ambivalence and Implications for Posttraumatic Stress Disorder

Self-concept has been implicated in the development and maintenance of PTSD (Brewin, 2011; Berntsen & Rubin, 2006; Conway & Pleydell-Pearce, 2000; Ehlers & Clark, 2000). This thesis espouses its import and consequence in trauma studies and calls for further research into this domain. In the context of trauma, self-concept is of significant importance to one's psychological well-being. The trauma potentially acts as a catalyst for re-defining and re-evaluating one's self-concept, as one is prompted to make sense of their experience. Finding meaning, in an otherwise incomprehensible situation, potentially leads to change in one's self-concept (Brennan, 2001; Brewin, 2011; Janoff-Bulman, 1992). Further, changes in self-concept have the potential to affect self-esteem. Self-esteem is considered to be an attitude towards the self as a whole (Baumeister, 1998). Most research on self-esteem has focused on the valence (i.e. positive and negative aspects) of this attitude towards self. Research has examined the importance of high self-esteem (i.e. positive attitudes towards self) in maintaining psychological well-being and the role of low self-esteem (i.e. negative attitudes towards self) in depression and anxiety (Sowislo & Orth, 2013; Swann, Chang-Schneider, & McClarty, 2007).

However, experiencing a trauma can raise complex attitudes and beliefs in a trauma survivor that are not necessarily seen in black and white or simply as positive or negative in valence as previous and current experiences, knowledge, beliefs and values are fighting for dominance or even co-existence. Thus, self-esteem has another dimension, namely self-ambivalence (Riketta & Ziegler, 2006). Self-ambivalence is the co-presence of both positive and negative, and thus conflicting, self-evaluations. The thesis argues that self-ambivalence may be a useful construct in trying to ascertain the state of one's self-concept following a trauma and its subsequent influence on posttrauma psychological adjustment.

Research has demonstrated that a clear, coherent and stable self-concept is emphasized in Western cultures and is thus, largely associated with psychological well-being (e.g., Campbell, 1990; Suh, 2000, 2002). Those from Western cultures have little tolerance for self-ambivalence and discrepancies in their self-concept. Specifically, inconsistencies in self-concept have been found to be related to greater anxiety, depression and lower self-esteem and life satisfaction (Campbell et al., 1996;

Donahue, Robins, Roberts, & John, 1993; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997). While a significant body of research has investigated the effects of self-ambivalence on psychological well-being, the role of self-ambivalence in trauma survivors, and especially those with PTSD, has not yet been investigated. Recently, however, Jerg-Bretzke, Walter, Limbrecht-Ecklundt and Traue (2013) conducted a related study investigating the emotional ambivalence (i.e. feeling both positive and negative emotions towards a situation, person or experience) experienced by German soldiers after deployment with PTSD. They found emotional ambivalence did indeed affect the severity of PTSD symptoms after soldiers returned from military operations and demonstrated it to be predictive of psychological burden. These findings demonstrate that there is potentially a need for further work examining the role of ambivalence in trauma survivors with PTSD.

Self-concept has a significant influence on the way in which one cognitively appraises events, the self, others and the world (Dunmore et al., 2001; Ehlers & Clark, 2000). Therefore, as self-ambivalence is seen somewhat negatively in Western cultures (Spencer-Rodgers et al., 2010), those with greater self-ambivalence may consequently have greater threat to their self-concept resulting in negative ways in which they appraise events, the self, others and the world (Spencer-Rodgers et al., 2009). There has been much research on the role of cognitive appraisals in the development and maintenance of PTSD (see Ehlers & Clark, 2000). However, to date, research has not examined the relationships between self-ambivalence and trauma-associated appraisals in those with PTSD.

Finally, while the literature is relatively consistent in terms of the role of self-coherence in maintaining psychological health in Western cultures; it is also consistent in demonstrating that Asian cultures hold a more dialectic worldview than those from Western cultures (Peng & Nisbett, 1999). This manner of thinking emphasizes change, contradiction, and co-variation, whereby the world is viewed as inherently contradictory (Spencer-Rodgers et al., 2009). Many studies have found this world-view philosophy forms a template to judge and evaluate the self. That is, dialecticism has been found to lead to greater self-ambivalence and dialectical self-esteem (Spencer-Rodgers, Peng, Wang & Hun, 2004). Research has indicated that members from Asian cultures have greater self-ambivalence and self-discrepancy than those from Western cultures (e.g. Boucher, Peng, Shi, & Wang, 2009; Hamamura, Heine & Paulhus, 2008; Heine, Lehman, Markus, & Kitayama, 1999; Kim, Peng, &

Chiu, 2008). Additionally, Westerners, and those low in dialecticism, have been found to strongly endorse polarized self-responses (i.e. accepting or providing positively keyed items and rejecting negatively keyed ones) and thus, tend to make internally consistent responses when evaluating the self (see Spencer- Rodgers et al., 2004). In contrast, in Asian cultures an inconsistent and discrepant self is considered normative and therefore these qualities of self tend not to be associated with psychological distress (Spencer-Rodgers et al., 2004). For instance, a study by Spencer-Rodgers et al. (2010) found self-ambivalence was unrelated to life satisfaction, anxiety, and depression among their Chinese sample but it was significantly related among their European American sample. Thus, research points to a dialectical inclination to tolerate contradiction and change amongst Asian samples (Cheng, 2009), which leads to the conclusion that Asians may readily acknowledge inconsistency within their self-concept and not suffer adverse consequences as a result (Spencer-Rodgers et al., 2009; Spencer-Rodgers et al., 2010).

The aim of this research, therefore, is to investigate whether self-ambivalence is implicated in PTSD and whether this differs across cultures. This will be investigated in a sample of British and Asian trauma survivors with and without PTSD. Firstly, it is hypothesized that due to Western cultures valuing a coherent and stable self, positive and negative judgments will be more polarized for the British group than the Asian group (i.e. British participants will have more negative or positive self-statements than Asian participants and Asian participants will have more neutral self-statements than British participants). Second, due to Asian cultures being more comfortable with psychological contradiction, including evaluative contradiction regarding the self, it is expected that the Asian group will provide similar numbers of co-occurring positive and negative self-statements and therefore have a more ambivalent (or equally-valenced) self-orientation than the British group (Heine & Hamamura, 2007, Falk, Heine, Yuki & Takemura, 2009). Third, given previous research using Western samples has demonstrated a relationship between self-ambivalence and poorer psychological adjustment, the British PTSD group was expected to have greater self-ambivalence than the British non-PTSD group. However, given Asian cultures have been found to have greater acceptance of self-ambivalence, it was hypothesized that self-ambivalence may not differentiate between Asian trauma survivors with and without PTSD. Fourthly, due to theoretical links between cognitive appraisals and self-concept, it was hypothesized that self-

ambivalence will be correlated with negative, dysfunctional trauma appraisals for the British group. However this relationship may not be evident in the Asian sample. Finally, given self-ambivalence is proposed to have a negative effect on trauma-related appraisals, at least in the British group, and trauma-related appraisals have been found to play a major role in PTSD, it was hypothesized that trauma-related appraisals will mediate the relationship between self-ambivalence and PTSD for the British group. However, given Asian cultures have greater acceptance of self-ambivalence and self-ambivalence is typically not associated with psychological maladjustment, these relationships may not be evident in the Asian sample.

7.3.1 Method

In addition to the TST being used as a measure of independence/ interdependence as denoted in Study 4. The TST was also was used in Study 6 as a measure of self-ambivalence. Dialectical tendencies toward tolerance of contradiction influence the manner in which Asians respond to Likert-type scales about the self and other attitude objects (Hamamura et al., 2008). Therefore, a free-response measure of self is used in this study. The TST has been used to examine differences in self-concept and cultural effects on an individual's self-concept (e.g., Bond and Cheung 1983; Watkins et al. 1998). Participants were instructed "Below, are 10 fill-in the blank areas for you to answer the basic question, "Who am I?" Simply write an answer next to each "I am" and make each answer different." Responses to this generic question provided subjective definitions of the self (Kuhn & McPartland, 1954). Thus the 'I am' is a qualitative measure of the self (Kuhn & McPartland, 1954) which simply asks respondents to provide statements in response to the question "Who Am I?" However, research has shown the TST may be more effective with as few as 10 responses (Bochner, 1994). Therefore, as in previous research, participants were asked to provide ten self-statements (Bochner, 1994). The rational for using the "I Am" test was due to participants being able to spontaneously list thoughts about themselves, which is a relatively unobtrusive assessment of the frequency with which cultures use positive and negative self-statements when describing the self was obtained, thereby providing a more naturalistically and less culturally-biased assessment of self-evaluative ambivalence (Spencer-Rodger et al, 2004). Further, the TST is especially useful for cross-cultural comparisons, as the format is more easily understood across a variety of cultures when compared to other types of measures. As

a result of these advantages, the TST provides a powerful tool for cross-cultural researchers to explore self-concept. However, it also needs to be borne in mind that one's mood state, as measured by the HSCL, may influence participant's self-statements. Research suggests depression is associated with greater negative self-statements, therefore participants' responses to the TST could be influenced by their mood, and thus interpretation of findings need to keep this in mind.

Responses to the 'I am' were coded according to valence; negative (-1), neutral (0), and positive (1). The proportion of positive, neutral and negative self-statements were divided by participants' total number of responses to develop a negative, neutral and positive ratio, respectively. Self-ambivalence was coded as the ratio of positive to negative self-responses. Inter-rater reliability was found to be excellent (Kappa coefficient of 1).

7.3.2 Results

Data achieved normality for all variables without transformations needing to be made in this study. Therefore parametric methods of analyses were used.

7.3.2.1 Hypothesis 1 and 2: Self-Evaluation

Table 21 shows the means for each self-evaluation variable for each group. A 2 (culture; British vs. Asian) x 2 (PTSD status; PTSD vs. no PTSD) ANOVA was used to investigate the number of self-statements provided. There was no cultural or PTSD main effect and the interaction was not significant.

A 2 (culture; British vs. Asian) x 2 (PTSD status; PTSD vs. no PTSD) MANOVA was used to investigate self-evaluation with ratio of negative, positive and neutral self-statements as the dependent variables. The multivariate effect of the interaction was approaching significance, $\Lambda = .93$, $F(3, 88) = 2.33$, $p = .08$, $\eta_p^2 = .07$. Follow-up univariate ANOVAs revealed that the interaction was only significant for ratio of negative self-statements provided, $F(1, 90) = 4.18$, $p = .04$, $\eta_p^2 = .04$. As predicted, British participants with PTSD had a significantly higher ratio of negative self-statements than Asian trauma survivors with PTSD, $t(32) = 1.93$, $p = .05$, $d = 0$. However, contrary to our hypotheses, Asian and British participants without PTSD did not differ significantly in terms of ratio of negative self-statements. Furthermore, ratio of negative self-statements did not differentiate between Asian trauma survivors with and without PTSD but British trauma survivors with PTSD had a significantly greater ratio of negative self-statements than those without PTSD, $t(46) = 2.75$, $p =$

.001, d = .97. The multivariate effect of culture was approaching significance, Λ = .93, $F(3, 88) = 2.28$, $p = .09$, $\eta_p^2 = .07$. Follow-up univariate ANOVAs revealed that, as expected, Asian participants provided a greater ratio of neutral self-statements than British participants, $F(1, 90) = 4.55$, $p = .04$, $\eta_p^2 = .05$. There was no evidence however to support the notion that British participants would provide more positive self-judgements than Asian participants. The multivariate effect of PTSD was significant, $\Lambda = .83$, $F(3, 88) = 6.08$, $p = .001$, $\eta_p^2 = .17$. Follow-up univariate ANOVAs revealed that those with PTSD had a significantly lower ratio of positive self-statements than those without PTSD, $F(1, 90) = 9.43$, $p = .002$, $\eta_p^2 = .10$.

7.3.2.2 Hypothesis 3: Self-Ambivalence

A 2 (culture; British vs. Asian) x 2 (PTSD status; PTSD vs. no PTSD) ANOVA was used to investigate self-ambivalence. The interaction was approaching significance, $F(3, 88) = 3.21$, $p = .07$, $\eta_p^2 = .08$. There was no support for our third hypothesis; Asian participants with and without PTSD did not differ significantly in levels of self-ambivalence when compared to British trauma survivors with and without PTSD. However, as predicted, self-ambivalence did differentiate between British trauma survivors with and without PTSD; those with PTSD had significantly greater self-ambivalence than those without PTSD, $t(46) = 4.02$, $p < .001$, $d = 1.22$, self-ambivalence did not differentiate significantly between Asian trauma survivors with and without PTSD.

Table 21

Means (SD) Self-Evaluation Scores, and Posttrauma Adjustment Scores for British and Asian PTSD and No-PTSD groups.

	Asian		British	
	PTSD (n = 19)	No PTSD (n = 27)	PTSD (n = 15)	No PTSD (n = 33)
Total self-statements	8.37 (2.75)	8.41 (2.17)	8.60 (2.29)	8.58 (2.03)
Positive SE	.17 (.24)	.30 (.28)	.17 (.21)	.41 (.33)
Neutral SE	.69 (.29)	.62 (.35)	.52 (.31)	.48 (.34)
Negative NE	.14 (.19)	.09 (.18)	.30 (.28)	.09 (.12)
Self-Ambivalence	-.03 (.33)	-.21 (.32)	.12 (.37)	-.32 (.35)
PTCI	129.15 (33.54)	73.04 (28.46)	109.00 (40.82)	59.82 (22.91)

Note: SE = Self Evaluation. PTCI = Posttraumatic Cognitions Inventory.

7.3.2.3 Hypothesis 4: Associations between self-evaluation and trauma appraisals

Data were normally distributed after transformations were made. Therefore, Pearson's correlations were used to investigate associations between self-ambivalence and trauma-specific appraisals for both the British and Asian groups. Table 22 illustrates that regardless of cultural group, self-ambivalence was positively associated with trauma appraisals, supporting our fourth hypothesis on ambivalent self-cognitions being directly related to trauma appraisals.

Additionally, Table 22 highlights positive self-evaluations were associated with fewer trauma appraisals for both cultural groups and negative self-evaluations were associated with greater trauma appraisals for both cultural groups. All correlations were reviewed partialling out PTSD symptoms to ensure that all these relationships are not just a feature of having PTSD symptoms. Partial correlation revealed the same relationships between self-ambivalence, negative and neutral self-evaluations and PTCI for both British and Asians. Positive self, however was approaching significant associations in the same negative direction for both groups, $r(45) = -.22$, $p = 07$ (British) and $r(43) = -.22$, $p = .08$ (Asians).

Table 22

Pearson Correlation Coefficients between Self-Evaluation Scores and Trauma Appraisals for the British and Asian Cultural Groups.

	PTCI	
	Asian	British
Self-Ambivalence	.42**	.53**
Positive Self-Evaluation	-.30*	-.40**
Negative Self-Evaluation	.31*	.35*
Neutral Self-Evaluation	.04	.09

Note: * $p < .05$, ** $p < .01$, PTCI = Posttraumatic Cognitions Inventory

7.3.2.4 Hypothesis 5: Trauma appraisals will mediate the relationship between self-ambivalence and PTSD

Two mediation analyses (Preacher & Hayes, 2008) examined whether the relationship between self-ambivalence and PTSD diagnosis was mediated by negative trauma-related appraisals (PTCI) in both the British and Asian samples. The rationale for mediation analysis was based on previous research, which led to the supposition that trauma appraisals would mediate the relationship between self-ambivalence and PTSD; thus mediation analysis allows for the identification of this relationship. These analyses were conducted using the bootstrapping procedures recommended for smaller samples (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; Preacher & Hayes, 2004, 2008) and operationalized in an SPSS macro by Preacher and Hayes (2004). Additionally, 5,000 bootstrap resamples of the data with replacement was used. Statistical significance with alpha at .05 is indicated by the 95% confidence intervals not crossing zero. For the British group, it was found that PTCI mediated the relationship between self-ambivalence and PTSD diagnosis, Sobel statistic = 2.15, p = .03, 95% confidence intervals = -5.51, -.52. For the Asian group, it was found that PTCI also mediated the relationship between self-ambivalence and PTSD diagnosis, Sobel statistic = 2.40, p = .02, 95% confidence intervals = -13.58, -1.20. Therefore, while self-ambivalence was not directly related to PTSD diagnosis, it indirectly affected PTSD through negative trauma-related appraisals. Further details about the mediation analyses are presented in Table 23.Table 23

Summary of Results of the Mediation Analyses where Self-Ambivalence is the Independent Variable, Trauma-Related Appraisals the Mediator and PTSD diagnosis the Dependent Variable.

	B	*SE*	*t*	*P*
British Sample				
Self-Ambivalence to Mediator (a path)	48.27	11.41	4.23	<.001
Direct Effect of Mediator on PTSD diagnosis (b path)	-.05	.02	2.57	.01
Total Effect of Self-Ambivalence on PTSD diagnosis (c path)	-4.16	1.45	2.87	.004
Direct Effect of Self-Ambivalence on PTSD diagnosis (c' path)	3.66	1.94	1.89	.06
Asian Sample				
Self-Ambivalence to Mediator (a path)	55.08	16.67	3.30	.002
Direct Effect of Mediator on PTSD diagnosis (b path)	-.07	.02	3.36	.001
Total Effect of Self-Ambivalence on PTSD diagnosis (c path)	1.82	1.06	1.72	.09
Direct Effect of Self-Ambivalence on PTSD diagnosis (c' path)	1.59	1.43	1.11	.27

7.3.3 Discussion

The aim of this study was to investigate the role of self-ambivalence in PTSD amongst Asian and British trauma survivors. First, there was some evidence to suggest that self-evaluations were more polarized for the British group than the Asian group. British participants with PTSD had more polarized negative self-evaluations than their Asian PTSD counterparts and Asian participants were found to provide a significantly greater ratio of neutral self-statements than British participants. Second, there was no evidence to support the prediction that Asian participants would have a more ambivalent self-orientation than the British group. This finding contradicts previous research that has found that Asians tend to evaluate themselves in a more contradictory manner than their American and Euro-American counterparts (Spencer-

Rodgers, Williams & Peng, 2010; Spencer-Rodgers et al., 2004; Kanagawa, Cross & Markus, 2001; Bond & Cheung, 1983). However, it is worth noting, that none of the studies referred to above use trauma survivors, therefore, findings here may demonstrate trauma's over-riding influence on self-concept and self-evaluation. Namely, the way in which one evaluates their self-concept posttrauma may be somewhat conflicting and contradictory regardless of cultural identification.

Despite the cultural groups not differing significantly in terms of self-ambivalence, culture did influence the manner in which self-ambivalence impacted on psychological well-being. It was found that self-ambivalence differentiated between British trauma survivors with and without PTSD; those with PTSD had significantly greater self-ambivalence than those without PTSD. However, self-ambivalence did not differentiate significantly between Asian trauma survivors with and without PTSD. These findings support the notion that in Western samples, there is a relationship between self-ambivalence and poorer psychological adjustment. However, Asian cultures have been found to have greater acceptance of self-ambivalence and are more comfortable with psychological contradiction (Falk, Heine, Yuki & Takemura, 2009; Heine & Hamamura, 2007). Additionally, it was found that negative self-statements differentiated between British participants with and without PTSD but did not differentiate between Asian participants with and without PTSD. This is potentially indicative of Asians being tolerant of negative aspects of self (Spencer-Rodgers et al., 2009; Spencer-Rodgers et al., 2004; Choi & Nisbett, 2000) and dialectical emotions prevalent in Asia being characterized by a ''middle way'' rather than by emotional extremes (Miyamoto & Ryff, 2011). Furthermore, Asian samples have been found to have less of a need for positive self-regard when compared to Western samples (Kim, Peng & Chiu, 2008).

Finally, self-concept has a significant influence on the way in which one cognitively appraises events, the self, others and the world (Dunmore et al., 2001; Ehlers & Clark, 2000). However, to date, research has not examined the relationship between an ambivalent self-concept and trauma appraisals. For both cultural groups self-ambivalence was significantly associated with dysfunctional trauma appraisals. Findings highlight that in the aftermath of trauma those displaying greater ambivalence in their self-concept may consequently perceive the self to be under threat and therefore appraise events, the self, others and the world negatively. This is analogous with Ehlers and Clark's (2000) cognitive model of PTSD, which proposes

that the conceptualization of internal/external threat is instrumental in promoting the use of maladaptive appraisals and coping strategies, which in turn, maintains current PTSD symptoms (Ehlers & Clark, 2000). The findings also align with more recent empirical findings such as Chen, Benet-Martinez, Wu, Lam and Bond's (2013) study. They investigated the role of the dialectical self and psychological adjustment on East Asians subjects and found a tolerance for contradiction had a deleterious effect on well-being. Consequently, it would appear that a dialectic and/or ambivalent self are not necessarily associated with less psychological distress; instead, it is psychologically taxing, which thereby results in maladjustment.

Finally, as hypothesized trauma-related appraisals mediated the relationship between self-ambivalence and PTSD diagnosis for British trauma survivors. However, given that it was not believed self-ambivalence would have a direct influence on PTSD in the Asian group but may indirectly influence PTSD via negative trauma-related appraisals, mediation analysis using bootstrapping was employed. This was based on the argument that testing for the *X → Y (self-ambivalence → PTSD*) association for statistical significance was not required nor was it suitable to use if inconsistent or indirect mediation was suspected (Kenny, 2013; MacKinnon et al, 2002; Shrout & Bolger, 2002) as was the case here. Results concluded that mediation also occurred for the Asian group, self-ambivalence influenced PTSD via the indirect effect (i.e. via trauma appraisals). Thereby demonstrating self-ambivalence to have a detrimental link with PTSD for both cultural groups, albeit through alternative expressions. However one of the limitation of this study would be using mediation analysis, which did not account for association, temporal order and the confirmatory-exploratory distinction (Gelfand, Mensinger & Tenhave, 2009), thus findings need to be considered somewhat tentatively. Notwithstanding this however, it can be put forward that pan-culturally in the aftermath of trauma, self-ambivalence may have a negative impact on trauma-related appraisals, which in turn may result in PTSD, given trauma-related appraisals playing a major role in PTSD.

7.4. Study 7: Preliminary Findings for Cultural Differences in Self-Concept as assessed by the Public and Communal Self Appraisals Measure (PCSAM) in those with and without PTSD

The PCSAM, developed in chapter 6, was designed to assess public and communal self cognitive appraisals hypothesized to be associated with poor recovery from traumatic experiences and maintaining PTSD. The validity and reliability of the PCSAM received good support as described in Study 4. Additionally, while it was predictive of PTSD for both Asian and British groups, it has not been used to assess any other factors involved in the development and maintenance of PTSD. The PCSAM is a brief questionnaire investigating the perceptions of public and communal aspects of self-appraisals, making it somewhat context specific is the type of appraisals it is measuring. With this in mind, the main aim of this study was to use the PCSAM and its subscales, utilizing the context it encapsulates, namely the disintegration of public and communal focused self-cognitions to assess one's self-concept posttrauma.

Further, self-concept has been found to be a significant factor in PTSD development and/or maintenance throughout the thesis. First, Studies 2 and 5 assessed self-concept in terms of distorted self-conceptions. These studies found that pan-culturally both a discrepant and/or trauma-centered self-concept was significantly associated with PTSD. Second, Study 6 investigated self-concept in regards to ambivalent self-conceptions posttrauma. This study found that while there were no cultural differences in self-ambivalence for British and Asian trauma survivors, those with PTSD in the British group had a more ambivalent self-concept than British trauma survivors without PTSD. However, self-ambivalence did not differentiate between Asian trauma survivors with and without PTSD. Moreover, Study 6 also found that pan-culturally self-ambivalence had a role in PTSD via being associated with negative cognitive appraisals which in turn were associated with PTSD. All studies thereby demonstrated self-concept and appraisals to be key features in PTSD pan-culturally. Further, studies 2, 5 and 6 investigated posttrauma self-concept (i.e. trauma-centered self, discrepant self, ambivalent self) in relation to trauma self-appraisals as measured by the PTCI. Collectively they found distortions in posttrauma self-concept to be related to negative self-appraisals; in addition these appraisals mediated the relationship between self-concept and PTSD diagnoses for both the

groups. Therefore, Study 7 extends these findings by focusing on trauma self-appraisals as measured by the PCSAM (i.e. public and communal self-appraisals), to find if the same relationships are evident. Consequently, it was hypothesized that the PCSAM will be significantly related to self-concept (i.e. trauma-centered self, self-discrepancy and self-ambivalence) for both the British and Asian PTSD groups in the same manner as the PTCI. Second, the PCSAM will mediate the relationship between maladaptive post-trauma perceptions of self-concept and PTSD symptoms for both British and Asian trauma survivors.

7.4.1 Method

In addition to the measures used in study 5 and 6, the results from the 14-item PCSAM described in Study 4 was also used. The scores from the PCSAM in Study 4 were used; trauma-centered self and self-discrepancy scored from Study 5 and self-ambivalence scores from Study 6 were used.

7.4.2 Results

Data was not normally distributed after transformations were made. Therefore, Spearman correlations (one-tailed) were used to investigate associations between trauma-centered self, self-discrepancy and self-ambivalence with the PCSAM (see Table 24).

7.4.2.1 Hypothesis 1: Associations between Self-concept and PCSAM

Trauma-centered self. Findings supported hypothesis 1, for those with PTSD in both cultural groups, trauma-centered self was significantly correlated with PCSAM. In addition the Asian PTSD group's trauma self-concept was significantly associated with the beliefs and belonging subscale, while the British PTSD group's trauma self-concept was also significantly related to the public and communal subscale.

Self-discrepancy. Correlational analyses did not support hypothesis 1 for this feature of self-concept, ideal and ought self-discrepancy scores were not significantly related to the PCSAM.

Self-ambivalence. Regardless of cultural group, self-ambivalence was significantly and positively associated with PCSAM, providing further support for hypothesis 1.

Table 24

Correlation Coefficients (one-tailed) for Trauma-Centered Actual-Self, Self-Discrepancies, Self-Ambivalence and PCSAM Scores for the PTSD British and PTSD Asian groups

	PCSAM-Total		PCSAM-Beliefs and Belonging		PCSAM-Public		PCSAM-Communal	
	Asian	British	Asian	British	Asian	British	Asian	British
Trauma-centered self	.54**	.71**	.39*	.33	.28	.81**	.34	.69**
Ideal SD	-.00	-.27	19	-.36	.27	-.33	-.36	-.12
Ought SD	.04	-.16	.17	-.20	.16	-.22	-.22	-.06
Self-ambivalence	.27*	.51**	.24	.27*	.16	.12	.0	.28*

Note: *$p < .05$. **$p < .01$. Ideal SD = Ideal Self-Discrepancy Score; Ought SD = Ought Self-Discrepancy Score

7.4.2.2 Hypothesis 2: Do appraisals on the PCSAM mediate the relationship between distortions in self-concept (i.e. trauma-centered self, self ambivalence and self-goals) and PTSD?

Three mediation analyses based on Baron and Kenny's (1986) method examined whether the appraisals as measured by the PCSAM Total mediated the relationship between distortions in self-concept (i.e. trauma-centered self, self-discrepancy and self-ambivalence) and PTSD diagnoses using bootstrapping procedures (Preacher & Hayes, 2008). The rationale for using this type of mediation analyses was based on the need to identify whether collectivistic type appraisals (i.e. PCSAM) also mediated the relationship between distortions in self-concept and PTSD, as was suspected based on previous research and previous findings reported throughout the thesis. In the analyses, 5,000 bootstrap resamples of the data with

replacement was used. Statistical significance with alpha at .05 is indicated by the 95% confidence intervals not crossing zero. It was found that the PCSAM did mediate the relationship between trauma-centered self and PTSD diagnosis, with a 95% bootstrap confidence interval of 1.46 to 21.97 for the British trauma survivors only, the same relationship was not found for the Asians trauma survivors, this partially supports hypothesis two. The PCSAM also mediated the relationship between self-ambivalence and PTSD diagnosis, with a 95% bootstrap confidence interval of .46 to 5.45 again for the British trauma survivors only, again only partially supporting hypothesis two. The PCSAM did not mediate the relationship between ideal or ought self-discrepancies and PTSD diagnosis for either group of trauma survivors (see Table 25 for summary of results).

Table 25

Summary of Results of the Mediation Analyses where Self-concept (i.e. trauma centered self, self-discrepancy and self-ambivalence) is the Independent Variable, PCSAM Total is the Mediator and PTSD diagnosis is the Dependent Variable.

	Asian				British			
	B	*SE*	*t*	*p*	*B*	*SE*	*t*	*P*
Trauma-Centered Self								
Trauma-Centered Self to Mediator (a path)	44.05	12.34	3.57	.001	81.21	18.33	4.43	<.001
Direct Effect of Mediator on PTSD diagnosis (b path)	.12	.04	3.32	.001	.11	.04	2.90	.004
Total Effect of Trauma-Centered Self on PTSD diagnosis (c path)	6.88	3.52	1.95	.05	10.71	3.63	2.95	.003
Direct Effect of Trauma-Centered Self on PTSD diagnosis (c' path)	1.81	4.10	.44	.66	7.02	4.38	1.60	.11
Ideal SD								
Ideal SD to Mediator (a path)	.06	2.80	.02	.98	-2.29	4.11	-1.28	.21
Direct Effect of Mediator on PTSD diagnosis (b path)	.13	.04	3.47	.001	.12	.04	3.14	.001
Total Effect of Ideal SD on PTSD diagnosis (c path)	-.26	.34	-.75	.45	-.25	.47	-.52	.06
Direct Effect of Ideal SD on PTSD diagnosis (c' path)	-.60	.48	-1.27	.21	.18	.65	.27	.78
Ought SD								
Ought SD to Mediator (a path)	-1.04	2.54	-.41	.68	-2.63	3.43	-.77	.45

Direct Effect of Mediator on PTSD diagnosis (b path)	.12	.03	3.61	<.001	.12	.04	3.43	.01
Total Effect of Ought SDon PTSD diagnosis (c path)	-.11	.30	-.37	.71	-.02	.40	-.06	.95
Direct Effect of Ought SD on PTSD diagnosis (c' path)	-.06	.44	-.13	.90	.25	.66	.38	.70
Self-Ambivalence								
Self-Ambivalence to Mediator (a path)	9.52	7.43	1.28	.21	25.91	5.52	4.69	<.001
Direct Effect of Mediator on PTSD diagnosis (b path)	.14	.04	3.55	<.001	.10	.04	2.72	.01
Total Effect of Self-Ambivalence on PTSD diagnosis (c path)	1.82	1.06	1.72	.09	4.16	1.45	2.87	.004
Direct Effect of Self-Ambivalence on PTSD diagnosis (c' path)	1.52	1.30	1.17	.24	2.85	2.02	1.41	.16

Note: Ideal SD = Ideal Self-Discrepancy Score; Ought SD = Ought Self-Discrepancy Score

7.4.3 Discussion

The overall aim of Study 7 was to provide preliminary findings as to the PCSAM's ability to highlight the deleterious relationship between self-appraisals and self-concept. The importance of the conceptual self's role in PTSD has been drawn upon throughout the thesis, as has the influence of maladaptive private self-appraisals on PTSD development and maintenance. However, the PCSAM utilized different contexts of self-appraisals, namely, the public and communal aspects of self, demonstrating that the conceptual self is comprised of more than our private self-appraisals. These other facets of the self have not yet been researched, although their importance has been alluded to in cross-cultural research (Markus & Kitayama, 1991). Consequently, this study provides a good starting point from which to draw potential conclusions as to the influence of maladjusted public and communal self-appraisals on the conceptual self and in the development and maintenance of PTSD.

Findings support previous research on the impact self-appraisals have on PTSD (e.g. Ehlers & Clark, 2000). For instance, hypothesis one was supported, the PTSD group had greater dysfunctional self-appraisals than the no PTSD group. Second, the PCSAM was significantly related to self-concept; whereby greater dysfunctional public and communal self-appraisals were associated with a more trauma-centered and ambivalent self-concept. Finally, the PCSAM also mediated the relationship between maladaptive post-trauma perceptions of self-concept and PTSD symptoms for the British but not for the Asian trauma survivors, it is not clear why this occurred. Consequently, it appears worthwhile investigating these other dimensions of self-appraisals, because they too appear to have a role in psychological well-being and in particular PTSD diagnoses, at least for the British trauma survivors.

Further work is needed, as these findings are preliminary, however, one of the strengths of the study was its use of trauma survivors with and without PTSD as an initial sample. Subsequently, findings do have theoretical implications. Ehlers and Clark's (2000) cognitive models of PTSD highlighted cognitive appraisals as a root element in the disorders perpetuation. Here too, cognitive appraisals pertaining to public and communal aspects of self are also associated with the disorder's continuation. Thus results support the appraisal models, as the result of negative self-appraisals within a public and communal context lead individuals to process their past threat as an ongoing threat to these aspects of the self. Ehlers and Clark (2000) theorized that PTSD is the result of an individual processing "the traumatic event

and/or its sequelae in a way that which produces a sense of serious current threat" (p.320). They propose that this perceived current threat is "either external (e.g., the world is a more dangerous place) or, very commonly, internal (e.g., a threat to one's view of oneself as a capable/acceptable person who will be able to achieve important life goals)" (p.320). Further, once this threat is activated it is accompanied by PTSD symptoms. The PCSAM taps into threats that are analogous to Ehlers and Clark's (2000) conceptualization of internal threat. However, these appraisals are based on interdependent type cognitions (e.g. I have failed in my social role). Thus the view of oneself as a capable and acceptable person is perceived using relatedness reasoning. The appraisals utilized by the PCSAM illustrate the influence and impact of significant others and the wider community on the self and the manner in which they relate to an individual's appraisal process following a trauma. Thus the PCSAM proposes that the threat to the conceptual self results in the processing of the traumatic experience and/or its sequelae in a way, which produces a sense of current and serious threat to public and communal aspects of self. Once these perceptions of current threat to self are activated, it is accompanied by PTSD symptoms. Further, as Sato (2001) proposes, the conceptual self is essential in maintaining mental health. However, it needs to be borne in mind that one's conceptual self is made of multifaceted aspects. In order to restore order and semblance to the whole, each area needs to be looked at in greater detail. Thus just as research points to each individuals holding both interdependent and independent aspects of their self-construal, it needs to be recognized that both these aspects of self-construal need to be addressed and redressed to arrive at a healthy self-conception. Thus measures assessing PTSD and other forms of psychological distress needs to be more incorporate of this to arrive at a fuller understanding as to the disorders development and maintenance.

The findings also have clinical implications. Cognitive therapy targets the dysfunctional private aspects of self-appraisals as outlined in the PTCI. However, due to PCSAM's direct and indirect associations with PTSD, it would make sense to also be inclusive of targeting public and communal aspects of one's self-appraisals as these too are held as important to an individuals subjective well-being.

A limitation of this study was the small sample size of British and Asian trauma survivors, therefore this was used as an exploratory dataset. In addition, the choice of mediation analysis as mentioned previously, did not account for association, temporal order and the confirmatory-exploratory distinction (Gelfand, Mensinger & Tenhave,

2009) which would have strengthening findings, thus results need to be considered somewhat more tentatively. Notwithstanding this however, these preliminary findings suggest that the PCSAM is a useful measure of self-appraisals, as they capture aspects of the self important to an individual's recovery following trauma.

7.5 General Discussion

Cognitive appraisals and self-concept have been found to be a central tenet to PTSD development and maintenance, moreover, as highlighted throughout the thesis, these two factors are found to have differing cultural implications The cumulative objective of Part 3 (Studies 4 – 7) was to extend the ecological validity of Part 1 (Studies 1 – 2) and Part 2 (Study 3) in it's investigation of cultural differences in trauma appraisals and self-identity following trauma in those with and without PTSD. This was achieved through the four studies detailed above, the first centered around trauma appraisals (Study 4) and associated implications for posttraumatic psychological adjustment; in addition to assessing the reliability and validity of the PCSAM and its appropriateness for use in Asian trauma survivor populations. The examination of the role of self-concept was undertaken in the following two sub-studies; investigating the relationship between distorted self-conceptions (Study 5) and ambivalent self-concept (Study 6) with trauma-related appraisals and PTSD diagnoses; and the impact of PCSAM and its influence on self-concept and post-trauma psychological adjustment (Study 7). The objective of this discussion is to briefly summarize the main findings and focus primarily on the theoretic and clinical implications of Studies 4-7.

7.6 Summary of findings

Overall, the results of Study 4 tend to confirm the hypotheses derived from the conceptual framework. There were cultural differences in appraisals of everyday and trauma experiences. However, there also appeared to be cultural similarities in the dysfunctional appraisals of those with PTSD. The PSCAM had good internal consistency, test-retest reliability, convergent validity, and discriminative validity. Additionally, unlike Study 1, the PTCI was predictive of PTSD for both the British and Asians.

Study 5 found that trauma-centered distortions in one's self-concept were found to correlate significantly with trauma-related appraisals, while those with

PTSD, regardless of cultural background, did have a significantly greater trauma-centered actual self-concept compared to trauma survivors without PTSD. Moreover, negative trauma-related appraisals mediated the relationship between distortions in self-concept and posttraumatic psychological adjustment (i.e. PTSD) for both British and Asian trauma survivors. As this study extended the results from Study 2, when findings are taken together, they relay the importance of the role of appraisals in identity formation and psychological adjustment posttrauma.

Study 6 showed that self-ambivalence differentiated between British trauma survivors with and without PTSD but did not differentiate between Asian trauma survivors with and without PTSD. Significant positive associations were found between self-ambivalence and trauma appraisals for both cultural groups. Finally, in both Asian and British trauma survivors, self-ambivalence was found to indirectly influence PTSD through trauma-related appraisals. Thus findings demonstrate self-ambivalence to have a negative effect on psychological adjustment for trauma survivors pan-culturally and further implicates self-concept in posttrauma psychological adjustment.

Finally Study 7 demonstrated that the PCSAM could make a useful measure of self-appraisals, as it captures public and communal aspects of the self, which are also important to an individual's recovery following trauma. Additionally, while study 7 supports previous research on the impact self-appraisals on PTSD development and maintenance, the PCSAM only mediated the relationship between maladaptive post-trauma perceptions of self-concept and PTSD symptoms for the British but not for the Asian trauma survivors, it is not clear why this occurred and further exploration would be needed. However, it is appears worthwhile investigating the dimensions put forth by the PCSAM, because they do appear to have a role in psychological well-being and in particular PTSD diagnoses, at least for the British trauma survivors.

7.7 Theoretical and Clinical Implications

7.7.1 Appraisals. There are several theoretical and clinical implications that can be drawn from these findings. First, this study supports PTSD models emphasis on the role of cognitive appraisals in PTSD (Ehlers & Clark, 2000) and the focus on appraisals in the treatment of PTSD (Resick, 2001). The results extend findings conducted with Western populations to indicate that appraisals also play an important

role in PTSD in Asian cultures, which is expected given the emphasis theories of emotion give to the role of cognition in emotion (e.g. see Mauro et al., 1992). The results indicate that the cultural differences in cognitive appraisals of everyday events, which are in line with cross-cultural theories (Mesquita & Walker, 2003), tend to extend to trauma cognitive appraisals. Nonetheless, despite these cultural differences in trauma cognitive appraisals, the findings suggest that the types of cognitive appraisals that relate to PTSD symptoms may be culturally similar. However, appraisals of personal control seemed to be somewhat unique. While appraisals of personal control were found, as in previous research (e.g. Jobson & O'Kearney, 2009), to differentiate between British trauma survivors with and without PTSD, appraisals of control had little relevance in discriminating between Asian trauma survivors with and without PTSD. This suggests that in some instances the influence of cultural differences in self-construal on cognitive appraisals influences PTSD outcome (see Jobson, 2009). The success of the PCSAM in differentiating between those with and without PTSD demonstrates the importance of also considering public and communal aspects of self in those with PTSD.

Effective treatment for PTSD targets appraisals of trauma (Resick, 2001). The effectiveness of these interventions has been demonstrated in Western cultures (e.g. Basoglu Salcioglu, & Liyanou, 2007; Duffy, Gillespie, & Clark, 2007). However our understanding of interventions for non-Western groups is exceptionally limited. Therefore, research improving our understanding of the processes involved in PTSD for those from different cultural groups is imperative for generalizing current interventions. Given the focus of effective treatments on appraisals, it is important that clinical practice and research consider the cross-cultural research highlighting the influence of culture on appraisals and associated emotional responses. The findings suggesting many appraisals associated with PTSD are culturally similar indicate that many of the treatment targets may be generalizable. However, it remains important that clinicians consider how trauma appraisals may challenge cultural norms and culturally influenced self (including self in relation to others) of a client. Thus, cognitive restructuring in therapy may need to focus on realigning sufferers' beliefs with their culturally determined conceptual self. It may be important to include more social role, group and interpersonal appraisals (and less focus on control) as potential moderators of PTSD within Asian cultures and thus, target these appraisals in treatment. Furthermore, current measures assessing trauma-related appraisals may

benefit from including greater focus on appraisals associated with interdependence. Finally, the recent changes to the PTSD criteria in DSM-V (APA, 2013) includes negative alterations in cognitions and persistent and distorted blame of self or others which seems to be appropriate cross-culturally as those with PTSD, regardless of cultural background, had negative cognitions about self (private, public and communal), world, and self-blame.

7.7.2 Self-Concept. Further, findings from the current study suggest discrepancies in self-concept (i.e. a trauma-centered self) can influence self-appraisals involved in the maintenance of PTSD and highlights the importance of considering self-concept in therapeutic interventions. The findings suggest that if trauma becomes central to self-concept, people are likely to perceive their self-concept as not being in line with a healthy self. This distortion in self-concept or ambivalent self-concept, in turn, may result in negative self-appraisals which over time has been found to be involved in the maintenance of PTSD (Dunmore et al., 1997; Ehlers & Clark, 2000); distortions/conflictions in self-concept perpetuate negative self-appraisals which in turn perpetuate PTSD. Thus, the results highlight and emphasize the role of the self (i.e. trauma-identified self, self-discrepancies, negative self appraisals) in PTSD and the importance of considering self-concept in therapeutic interventions. For instance, self-schema work could address trauma-caused 'vulnerable identities' (Brewin & Holmes, 2003), integrating current views of the self (e.g. I am a victim) into existing self-knowledge and the life story, and make sense of the trauma in respect to existing aspects of their self-concept and goals (Hembree & Foa, 2004) and targeting the relationship between appraisals and self-concept.

7.8 Limitations

The limitations of the study are acknowledged; sample sizes were modest which potentially limits statistical power and generalizability. Second, the study was cross-sectional which precludes causal explanations. Third, participants were asked to complete all tasks in English, this may have impacted on appraisals and identity for participants in the Asian group. Fourth, future research would benefit from investigating the influence of culture on appraisals associated with particular traumas as trauma type (e.g. interpersonal) may have had an influence on findings. Fifth, it was difficult to estimate selection bias. Sixth, this research, as in most other cross-

cultural research (Mesquita & Walker, 2003), focuses on attribution to a specific agent (self or other). Agency and agency appraisals can also be associated with magic spells, spirits, fate, and so forth. Such appraisals need further exploration in relation to culture and appraisals of trauma. This especially needs to be considered in terms of cultural differences in religious beliefs. Seventh, due to dialectical tendencies toward tolerance of contradiction and its influence on the manner in which East Asians respond to Likert-type scales about the self and other attitude objects (Hamamura et al., 2008) a free-response measure of self was used in this study, however because of this self-ambivalence was only measured using the ratio of positive to negative self-statements. In future, other forms of self-ambivalence measures need to be used, which have been tried, tested and validated. Additionally, the Asian and British participants differed on various demographic factors, which may have influenced finings. However, when these demographic variables were included as covariates a similar pattern of results remained, demonstrating that age, English language ability and gender had no significant bearing on reporting of self-discrepancies within one's self-concept. Conversely, when length of time spent in the UK and interdependence scores were included as covariates in analysis, results did present themselves in a culturally dynamic manner. Namely, results reflected prior research highlighting interdependent cultures (reflected by the Asian group in this study) as having greater tolerance and acceptance of self-discrepancies within their self-concept. Future research should consider conducting a cross-country study in an attempt to reduce the influence of the new culture on self-concept. Also, future research would benefit from examining trauma survivors from similar trauma types as different trauma types (e.g. interpersonal) may influence the self-concept differently. Finally, as mentioned earlier in the participant description, some ex-veterans participated in the study in the British group only. This could have potentially impacted on findings as ex-veterans may not share similar characteristics to their civilian counterparts, indeed some research denotes military personnel to be more robust, less likely to worry, less neurotic and less agreeable (Jackson, Thoemmes, Jonkmann, Ludtke & Trautwein, 2012). Additionally, the PTSD measures have been adapted for serving personnel as they take these characteristics into account. Additionally, there were no ex-veterans in the Asian group to provide equifinality between the two groups; therefore findings may need to be understood more cautiously.

7.9 Conclusions

Notwithstanding these limitations, the findings suggest negative appraisals mediate the relationship between distortions in self-concept and PTSD. Specifically, if a trauma survivor, regardless of their cultural background, has challenges to their self-concept (e.g. I am a victim), on-going appraisals about the self will be both negative and distorted (I cannot cope, I am permanently damaged) and such negative appraisals have been found to have an important role in the maintenance of PTSD as they create a sense of current internal threat to self (Dunmore et al., 1997; Ehlers & Clark, 2000; Ehlers et al., 1998; Karl et al., 2009; Matthews et al., 2009). Such findings warrant further investigation into how self-concept can influence PTSD recovery. Further, the results of the study document one of the first investigations into the relationship between an ambivalent self-concept across different cultural groups of trauma survivors with PTSD symptoms and maladaptive appraisals, producing findings that warrant further investigation into how self-concept can influence PTSD recovery. Finally, as far as the author is aware, this study is one of the first to investigate the role of culture in trauma appraisals and associated posttraumatic psychological adjustment. The findings suggest that while there are cultural differences in appraisals of trauma experiences, those with PTSD, regardless of cultural background, may have similar dysfunctional appraisals, which may play a role in the development and maintenance of PTSD. This is initial research in this area and thus, further research is required to further investigate this important area.

Chapter 8
General Discussion

> "It is more important to know what kind of patient has a disease than what kind of disease a patient has."
> (Winston Churchill)

In this final chapter a review of the main aims of the thesis will first be provided, followed by a summary of the main findings, which are discussed in the context of the research questions defined in the introduction and in reference to the conceptual framework. Specifically, Chapter 8 aims to synthesize results from each study with current theoretical understandings about the etiology and maintenance of PTSD and understandings relating to cultural variation in self-construal. Third clinical implications of the findings are discussed. Lastly, limitations and future directions are reviewed.

8.1 Review

Trauma has been perceived by many to be a localized issue (Leppaniemi, 2004). However trauma and its consequent manifestations (i.e. the development of PTSD) has been gaining increasing attention as a global problem. Leppaniemi (2004) asserts urgent, co-ordinated and well organized measures need to be put in place to combat anticipated increases in all categories of trauma injury across the globe, which are all predicted to rise by the year 2020. Therefore, now more than ever it is important to understand disorders such as PTSD for prevention and treatment outcomes. However, what needs to be borne in mind is that a trauma does not simply affect a single person or group of people, a trauma "is never an isolated event unrelated to the surrounding world" (Leppaniemi, 2004: 193-194). Additionally, the quote above by Winston Churchill captures the thesis' reason d'être. First, it impresses the importance of truly understanding the individual trauma survivor: where they come from and therefore how they will potentially interpret what has occurred to them and how they will subsequently cope with what has happened. Second, it relates back to the conceptual framework, highlighting that cultural differences in our self-construal can in turn influence the "kind of person" one is, which in turn influences one's self-concept and appraisals: two key processes

involved in PTSD development and maintenance and therefore central to one's posttraumatic health, treatment and recovery.

In order to arrive at effective treatments, the thesis has proposed culture needs to be incorporated into cognitive models of PTSD to advance theoretical and clinical propositions for subsequent 'real world' practical application (i.e. treatments). However, this dimension needs to gain clarity in its associations to PTSD as research in this area has been implemented but is still significantly lacking. However, culture's theoretical implications and associations with cognitive models have yet been established. As detailed in the conceptual framework, the cause of PTSD may very well be related to the manner in which the individual interprets and subsequently appraises the event and meanings of the event, these interpretations potentially are steeped in and informed by one's cultural and socialization practices. In light of this, the overall objective of this thesis was to investigate the influence of culture on the posttraumatic appraisals and self-concept and its relationship to PTSD. Specifically, Part 1 was comprised of two studies that investigated cultural differences in trauma associated appraisals (Study 1) and posttraumatic self-concept (i.e. trauma-centered self and self-discrepancies) (Study 2) and implications for posttraumatic adjustment in a non-clinical sample. Part 2 (Study 3) was a qualitative study investigating interdependent type appraisals associated with trauma. Part 3 extended the ecological validity of Part 1 and 2 by investigating cultural differences in trauma associated appraisals (i.e. general appraisals, PTCI and PCSAM) (Study 4) and posttraumatic self-concept (trauma-centered self, self-discrepancies and self-ambivalence) (Studies 5-6) and the relationships between appraisals and self-concept (Studies 4 and 7) in British and Asian trauma survivors with and without PTSD. A summary of the findings are reported and discussed below.

8.2 Overview of Main Findings

8.2.1 Trauma Appraisals

The aim of Studies 1 and 4 was to investigate the influence of culture on cognitive appraisals associated with trauma experiences and the influence of these appraisals on posttraumatic psychological adjustment in a non-clinical sample (Study 1) and in a sample of trauma survivors with and without PTSD (Study 4). Both studies were discussed separately in their respective chapters, however, it would seem apt to discuss the main findings by combining the pilot first study with Study 4, as the

subsequent study extended the ecological validity of its precursor. Overall the findings demonstrated cultural differences in the way in which experiences are appraised. British participants were found to appraise significantly less pleasantness (Study 1 and 4) and legitimacy (Study 4) and significantly greater anticipated effort (Study 1), goal-need conduciveness (Study 4), norm-self compatibility (Study 1), and attentional activity (Study 1) than Asian participants in the positive (Study 1) and negative (Study 4) autobiographical memories they provided. These differences reflect what has been found in previous research. Moreover, the findings demonstrated that such differences also extended to the trauma autobiographical memory. Such cultural differences reflect British participants valuing agency, independence, assuming their reactions are typical and being less concerned about discrepancies with the reactions of others (Markus & Kitayama, 2010; Mauro et al., 1992; Mesquita & Walker, 2003). Additionally, Asian cultures tend to have greater acceptance of situation outcomes and fate (Mesquita & Walker, 2003). Therefore, appraisals, including those associated with trauma experiences, are in line with what is culturally emphasized and expected and thus, appear to function to develop, express and maintain the culturally-expected self (Mesquita & Walker, 2003).

Despite these cultural differences in appraisals of positive, negative and trauma autobiographical memories, the findings overall also suggest that the relationships between cognitive appraisals and PTSD symptoms are predominately culturally similar, which consequently disputes the first hypothesis in the conceptual framework. As those with and without PTSD, regardless of their cultural background, were found to appraise events differently; those with PTSD appraised their memories to be less pleasant with greater anticipated effort than those without PTSD. Additionally, those with PTSD were found to appraise the trauma memory uniquely. While those with and without PTSD tended to appraise the negative event similarly, those with PTSD appraised that they could not cope as well in the trauma event, perceived the trauma event to be less predictable, certain and understandable, and appraised that they had less motivation to attend closely to the event than trauma survivors who did not develop PTSD. Furthermore, those with PTSD felt they were personally responsible for the trauma event.

Substantial research has demonstrated the role of control appraisals in maintaining PTSD. However, cross-cultural research has demonstrated that control is one particular cognitive appraisal that is valued to a greater extent in Western cultures

than Asian cultures (e.g. Mesquita & Walker, 2003). This cultural difference was found to influence the relationship between control and PTSD supporting hypothesis one in the conceptual framework. In Study 1 while a significant negative correlation was found between lower levels of perceived control and PTSD symptoms, this was only found to be the case for the British group. In Study 4, while British trauma survivors with and without PTSD did not differ significantly in their appraisals of control associated with the negative memory; for the trauma memory British trauma survivors with PTSD reported lower levels of control appraisals in the trauma memory than those without PTSD. In contrast, Asian trauma survivors with and without PTSD did not differ significantly for either the negative or trauma memories. Thus, as perceived personal control and agency are valued in Western cultures, appraisals associated with situations, such as the trauma event, that violate culturally expected cognitive appraisals are potentially distressing (Mesquita & Walker, 2003). Therefore, perceived control differentiates between those with and without PTSD in British cultures but not Asian cultures.

In terms of trauma-specific appraisals, hypothesis one was supported by Study 1, which found that for the British group, the PTCI was significantly correlated, and predicted, PTSD symptoms. In contrast, for the Asian group the PTCI did not significantly predict PTSD symptoms. Based on this finding and the findings of a related qualitative study (Study 3), it was proposed that the PTCI may be tapping into individualistic type appraisals (e.g. I am a weak person, I can't rely on myself, I am inadequate) rather than interdependent, public (i.e. social roles) and communal (relationships and interdependence) appraisals, which are emphasized in Asian cultures, thereby demonstrating cultures to interpret trauma appraisals differently. However, in Study 4 the PTCI was found to differentiate between those with and without PTSD, regardless of cultural background, thereby not providing support for cultural differences in trauma appraisals. Therefore, in clinical samples the PTCI may be appropriate for use with Asian trauma survivors as those with PTSD may hold culturally similar dysfunctional negative appraisals about the self, world and self-blame.

The final aim of Study 4 was to investigate the reliability and validity of the PCSAM and its appropriateness for use in Asian trauma survivor populations. The PCSAM was a newly developed measure aimed to assess the influence of trauma on more public and communal aspects of self-appraisals. The final PCSAM inventory

consisted of 14-items that loaded onto three components; 1) beliefs and belonging, 2) communal aspects of self, and 3) public and social roles. The PSCAM was found to have good internal consistency, test-retest reliability and convergent validity. In regards to discriminate validity, the PCSAM (and its sub-scales) could discriminate between those with and without PTSD. A discriminant function analysis found that the specificity and sensitivity of the PSCAM subscales in identifying individuals with and without PTSD was good.

Study 3 was a qualitative study investigating the meanings and interpretations of trauma and trauma appraisals using trauma survivors from collectivistic cultures and mental health practitioners who routinely work with trauma survivors from collectivistic cultures, as the vast majority of research on this topic has been conducted with Western/individualistic cultures. Eight themes emerged as a result of the focus groups and key informant interviews, these were; Trauma Perceptions, Traumatized Self, Cultural and Social roles, Future, Relationships, External/World, Education and Language. Some themes were evocative of current work in the trauma literature as having direct or indirect implications for poor posttraumatic adjustment and as indicative of PTSD development. In addition these themes also had overlaps with literature on individualistic type cognitions. This included 'trauma perceptions', 'traumatized self; and some subthemes (e.g. the world is a dangerous place) from 'external/world'. Others themes, for instance 'cultural and social roles, 'relationships' and 'beliefs' subtheme from 'external/world' appear to be unique as they have not been explored in relation to trauma appraisals for any cultural group. Further, they also appear to be reminiscent of what research construes as an interdependent self (e.g. group relatedness, achieving group harmony, importance of significant others). Therefore, it was these three themes (cultural and social role, i.e. public self-cognitions; relationships, i.e. communal self-cognitions, and beliefs) that were further developed to create the PCSAM as an additional measure to assess for dysfunctional appraisals. The findings of the PCSAM are outlined above in Study 4.

Finally, Study 7 provided preliminary results from the PCSAM and potentially demonstrates that interdependent self-cognitions also have implications for trauma survivors, as it impacts on self-concept and PTSD. These influences appear to be culturally similar, for instance both the British and Asians negative dysfunctional appraisals as measured by the PCSAM were significantly related to distorted self-concept (i.e. trauma-centered self and self-ambivalence). Additionally, the PCSAM

mediated the relationship between self-concept and PTSD symptoms, but only for the British group. It is not clear why this did not occur for both groups.

8.2.2 Posttrauma Self-Concept

Studies 2, 5 and 6 all focused on different aspects of a posttraumatic self-concept. The aim of Studies 2 and 5 were to investigate the relationship between distortions in self-concept (i.e. trauma-centered and self-discrepancies) and PTSD symptoms. Again Studies 2 and 5, which are discussed separately in their respective chapters, are brought together here. Overall it was found that those with PTSD, regardless of cultural background, were significantly more likely to have a trauma-centered self-concept than those without PTSD. This is in line with previous research (e.g. Berntsen & Rubin, 2006, 2007; McNally et al., 1995; Sutherland & Bryant, 2005). Secondly, it was found that those with a more trauma-centered self-concept had significantly greater discrepancies in their self-concept (Study 2). This suggests that particular distortions in self-concept may be related to other distortions in self-concept. Thirdly, the findings taken together suggest that distortions in self-concept (i.e. trauma-centered self-concept and self-discrepancies) are significantly correlated with negative trauma-related appraisals pan-culturally. These findings support hypothesis two of the conceptual framework, which proposed that self-concept would be impacted by trauma. Here we find that when a trauma becomes central to self-concept, this results in it becoming damaged and distorted and subsequently leads to poor posttrauma adjustment, for both British and Asians.

Study 6 investigated self-consistency needs by focusing on the manner in which individuals deal with contradicting and inconsistent self-relevant information following trauma (i.e. ambivalent self-concept). The study found British trauma survivors held more polarized self-statements than Asian trauma survivors while Asians held more neutral self-statements. This suggests the British are trying to avoid ambivalence while Asians may not and may be comfortable with negligent self-information. Additionally, findings do appear to provide some support for hypothesis two from the conceptual framework, as an ambivalence posttrauma self-concept had cultural distinct implications for posttrauma adjustment. Specifically, it was found that for the British group those with PTSD had significantly greater ambivalence than those without PTSD; however, this was not the case for the Asians. This again suggests that an inconsistent, ambivalent self-concept is indicative of maladjustment

for those from individualistic cultures, while collectivistic cultures are more tolerant of such contradictions and inconsistencies and does not necessarily result in maladjustment or PTSD. This supports hypothesis two, as the trauma does appear to impact self-concept and fosters self-ambivalence. However, ambivalence appears to directly impacts on poor adjustment for the British, but not for the Asians.

8.2.3 Trauma Appraisals and Posttrauma Self-Concept

The aim of Studies 2 and 5 was also to investigate the relationships between distortions in posttrauma self-concept (i.e. trauma-centered and self-discrepancies) and trauma-related self-appraisals and PTSD symptoms. In addition to examining whether these relationships differ depending on one's cultural background. It was found that negative trauma-related appraisals mediated the relationship between distortions in self-concept (self-discrepancies in Study 2 and trauma-centered self-concept in Study 5) and PTSD. This difference between Study 2 and 5 (i.e. appraisals did not mediate the relationship between self-discrepancies and PTSD in Study 5) may be because self-discrepancies did not differentiate between those with and without PTSD in Study 5. This is contrary to previous research (e.g. Sutherland & Bryant, 2008) and it is uncertain why this was the case. However, findings do provide some support to hypothesis three of the conceptual framework, namely, regardless of cultural group, trauma appraisals and posttrauma self-concept were related, in addition, appraisals mediated the relationship between posttrauma self-concept and PTSD, regardless of one's cultural background.

Study 6 also investigated the relationship between posttrauma self-concept using self-ambivalence and trauma appraisals as measured by the PTCI. It was found that self-ambivalence was related to trauma appraisals again supporting hypothesis three. In addition trauma appraisals mediated the relationship between self-ambivalence and PTSD for the British but not for the Asian group, demonstrating a cultural distinction in how ambivalence influences self-concept's relationship with appraisals and PTSD. In a similar vein, Study 7's exploratory analysis of the PCSAM and how these alternative self-appraisals impacted on posttrauma self-concept found similar results. Specifically trauma-centered self-concept and an ambivalent self-concept were related to the PCSAM, supporting hypothesis three. In addition the PCSAM appraisals mediated the relationship between self-ambivalence and PTSD for the British but not for the Asians. This is further supportive of hypothesis three of the

conceptual framework; in addition to cross-cultural literature denoting self-consistency needs are different across cultures. This is seen here as they had differing implications on posttrauma psychological adjustment.

The overall findings from studies 2, 5, 6 and 7 support trauma appraisals being related to posttrauma self-concept for both the British and Asians in relation to private self-cognitions as measured by the PTCI, however, this was only partially the case for collective self-cognitions (as measured by the PCSAM). For instance, while these collective self-cognitions were associated with posttrauma self-concept for both the British and Asians, they only mediated the relationship between self-concept and PTSD for the British; it is uncertain as to why this did not occur for the Asians other than to highlight differences in how self-cognitions generated by differing self-construal impact on adjustment across cultures. Therefore further work is needed to unpack these processes and understand how they are utilized.

8.3 Theoretical Implications

Throughout the thesis it has been questioned as to whether current cultural models of PTSD are flexible enough to accommodate cultural variation in self. Based on the overall findings outlined throughout this thesis, the short answer is yes. This said, while many cultural similarities were found in the appraisals and self-concept of those with PTSD (discussed further below), the findings overall also highlight that these models would benefit from further considering the influence culture plays on the cognitive processes involved in the disorder's development and maintenance. Below are more specific examples for this assertion, which draw together findings from each study with the socio-cognitive models of PTSD and conceptualize the findings with the framework outlined in Chapter 4.

8.3.1 Appraisals

***8.3.1.1 Trauma appraisals in relation to everyday appraisals*.** Based on Studies 1 and 4, the findings supported the PTSD models' emphasis on the role of cognitive appraisals in PTSD (Ehlers & Clark, 2000) and the focus on appraisals in the treatment of PTSD (Resick, 2001). Namely, the results extended previous findings that have been conducted with Western populations to indicate that appraisals also play an important role in PTSD in Asian cultures. This is expected given the emphasis theories of emotion give to the role of cognition in emotion (e.g. see Mauro et al.,

1992). However, cultural differences in the appraisals of trauma were found indicating that the cultural differences previously found in relation to the cognitive appraisals of everyday events tend extend to the trauma experience. This supports cross-cultural theories' notion that the independent self tends to appraise events in terms of personal agency, control and responsibility while such appraisals are less emphasized by the interdependent self, as generally emphasized in Asian cultures. Thereby, such appraisals function to differentiate the self and reaffirm the self as an autonomous entity (Mesquita & Walker, 2003). Nonetheless, despite these cultural differences in trauma cognitive appraisals, the findings suggest that the types of cognitive appraisals that relate to PTSD may be culturally similar. This indicates that those with PTSD, regardless of their cultural background, have similar negative, distorted and dysfunctional appraisals of the self (private, public and communal aspects), world and self-blame which consequently result in a sense of on-going continual threat proposed to maintain PTSD (Ehlers & Clark, 2000).

8.3.1.2 Appraisals of personal control. Appraisals of personal control seemed to be somewhat unique. While appraisals of personal control were found, as in previous research (e.g. Jobson & O'Kearney, 2009), to differentiate between British trauma survivors with and without PTSD, appraisals of control had little relevance in discriminating between Asian trauma survivors with and without PTSD. This suggests that in some instances the influence of cultural differences in self-construal on cognitive appraisals does influence PTSD outcome (see Jobson, 2009). This has important theoretical implications. For instance Ehlers and Clark's (2000) model of PTSD emphasizes the role of self-relevant appraisals of the trauma experience and/or its sequelae in the maintenance of PTSD. The model suggests that appraisals function to maintain a sense of current threat in the survivor's life and are instrumental in promoting the use of maladaptive strategies intended to control this threat and the current symptoms. Therefore, it is theoretically important to understand how trauma exposed individuals, in particular those with PTSD, utilize agency appraisals, especially in relation to regulating self-relevant appraisals of or following the trauma event and how these subsequently influence coping strategies. It could be surmised that control appraisals are perceived as appraisals of internal threat for those from Western cultures, as this appraisal dimension in Studies 1 and 4 was measuring the individual's perceived internal control (i.e. attributing the environmental event, in this

instance the trauma event, to themselves, as opposed to external attributions outside one's power, such as luck or fate or other people). When the British trauma survivors had diminished perceived control appraisals, it could be supposed these control appraisals were evaluated as threat appraisals, assessing the transaction between themselves and the environment as a potential source of harm or loss (Folkman, 1984). Further, such threat appraisals have been found in previous research to be followed by the arousal of negative emotions (e.g. anger, fear, anxiety, depression) in those from Western cultures, which must be regulated to preserve a tolerable internal state. Additionally, the cross-cultural literature (Mesquita & Karasawa, 2002; Mesquita & Walker, 2003) has found appraisals of personal responsibility, autonomy and control to be associated with positive affect in independent cultures but not in interdependent cultures. Thus following from a trauma event, diminished person responsibility, autonomy and control are more likely to be associated with negative affect in independent cultures. Subsequently, these negative emotions may prevent the use of effective problem-focused coping (Folkman & Lazarus, 1980). Hence, control appraisals in regards to a traumatic or stressful transaction are potentially viewed as a threat to one's well-being which in turn contribute to pathology because it directs coping towards excessive emotional regulation and diverts it from problem solving (Olff, Langeland, Berthold & Gersons, 2005). In contrast, for those from Asian cultures, given control and personal agency have less emphasis such appraisals may be less related to internal threat to self and thus less accompanied by PTSD symptoms.

Finally, the appraisals of control could have further ramifications within Ehlers and Clark's (2000) model of PTSD, specifically, pertaining to cognitive appraisal domains of control strategies, alienation, mental defeat and permanent change. These four theoretical appraisal domains refer to the trauma exposed individuals' appraisal of their cognitive, emotional and behavioral responses during the traumatic event and appraisals of themselves and of their relationship to others subsequent to the trauma (Jobson, 2009). There is some evidence that these four appraisals operate in PTSD consistently with the appraisal model and it is proposed that one's appraisals of perceived internal control over the event could influence control strategies employed by the individual. For instance, failure to effectively gain control over the intrusions of the trauma memory would confirm the individual's beliefs that these trauma related thoughts or images are indeed a threat to personal

well-being that will lead to long term negative consequences (Ehlers & Clark, 2000). Thus maladaptive control strategies contribute to the maintenance of PTSD by directly producing symptoms and preventing change in the negative appraisals of the trauma and in preventing change in the trauma memory (Brewin & Holmes, 2003). Moreover, lack of personal control could further engender mental defeat due to diminished autonomy, while if lack of personal control leads to inferiority this has associations with an overall feeling of alienation or permanent change following the trauma (Ehlers et al, 1998). However, again these claims may be culturally specific. Jobson and O'Keraney (2009) found that while appraisals of control, mental defeat, permanent change and alienation differentiated between those with and without PTSD from individualistic cultures, the only appraisal differentiating between those with and without PTSD from collectivistic cultures was alienation. Hence, again in this study appraisals of a lack of control and agency did not seem to play a role in PTSD for those from collectivistic cultures, stressing the importance of control for psychological adjustment in Western cultures and highlighting the lessened relevance of control for adjustment for trauma survivors from collectivistic cultures.

Theoretically, these findings also extend Mesquita and Walker's (2003) argument that cultural differences in self-construal moderate the relationship between the way in which individuals appraise situations, events and life encounters and their affective responses to the trauma experience and PTSD. Further, as Sato (2001) proposed, for those with an independent self-construal, poor mental health may result when personal control over their environment is perceived to have diminished and subsequently the self is under threat, which in turn impacts on self-relevant appraisals and its impact of coping strategies, which could turn maladaptive. This in turn support Ehlers and Clark's (2000) appraisal model, namely, trauma appraisals that threaten the self (i.e. by negative autonomous appraisals) may produce a sense of current threat that is accompanied by PTSD symptoms. However, for those with an interdependent self-construal poor mental health does not appear to be related to the perceived level of personal control over the environment. The findings therefore suggest the appraisal model may need to consider and make explicit how cultural differences in self impact on the way in which appraisals may be implicated in the etiology and maintenance of PTSD.

8.3.1.3 Appraisals relating to private, public and communal aspects of self.

In terms of the PTCI, it is a measure of trauma-related self-relevant appraisals pertaining to the world, self and self-blame. Findings demonstrated that such appraisals captured in this measure could be applied to both independent and interdependent cultural groups, thus, suggesting that trauma has universal effects on these post-trauma conceptions. Specifically, regardless of cultural orientation, a trauma impacts on cognitions of one's worldviews, self-views and self-blame. These cognitions can become trauma centered and dysfunctional, leading to an internal (self, self-blame) and external (world) sense of current and continued threat experienced by the trauma exposed individual. This sense of current threat in turn causes maladaptive coping strategies and provokes PTSD symptoms. Thus further demonstrating that appraisals are a key feature of PTSD and supporting Ehlers and Clark's (2000) PTSD model from a cross-cultural perspective. Finally, while some studies have found the self-blame subscale to be lacking in discriminant validity for determining those with PTSD (e.g. Beck et al, 2004), in this thesis support was provided for all subscales of the PTCI for both the British and Asians. This in turn supports the theoretical supposition that these posttraumatic cognitions play a significant role in PTSD for those from individualistic and collectivistic cultures; supporting previous studies that have found negative appraisals and PTSD severity to be highly associated (Beck et al, 2004; Daie-Gabai et al, 2011; Foa et al, 1999).

Additionally, while the PTCI pertains to private self-cognitions following a trauma, the PCSAM, which was also successful in differentiating between those with and without PTSD, captures collective self-cognitions (i.e. public and communal) following a trauma. The PCSAM has a number of theoretical contributions; first, as previously stated it was able to discriminate for both British and Asian trauma survivors those with and without PTSD. This is important theoretically, because it demonstrates the importance of considering public and communal aspects of self and the role these self-appraisals play in PTSD development and maintenance. The PCSAM captures communal self-cognitions based on group membership (e.g. I am a father, mother, husband) and public self-cognitions that pertained to cognitions about how individuals perceive others to view them (e.g. people think I am weak) in relation to the trauma experience (e.g. Communal – Since the event I feel like I am a burden to others, i.e. perceive others to think of them as burdens, refers to family, social, community groups; Public - Since the event I have lost my social role/identity (e.g. as

a parent, husband, wife, at work) again refers to group memberships). From a theoretical standpoint, these self-features are potentially as important to one's psychological adjustment as private aspects of the self (i.e. I am weak, I am a failure) as they too can come under threat following a trauma. Consequently, this again is synonymous with Ehlers and Clark's (2000) cognitive model of PTSD, as these communal and public aspects of self represent internal threats to self (i.e. negative beliefs about self) and illustrate overgeneralized appraisals of danger to the collective self, which in turn represents an ongoing anxiety response to the trauma event after its occurrence. The PCSAM also captures external threat appraisals in its 'beliefs and belonging' subscale, and again this is analogous with Ehlers and Clark's (2000) model denoting external threat to self. Specifically, external threat appraisals here concern the individual's perception of safety and agency (i.e. control and responsibility) and are directed to external factors (i.e. fate, luck) as the causal attributor for the trauma event. However, these external attributors are random, arbitrary and unpredictable, thereby threatening the safety of the self. To conclude, the PCSAM presents alternative appraisals concerning the competence of oneself to be part of the cognitive model put forward by Ehlers and Clark (2000). Specifically, these appraisals are responsible for perceptions of on-going threat experienced by the individual posttrauma.

Cross-cultural theories on the role of the self have proposed that the private self is emphasized more in individualistic cultures than in collectivistic cultures (Hofstede, 1980; Hsy, 1981; 1985) and therefore these individuals have more private self-cognitions and fewer collective self-cognitions. In contrast those from collectivistic cultures would have more collective self-cognitions and fewer private self-cognitions due to the emphasis on the collective self (Trafimow, Triandis & Goto, 1991). PTSD research has focused primarily on private self-cognitions and has demonstrated how they are impacted following a trauma and their subsequent influence on PTSD. The results from Studies 3, 4 and 7 expand on these current theoretical suppositions concerning private and collective aspect of self and on trauma appraisals, as they demonstrate that negative self-appraisals focusing on interdependent type cognitions are as important, as they too play a role in PTSD for both British and Asian cultures. Here we find that collective self-cognitions surrounding communal and public aspects of self are just as vulnerable. Therefore, the dominant self-construal and dominant self-cognitions are no more important than the

secondary self-construal and secondary self-cognitions following a trauma regardless of cultural orientation. Thus both collective and independent self-construal and self-cognitions are just as vulnerable following trauma and have just as much of a detrimental effect for independent cultural groups as they do for collectivistic cultural groups. This in turn is reflective of literature highlighting that individuals have both independent and interdependent self-construal and require both aspects of self to maintain psychological well-being (Markus & Kitayama, 1991; Sato, 2001), and whist culture may determine which self-construal is emphasized, the other should not be relegated to the sidelines, as it too has a significant bearing on posttauma psychological adjustment. Specifically, following a trauma, both self-construal are potentially impacted and damaged, which in turn have negative and detrimental effects for adjustment.

8.3.2 Posttrauma Self-Concept

8.3.2.1 Trauma-centered self-concept. Brewin (2003) asserts individuals with PTSD often have common negative identities that perceive the self as powerless, inferior and futureless; in other words, their self-concept is vulnerable following a trauma. In a similar vein, Berntsen and Rubin (2006; 2007) focus on this vulnerability in self-concept and propose that a trauma can become central to one's self-concept. Here we find that the findings in this thesis support these two suppositions; the self is vulnerable following a trauma and can become trauma-centered regardless of cultural influences. Further, this trauma-centered self has significant associations with negative cognitive appraisals which are evoked due to difficulties in retrieving positive self-identities or negative self-identities being readily reactivated due to the trauma experience, thereby delineating the competition in self-concept retrieval. Therefore, the trauma event can be seen to have power over one's cognitions (views of self and world) and more worryingly, threatening one's sense of self (Brewin, 2003).

Thus there is a universality in the aftermath of trauma, the trauma memory of those with PTSD seems not to align with the desired goals of the self-concept and thus is hard to integrate with previously held assumptions about the self and world. Consequently, the trauma becomes central to people's mental life as they struggle to resolve these discrepancies resulting in a significant amount of time being spent recalling these events and ruminating about them (Brewin, 2011; Horowitz, 1976,

Janoff-Bulman, 1992). As a result, the trauma becomes highly associated with self-concept (Brewin, 2011) and the traumatic event forms a turning point in people's construction of their own identity and a cognitive reference point for the organization of autobiographical knowledge (Berntsen & Rubin, 2006). Therefore, it seems that pan-culturally those with PTSD have more trauma-defined self-concepts than those without PTSD.

8.3.2.2 Self-consistency. Research denotes that there are culture specific differences in self-consistency needs (Suh, 2000). The thesis proposes that self-consistency needs play a central function following a trauma, as one is compelled to make sense of the conflicting self information caused by the event and integrate it with exiting self-concept content. However, cultural differences in self-consistency needs are proposed to impact differently on psychological well-being. This contention was based on the contradictory and changeable nature of the interdependent self-concept (see Chapter 3), and research on naïve dialecticism (see Chapter 3). Therefore, theoretical positions regarding self-discrepancy and self-ambivalence, and the role of culture in these arguments need to be taken into account when considering the influence of trauma on self-concept and its subsequent effect on PTSD.

Self-discrepancy theory (Higgins, 1987, 1999) predicts that ideal and ought discrepancies will cause negative affect in those from Western cultures. Findings were conflicting, as self-discrepancy was related to negative appraisals and PTSD symptoms via appraisals in Study 2 in both Western and Asian trauma survivors, but this however, did not occur in Study 5's nor Study 7's trauma sample of PTSD and no-PTSD trauma survivors. This potentially suggests that in a clinical sample of trauma survivors with PTSD and without PTSD, self-discrepancy theory does not provide a unique variance with the disorder nor does it share variance with appraisals, perhaps implying self-discrepancy variables to be latent when it comes to understanding PTSD etiology. However, Sutherland and Bryant did find it plays a role in PTSD development and/ or maintenance. Their findings supported cognitive models of PTSD, demonstrating an individuals self-appraisals to be largely dominated by negative perceptions (Ehlers & Clark, 2000) and that the trauma is intrinsic to identity (Berntsen, Willert, & Rubin, 2003).

8.3.2.3 Self-ambivalence. Self-ambivalence theory brings to the forefront the conflicting and simultaneous existence of oppositional data (i.e. positive and negative evaluations) of an attitude object and like cognitive dissonance, illustrates dissonance that could arise due to inconsistencies in the content of one's self-concept (Mylvaganam, 2009). Attitudes have been identified to encompass evaluations of other people, places, ideas, beliefs and feelings. In this thesis, attitudes pertained to the self in an effort to add to the theoretical literature on how self-ambivalence in regards to one's self-concept can impact on posttrauma adjustment and pathological disorders such as PTSD. An essential component of ambivalence is the idea that people hold evaluations, which are inconsistent. Self-ambivalence theories illustrate these inconsistencies can relate to the self and can be both negative and positive and can be experienced concurrently, thereby giving rise to self-ambivalence. What is more, attitudes towards self-ambivalence differ across cultures. In Asian cultures, self-ambivalence tends to be tolerated; individuals hold paradoxical information concurrently and are comfortable with such shifting characteristics and inconsistencies (Spencer-Rodgers et al., 2010). Whilst in Western, independent cultures, self-ambivalence is problematic, as the self tries to attain stability and boundaries from which to determine current and future self-evaluations and from which to interpret experiences. Self-ambivalence theory espouses that the more ambivalent one's self-concept, the more dissonance, unpleasantness and discomfort one experiences. However, due to differing self-consistency needs and dialectic traditions of those from Asian cultures, this may not necessarily hold true for trauma survivors from these cultures following a trauma. Therefore, this thesis investigated whether such a tolerance for contradiction and conflicting self-relevant information was also in effect following a trauma. What was found extends the theoretical literature, as British individuals with PTSD had greater ambivalence in their self-concept than trauma survivors without PTSD. However, self-ambivalence did not differentiate between Asian trauma survivors with and without PTSD. This reflects cultural differences in self-consistency needs; those from Asian cultures are more tolerant of ambivalence in their self-concept and consequently ambivalence seems not to be associated with poor psychological adjustment. For those from Western, independent cultures ambivalence potentially negatively impacts one's self-worth following the trauma. It is therefore surmised that those individuals perceive their self-concept/self-representations as internal failings. Moreover, negative/ambivalent

self-concept was found to be related to negative appraisals for both British and Asians, this potentially demonstrates that ambivalence constitutes a predisposition towards maladaptive posttauma appraisals pan-culturally and therefore, ambivalent self-perceptions act as components of the cognitive mechanism related to the disorder (PTSD).

Therefore, findings support self-ambivalence theory's contention that posttrauma ambivalence in self-concept causes dissonance and conflict, which has a detrimental effect on adjustment posttrauma for those from independent cultures as it was found to have overt associations with PTSD. This is not necessarily the case for those from Asian cultures. For those from Asian cultures, as appraisals mediated the relationship between self-ambivalence and PTSD, an indirect effect for the role of self-ambivalence in having an influence on PTSD symptoms is suggested for this cultural group. Thus when it comes to PTSD, ambivalence is not necessarily adaptive in dialectical cultural contexts (Spencer-Rodgers et al., 2009), instead they too reflect the deleterious effect between a conflicted and ambivalent self-concept resulting in negative self appraisals which in turn results in PTSD.

Spencer-Rogers et al. (2009) propose, self-coherence is regarded as a fundamental human motive in Western psychology and according to self-verification theory (Swann et al., 2003); people strive for internal consistency and temporal stability in their thoughts, feelings, and actions. While these qualities may be viewed as normative and desirable in independent cultures and are generally associated with psychological well-being (Suh, 2002), they too appear to play a similar roles albeit indirectly for those from Asian culture. Thus those from Asian cultures were just as motivated to resolve inner conflicts resultant from the trauma as those from individualistic cultures; suggesting those from collectivistic cultures are not more tolerant of inconsistencies and ambivalence resultant from the trauma given their negative influence on the way in which the self and world is appraised posttrauma.

8.3.3 Summary

To conclude, trauma's impact on self-concept is reflective of research, which posits that trauma can become central to one's self-concept, threatens one's self-concept and leads to an increase in PTSD symptom severity. Namely, as Brewin (2003) postulates the trauma event damages the self and affects self-knowledge through the violation of an individual's schemata (Berntsen & Rubin, 2007)

concerning self assumptions and beliefs. This can cause the self to become trauma-centered and/or self-ambivalent. This in turn, acts as highly accessible self-relevant information and a cognitive reference points for the organization of other autobiographical memories (Berntsen & Rubin, 2006, 2007) that reinforce a traumatized or ambivalent self and subsequent negative self-appraisals. Consequently, this can effect future expectations of the self (Berntsen & Rubin, 2007; Smeets et al., 2010) as traumatized, inconsistent, conflicted and ambivalent. Thus the trauma event becomes highly salient to the individual's life script and acts as a major causal event on which to base future interpretations, thereby subverting self-concept and maintaining a traumatized or ambivalent self-concept (Berntsen & Rubin, 2007). To summarize, trauma can become central to self-concept (trauma-centered and self-ambivalent) and inform one's self-concept, in turn this has been found to be positively correlated with negative appraisals and PTSD symptoms for both individualistic and collectivistic cultural groups in either an overt or indirect fashion.

8.3.4 Overall Summary of Theoretical Implications

Overall the findings point to some important cultural considerations both in the etiology of PTSD and in its maintenance, which are not part of current models of PTSD. The results also point to cultural similarities in trauma appraisals for those with PTSD and trauma's impact on self-concept. Thus findings from this thesis both challenge certain aspects of these models to articulate more explicitly how the cultural self aligns with their accounts, in addition to providing support for certain universal features of PTSD outlined in the clinical models of PTSD. However, due to cultural differences that have arisen in this thesis, it is proposed these differences need to be considered in PTSD models and alterations to structural aspects of PTSD models and in aspects and processes that are through to be implicated in the maintenance of PTSD symptoms are needed. Therefore while certain universal features are acknowledged, the thesis proposes that PTSD models need to explicitly consider cultures impact on the self and the cultural self's subsequent impact on processes involved in the development and maintenance of PTSD.

The thesis has now reached a point a point in which it is appropriate to synthesize the findings with current theoretical knowledge about the etiology and maintenance of PTSD, knowledge of cultural differences in self-construal and the conceptual framework outlined in Chapter 4 to produce a working model that offers a

method of making sense of the findings and accounts for the relationship between trauma and culture's impact on the etiology and maintenance of PTSD focusing on appraisals and self-concept. This model is depicted in Figure 11.

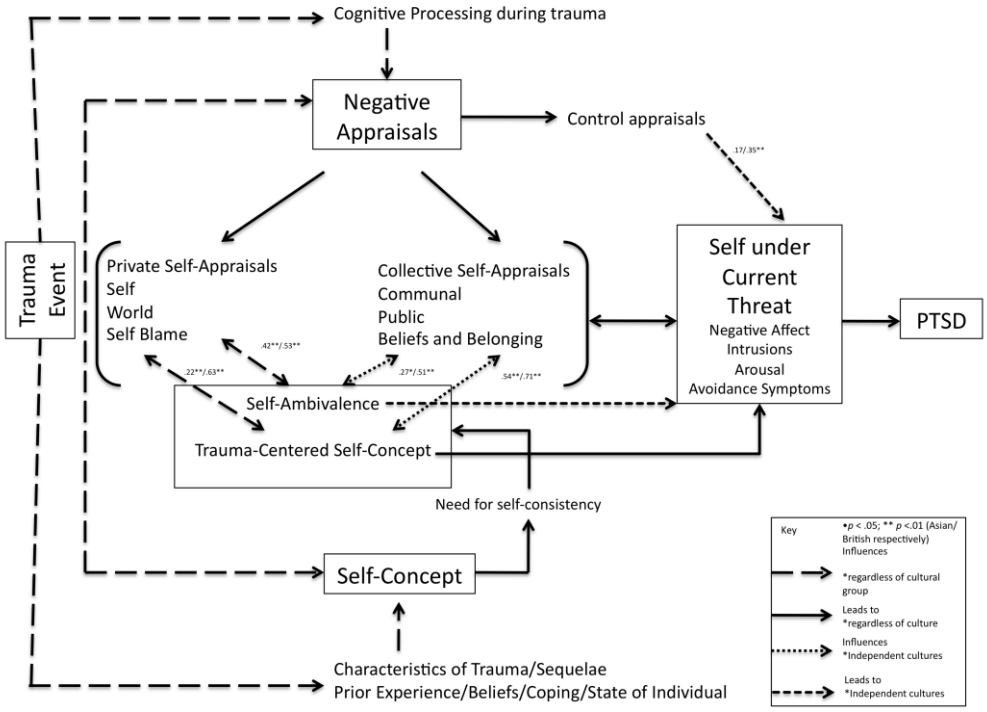

Figure 11. Conceptual Model of the Thesis investigating Cultural Differences in Trauma Appraisals and Implications for the development of PTSD

Figure 11 extends Ehlers and Clark's (2000) cognitive appraisal model by further highlighting the role of appraisals in PTSD, in addition to integrating self-concept as another key feature based on Brewin's (2003) threat to self model and Berntsen and Rubin's (2006, 2007) trauma as central to identity model. At a broad level, it can be seen that the trauma event influences one's cognitive processing, in this instance, one's appraisals of the trauma, which occur both at the time of the trauma event and in its aftermath, and one cognitions relating to the self. Firstly, these trauma appraisals can become negative which subsequently leads to negative private and collective self-appraisals. The model then delineates that both the independent and interdependent self-construal potentially come under attack by the trauma. The resultant dysfunctional private and collective self-appraisals correspond to the

individual perceiving their self to be under threat both internally (e.g. I am weak, I have failed in my role as a father, husband etc) or externally (e.g. the world is a dangerous place, the event happened because of fate, bad luck), demonstrating both internally self-relevant appraisals and externally self-relevant appraisals to be dangerous to the individual regardless of these appraisals arising from their independent or interdependent self-construal. Thus the self is perceived to be under current threat which can lead to negative affect, intrusions of the trauma event and of the self perceived as a failure, in addition to arousal and avoidance symptoms, all of which are features of PTSD. Therefore if the self is perceived to be under threat, this leads to the development of PTSD and if the self is perceived to be under on-going threat it leads to the maintenance of PTSD due to the continued expression of the disorder's symptoms. It is proposed that this occurs regardless of one's cultural orientations. However, an added component, which is not included in Ehlers and Clark's (2000) original model, is the inclusion of the collective self-appraisals reflecting and being influenced by the interdependent self-construal. Thus incorporating the cross-cultural literatures which points to individuals holding both aspects of self and proposing trauma has the potential to disrupt both self-systems and therefore both need to be addressed following trauma.

Secondly, control or agency appraisals are added as an adjunct of the appraisal process. The cross-cultural literature and the thesis' findings highlight agency appraisals and the importance given to them being culturally variable. Therefore it is important to consider this dimension in cognitive models of PTSD, as the evaluation between the self and one's interaction with the environment could be highly salient to the individual, especially those from independent cultures. Thus the agency appraisal pertaining to one's control and potentially one's assumed responsibility for the trauma event can imply the self to be useless and powerless (Brewin, 2003). Thereby again demonstrating the self to be under threat as it has lost its autonomy and is perceived as too weak to have stopped bad things from happening in the present and in the prospective future. Once more this causes negative affect and PTSD symptomatology leading to the development of PTSD and if on-going dysfunctional control appraisals are made, these symptoms will be maintained. However, this seems to have more influence on the independent aspect of self that the interdependent aspect of self, which gives less emphasis and is less psychologically influenced by perceived levels of control in events.

Third, Figure 11 also denotes the symptoms protracted when the 'self is under current threat' to have a reciprocal relationship with collective and private appraisals. Specifically, the more the self feels it is under duress the more dysfunctional its appraisals, which serve to perpetuate the disorder, as the self is appraised and reappraised as powerless, inferior, futureless, vulnerable to further negative events, failing in its social roles, not living up to social and cultural obligations, letting others down and failing in relationships, without the means to defend against such appraisals.

Fourth, the trauma event also influences one's self-concept. Our self-concept is already comprised of information pertaining to past experiences, beliefs and state of the individuals. However, the trauma impacts on this information and on one's coping potential. Thus when the self tries to assimilate and integrate the trauma information, this can be done at the expense of previously held beliefs and assumptions of the self; thereby relegating the self-concept to become negative, trauma-centered or self-ambivalent. In an effort to attain self-consistency, the model illustrates a number of cultural differences and similarities. For instance if one's self-concept becomes trauma-centered due to the catastrophic damage wrought by the trauma, the self is perceived to be under current threat regardless of cultural affiliation, which then leads to experiencing PTSD symptoms. Another aspect of self-concept is that of self-ambivalence, the co-presence of positive and negative self-information. This co-presence of oppositional self-data and attitudes concerning the self does not give rise to self-consistency and its presence is enough for the self to come under direct threat for those form independent cultures and to the subsequent development of PTSD and maintenance if ambivalence is not redressed. However, as the cross-cultural literature denotes, collectivistic groups are more tolerant of contradictions and inconsistencies. This appears to be the case here too; its own self-ambivalence does not appear to be detrimental to those from collectivistic cultures. However, a different picture emerges when self-ambivalence is coupled with appraisals, which the model delineates self-concept to have a reciprocal relationship with. Here we then find that both a trauma-centered self-concept and an ambivalent self-concept are indirectly associated with PTSD development and maintenance regardless of cultural identification. However, this appears to only be the case in regards to private self-cognitions pan-culturally, collective self-cognitions mediates the relationship between distorted self-concept and PTSD only for those from independent cultures. It is not understood why this may be

the case and thus, further research is needed to extrapolate findings and gain clearer understandings as to this occurrence.

Overall, the work does extend theoretical models of PTSD by combining literature on socio-cognitive models of PTSD with the theoretical construct of self-construal and cultures impact on this. While further work is needed, the thesis does point to the usefulness of explicitly integrating the cultural self in PTSD models.

8.4 Clinical Implications

Following on from the results of Studies 1 and 4, it can be asserted that effective treatment for PTSD target the appraisals of trauma (Resick, 2001). The effectiveness of these interventions has been demonstrated in Western cultures (e.g. Basoglu Salcioglu, & Liyanou, 2007; Duffy, Gillespie, & Clark, 2007). However our understanding of interventions for non-Western groups is relatively limited. Therefore, research improving our understanding of the processes involved in PTSD for those from different cultural groups is imperative for generalizing current interventions. Given the focus of effective treatments on appraisals, it is important that clinical practice and research consider the cross-cultural research highlighting the influence of culture on appraisals and associated emotional responses. The findings suggesting many appraisals associated with PTSD are culturally similar and thus, indicate that many of the treatment targets may be generalizable. However, it remains important that clinicians consider how trauma appraisals may challenge cultural norms and the culturally influenced self (including self in relation to others) of a client. Thus, cognitive restructuring in therapy may need to focus on realigning sufferers' beliefs with their culturally determined conceptual self. It may be important to include more social role, group and interpersonal appraisals (and less focus on control) as potential moderators of PTSD within Asian cultures and thus, target these appraisals in treatment. Furthermore, current measures assessing trauma-related appraisals may benefit from including greater focus on appraisals associated with interdependence. The PCSAM could therefore act as a much needed accompaniment measure, due to its focus on interdependent type cognitions and in so doing contribute to a more rounded assessment of dysfunctional trauma appraisals. Finally, the recent changes to the PTSD criteria in DSM-V (APA, 2013) includes negative alterations in cognitions and persistent and distorted blame of self or others which seems to be appropriate cross-culturally as those with PTSD, regardless of cultural background,

had negative cognitions about self (private, public and communal), world, and self-blame.

Further, control appraisals were found to be important, especially for those who had developed PTSD. However, trauma events are, in most instances, random and the individual perceives them to be uncontrollable. This then engenders feelings of hopeless and helplessness. If one is to overcome such feelings, restoring one's sense of control and autonomy is required. This can potentially alleviate PTSD symptomatology. For instance, Resnick, Kilpatrick, Dansky, Saunders, and Best (1993) found that completely uncontrollable events such as natural disasters were less likely to lead to PTSD than traumas inflicted by other people, for instance rape and physical assault. Therefore, it is important to relinquish negative appraisals and reacquire or strengthen other appraisals (i.e. control) if one is to disconfirm their trauma centered beliefs, as this not only has implications for the individual's "here and now" experiences but also their future experiences (i.e. perceived current / on-going threat). However, this only appeared to be important for the British participants and not the Asians, as control did not differentiate between those with and without PTSD in the Asian groups. This is an important finding, as it would appear to be critical to focus on agency appraisals for those from independent cultures due to its strong associations with PTSD and well-being. Lack of control and unpredictability are associated with high levels of fear responses (Foa, Zinbarg & Rothbaum, 1992; O'Donnell et al., 2007) and this is potentially what is happening during the trauma event for the British group, resulting in perceptions of diminished control. Conversely, for those from interdependent cultures, this is potentially not problematic because they have an external locus of control and therefore control appraisals or lack thereof are not perceived to threaten the self. However, for those from collectivistic cultures, relatedness appraisals are important as mentioned above and as highlighted by the PCSAM. Thus a clinical emphasis on relatedness and interpersonal relationships in treatment of maladaption following trauma is needed for those from collectivistic cultures; while emphasis on increasing autonomy in trauma survivors from individualistic cultures is stressed.

Clinical implications that can be drawn from Studies 2 and 5 highlight and emphasize the role of the self (i.e. trauma-identified self, self-discrepancies, negative self appraisals) in PTSD and the importance of considering self-concept in therapeutic interventions. For instance, self-schema work could address trauma-caused

'vulnerable identities' (Brewin & Holmes, 2003), integrating current views of the self (e.g. I am a victim) into existing self-knowledge and the life story, and make sense of the trauma in respect to existing aspects of their self-concept and goals (Hembree & Foa, 2004) and targeting the relationship between appraisals and self-concept. It is worth noting that for only the British group, self-discrepancies were associated with self-blame appraisals. This may be the result of those from individualistic cultures valuing responsibilities of personal control and responsibility more than those from collectivistic cultures (Mesquita & Walker, 2003). Additionally, for the Asian group, ought self-discrepancy scores were also significantly correlated with negative world appraisals (e.g. feelings of alienation, not being able to rely on others, etc.). This may reflect ought self-discrepancy being not living up to others expectations, which may relate to appraisals of alienation (Jobson & O'Kearney, 2009).

Study 3 also brings to light that challenges or perceived threats to one's moral and value beliefs can lead to negative cognitions that can be extremely detrimental to an individual's well-being. For instance believing that one did not act within the cultural mores and values of one's culture could lead to social alienation (Ehlers & Clark, 2000; Ehlers et al., 1998; Jobson, 2009). Therefore, it is important to address and redress these beliefs, as they could potentially alleviate maladaptive symptoms; as research has found the feelings this construct engenders (e.g. helplessness, hopelessness, alienation) are all linked with PTSD. Those from collectivistic type cultures could be more vulnerable to developing feelings of alienation due to the weight put on the importance of the group and significant others. The group potentially acts as a protective feature and offers an important and accessible support system, however, if they feel separate from and outside of their group, not only do they lose this support, but they could lose their sense of self, as their culture, group and social standing within it make up a part of their self-concept and identity. Therefore perceived threats to and perceived attacks on their morals and values could lead to disintegration of their self-concept, leaving them feeling alienated, disaffected and isolated, in addition to perpetuating negative appraisals, all of which are associated with maintaining PTSD.

All the studies point to trauma acting as a catalyst for individuals to think about and question meanings, values and beliefs pertaining to their personal, public and collective selves and their self-functioning following the trauma. The trauma unsurprisingly challenges these core values and beliefs and impacts on their self-

work, safety and meanings associated with life (Orr et al., 2004). As Janoff-Bulman (1992) assert, trauma and subsequent development of PTSD is a result of "the shattering of basic assumptions" concerning the individual and the world. It is an "information shock" which impacts on our self-concept and cognitions pertaining to beliefs, cognitive schemas and attributions. Therefore, the clinical implications that can be derived from these studies demonstrate that these negative and catastrophic self-appraisals render one's self-concept to be traumatized and distorted, to be self-limiting and self-defeating. Subsequently, correcting such negative and dysfunctional appraisals is fundamental to restoring a healthy self-concept. Ager et al (2006) proposes posttraumatic cognitive reframing is necessary as it could correct these key processes and allow for the individual to move forward. Further clinical implications pertaining to Studies 3, 4 and 7, all in reference to the PCSAM and the appraisals as detailed in the PTCI demonstrate that belief rigidity in private, public and communal aspects of self also constitute cognitive risk for PTSD. Therefore, all these self-aspects need to be assessed and addressed therapeutically to arrive at a healthy self-concept through the redressing of these self-appraisals.

8.5 Limitations

The limitations of this thesis will be discussed briefly, as they have already been addressed in length in the studies. The first set of limitations concern the possibility of trauma type moderating the impact of cultural differences on trauma responses. Specifically, future research should clearly match trauma-type across culture. Furthermore, whether a trauma is of individualistic (i.e. car accident) or collectivistic (i.e. tsunami) nature may have influenced findings. Finally, whether the trauma type was interpersonal or not may have influenced findings.

The second set of limitations pertain to PTSD diagnoses affecting relationships between appraisals, self-concept and maladjustment, as all these relationships could just be a feature of having PTSD symptoms. However, partially out PTSD symptoms did bring about similar results.

The third set of limitations pertained to cultural variables. This included, language, as the tasks and SCID-I interviews were all conducted in English. This could have potentially affected task understanding and impacted on findings. Additionally, a significant factor was that all participants were residing in the UK and future work should consider a cross-country study. Further, in regards to the samples

was group heterogeneity (i.e. the Asian group was comprised of several cultural groups). This is keeping with previous studies (Hall et al., 2004; Jobson & O'Kearney, 2009; Wang & Ross, 2005) and while, this approach was selected, as this is the first study to explore these issues, the next step is to use more homogeneous groups

Moreover, while a measure of self-construal was added in Part 3 to strengthen group allocation of participants as being either from individualistic or collectivistic culture, it is also acknowledged that the independent/interdependent construct is only one cultural dimension. Therefore, the cultures comprising these groups (i.e. participants in Studies 4 -7) could vary on other cultural dimensions.

Fourth, the qualitative study could have used participants from individualistic cultures to investigate if findings were comparable. Additionally, the PCSAM is an exploratory measure, confirmatory analyses and further statistical analyses with larger sample sizes (e.g. factor analysis) will need to be conducted to derive more solid basis for interpretation of analyses.

Fifth, future work could use other established measures of self-ambivalence. However, the TST did allow for a free response measure of self-evaluation, thereby circumventing dialectic tendencies of those from collectivistic cultures impact on responses as it may do for standardized measures of investigating self-concept.

Another set of issues pertains to the study being cross-sectional which precludes causal explanations, in addition to sample sizes being modest. Finally, in relation to methodological issues, the hypotheses derived in this thesis were tested using very similar methodology throughout. Thus, findings could also have been reflective of the methodology used, as opposed to cultural differences. However, findings did emerge consistently across tasks suggesting some convergence of findings. Second, the thesis adopted a universalistic approach to cross-cultural research in that it tested the universality of existing psychological theories of trauma.

8.6 Conclusions

To conclude, the research project detailed in this thesis aimed to investigate cultural differences in trauma appraisals and posttrauma self-concept and its implication for the development and maintenance of PTSD. Consequently, based on observations that current socio-cognitive models of PTSD seem to have largely ignored cultural models of self-construal and its associated implications to the

disorder, this thesis synthesized these two separate realms and developed a conceptual framework that transported PTSD models in to the cultural sphere via their existing connections with the self. This conceptual framework was then tested using the seven studies detailed above. The overall results can be concluded as supportive of the conceptual framework. As taken as a whole, the findings relay that there were cultural differences in trauma appraisals, including a significant cultural difference in perceived personal control for those with PTSD compared to trauma survivors without PTSD. The remaining appraisals of those with PTSD, across both cultural groups, tended to be similar. Second, collective self-cognitions also play a significant role in PTSD development and/or maintenance, suggesting both independent and interdependent self-construal are impacted and damaged by trauma. Therefore both independent and interdependent type cognitions need to be taken in to account when assessing maladaptive responses to trauma, specifically PTSD. Third, posttrauma self-concept can become traumatized and trauma-centered. When this occurs there is a pan-cultural relationship to PTSD. Specifically, a trauma-centered self-concept regardless of cultural background is significantly associated with negative cognitive appraisals of the trauma and its sequelae. Subsequently these negative cognitions mediate the relationship between a trauma-centered self-concept and PTSD. Fourth, posttrauma self-concept can also become ambiguous and ambivalent. Self-ambivalence appears to be culturally variant. Specifically those from independent cultures with PTSD had greater self-ambivalence than those from independent cultures without PTSD, however this was not the case for those from collectivistic cultures, suggesting a greater tolerance of ambiguity and contradiction. However, it is also important to examine the indirect relationships self-concept may have to PTSD, in this case, there was an indirect relationship between self-ambivalence and PTSD mediated by appraisals. This is an interesting finding, as previous research points to ambivalence not being a pertinent to maladjustment or damaging well-being in Asian and collectivistic groups, however, when looking at it from an indirect standpoint, it does pose as deleterious for both British and Asians, suggesting ambivalence has an impact on posttrauma self-concept and consequent PTSD symptomatology pan-culturally.

In light of these findings current models of PTSD were critiqued in terms of their cultural flexibility in accounting for cultural variation in self-construal. Additionally, while overall the PTSD models can, and do, account for much of the

phenomena observed in PTSD, and while cultural similarities were found in the thesis pertaining to both trauma appraisals and self-concept, there were a number of significant cultural variations for both these processes, which in turn has an influence on both in the etiology and maintenance of the disorder. Consequently, findings challenge these models to incorporate the manner in which the cultural self aligns with their accounts. As foundations with the cultural self had already been set allowed the conceptual framework to be established as a starting point for further study. Findings from these further studies serve to realize these links with the cultural self to be resolute and in need of articulation in PTSD models. Specifically, they need to be more explicit on the impact of the cultural self on the processes involved in the development and maintenance of PTSD. Further, the thesis also offers guidelines for clinical practice. It was suggested that current elements of cognitive behavioral therapy for PTSD to focus on interdependent and relatedness aspects of self. Consequently expanding its approach to include public and communal aspects of self.

The human response to traumatic stress and PTSD is an important public health concern. It impacts on both the individual and society. This thesis aimed to attend to one of the multi-dimensional domains (i.e. culture) pertaining to PTSD, its concluding point being that while trauma impacts on the affected in varying ways, culture should be included in cognitive models and treatment practices as this will allow for a fuller and richer understanding as to its consequences and how to address them. Cultural similarities were found in the thesis' studies, but so too were cultural distinctions. Hereafter it is advocated that a cultural element should be included into theoretical frameworks as this could allow for a more precise characterization of the nature and range of responses of trauma survivors that could significantly improve treatments directed to them. The thesis provides some light on this area, however, continuation of research is in this domain is required.

8.7 Future Directions

This thesis initiated an exploration into cultural differences in trauma appraisals and posttraumatic self-concept. It is believed to be one of the very few studies exploring trauma appraisals and one of the first studies exploring posttrauma self-concept from a cultural perspective concerning trauma consequences. Its findings therefore are some of the first to break ground in this research area. However, being such a new venture, although clear theoretical and clinical implication emerged, so

too did questions and areas requiring further research. These areas included belief systems and religion, the PCSAM and posttraumatic growth.

Specifically, Study 3 found that cultural variations in self potentially also impact on belief systems and religion. The PCSAM's beliefs and belonging subscale has links with spirituality and a transcendental perspective. However the remaining studies in the thesis did not focus on this aspect, as this was not its focus nor did it have the time or resources to pursue this avenue of inquiry. There has been a renewed interest in this area with calls for mental health practitioners to focus on spiritual issues. However, research in this area has continued to be neglected. It is for that reason the relationship between spirituality and PTSD is not known and should be further researched, especially from a cross-cultural perspective, as this has not previously been done. Study 7 does point toward this being a factor in PTSD development and maintenance as those with PTSD had a significantly greater number of dysfunctional appraisals on this subscale. This area therefore needs further research, perhaps looking into spiritual alienation and its nascent implications for PTSD. In relation to religion, the PCSAM did also touch upon this area (item inclusion concerning karma and fate attribution) however not in any great detail due to time and project constraints. Yet work has found trauma-affected individuals have trouble reconciling their religious beliefs with the trauma event and in instances abandon them (Foy, Drescher, & Watson, 2011). Therefore future work on this area would be beneficial to further understandings on religion and PTSD. Furthermore, the PCSAM needs further expansion and exploration as only exploratory analyses were conducted in this thesis. The results were promising as to the measures validity and reliability; however, further research using this measure would be beneficial as to its applicability to assess for PTSD in traumatized populations.

As a final point, posttraumatic growth was another area that came to attention but was not investigated. It focuses on positive posttraumatic effects, while this thesis focused on the negative posttraumatic consequences. This area also influences treatment plans for individuals with PTSD, as treatment plans could include alterations to perceptions of trauma appraisals, specifically to help individuals perceive the trauma and subsequent appraisals as challenges, turning points or opportunities for growth. It is not proposed that dysfunctional difficulties should be ignored, but that careful consideration should also be given to this area of the trauma

literature due to its potential implications for PTSD. Additionally, to the author's knowledge, no substantial work has been done cross-culturally in this area.

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Appendix A

Ethical Approval - Reference Number 2009/10-029 (for Studies 1 and 2 in Part 1)

Dr Laura Jobson
School of Medicine, Health Policy and Practice
Elizabeth Fry Building
University of East Anglia
NR4 7TJ

Faculty of Medicine and Health Sciences
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11th June 2011

Dear Laura

Cultural Differences in the Autobiographical Memory and Appraisals of Trauma - Reference Number 2009/10-029

Thank you for your e-mail dated 5th July 2011 notifying us of the amendments you would like to make to your above proposal. These have been considered by the Chair of the Faculty Research Ethics Committee and we can now confirm that your amendments have been approved.

Please can you ensure that any further amendments to either the protocol or documents submitted are notified to us in advance, and also that any adverse events which occur during your project are reported to the Committee.

Please can you also arrange to send us a report once your project is completed.

Yours sincerely

Maggie Rhodes
Research Administrator

Cc Alberta Engelbrecht

Appendix B

Ethical Approval - Reference Number 10/H0311/56 (for Study 3 in Part 2)

NHS
National Research Ethics Service
Hertfordshire REC
Victoria House
Capital Park
Fulbourn
Cambridge
CB21 5XB

Telephone: 01223 597733
Facsimile: 01223 597645

22 March 2011

Mrs Alberta Engelbrecht
MPhil/PhD Research Student and Teaching Associate
University of East Anglia
School of Medicine, Health Policy and Practice
University of East Anglia,
Norwich
NR4 7TJ

Dear Mrs Engelbrecht

Study Title: **Investigating Cultural Differences in Trauma Appraisals and Implications for the Posttraumatic Cognitive Inventory**
REC reference number: **10/H0311/56**

Thank you for your letter of 10 January 2011, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Vice-Chair.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

For NHS research sites only, management permission for research ("R&D approval") should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements. Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk.

This Research Ethics Committee is an advisory committee to the East of England Strategic Health Authority
The National Research Ethics Service (NRES) represents the NRES Directorate within the National Patient Safety Agency and Research Ethics Committees in England

Where the only involvement of the NHS organisation is as a Participant Identification Centre (PIC), management permission for research is not required but the R&D office should be notified of the study and agree to the organisation's involvement. Guidance on procedures for PICs is available in IRAS. Further advice should be sought from the R&D office where necessary.

Sponsors are not required to notify the Committee of approvals from host organisations.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	*Version*	*Date*
REC application	IRAS parts A&B 65761/161278/1/59 9	27 October 2010
Investigator CV - Alberta Engelbrecht (CI and Student)		05 November 2010
Investigator CV - Laura Jobson (Academic Supervisor)		05 November 2010
Response to Request for Further Information from Mrs Alberta Engelbrecht and Laura Jobson		10 January 2011
Advertisement - Appendix K	2	10 January 2011
Letter of invitation to participant - Focus Group	2	10 January 2011
Letter of invitation to participant - Appendix A - Focus Group	2	10 January 2011
Letter of invitation to participant - Appendix B - Key Informant Interviews -	2	10 January 2011
Participant Information Sheet: Appendix D	2	10 January 2011
Participant Information Sheet: Appendix C	2	10 January 2011
Participant Consent Form: Appendix E	2	10 January 2011
Participant Consent Form: Appendix F	2	10 January 2011
Questionnaire: Appendix G - PTCI Questionnaire	2	10 January 2010
Interview Schedules/Topic Guides - Focus Group and key Informant Guide	2	10 January 2011
Evidence of insurance or indemnity	Letter from UEA	27 October 2010
Evidence of insurance or indemnity	Zurich Municipal	16 June 2010
Protocol	2	10 January 2011
GP/Consultant Information Sheets - Appendix H	2	10 January 2011
GP/Consultant Information Sheets - Participant GP Form	2	10 January 2011
GP/Consultant Information Sheets - Appendix I - Participant GP Form	2	10 January 2011

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Now that you have completed the application process please visit the National Research Ethics Service website > After Review

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

The attached document *"After ethical review – guidance for researchers"* gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email referencegroup@nres.npsa.nhs.uk.

10/H0311/56	**Please quote this number on all correspondence**

With the Committee's best wishes for the success of this project

Yours sincerely

pp **Dr Sunda Uthayakumar**
Vice-Chair

Email: Anna.Bradnam@eoe.nhs.uk

Encs: "After ethical review – guidance for researchers"

Cc: Dr Laura Jobson (Academic Supervisor)
School of Medicine, Health Policy and Practice
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Miss Tracy Moulton (Sponsor Contact)
Research Enterprise and Engagement
University of East Anglia
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Brenda Jones (NHS R&D Contact)
Norfolk and Waveney Mental Health NHS Foundation Trust
Norfolk and Waveney Mental Health Partnership
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Appendix C

Ethical Approval - Reference Number 12/EE/0194 (for Studies 4 - 7 in Part 3)

NHS
Health Research Authority

NRES Committee East of England - Essex
East of England Rec Office 1
Victoria House
Capital Park
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Cambridge
CB21 5XB

Telephone: 01223 597693
Facsimile: 01223 597645

27 June 2012

Mrs Alberta Engelbrecht
University of East Anglia
Norwich Medical School, Elizabeth Fry Building
Norwich
NR4 7TJ

Dear Mrs Engelbrecht

Study title:	**Investigating Cultural Differences in Appraisals and Identity following Trauma and Implications for Post-trauma Psychological Adjustment**
REC reference:	**12/EE/0194**

Thank you for your letter of 14 June 2012, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation [as revised], subject to the conditions specified below.

Ethical review of research sites

NHS sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Non-NHS sites

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of approvals from host organisations

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	*Version*	*Date*
Advertisement	Version 2	21 May 2012
Covering Letter		21 May 2012
Evidence of insurance or indemnity		28 June 2011
GP/Consultant Information Sheets	Version 2	21 May 2012
Investigator CV		
Letter from Sponsor		04 April 2012
Other: Supervisor C.V Laura Jobson		
Other: Transfer of Registration from Mphil to PHD Degree Programme		24 October 2011
Other: Appendix B Poster	Version 2	21 May 2012
Other: Appendix D GP Form	Version 2	21 May 2012
Other: Appendix G: SCID Answer Sheet	Version 2	21 May 2012
Other: Appendix K: Flyers	Version 2	21 May 2012
Other: Appendix M: Email Address Form	Version 2	21 May 2012
Other: Letter From Dr Peter Langdon		18 May 2012
Other: Appendix N: Debrief Sheet	Version 2	21 May 2012
Participant Consent Form: Appendix L: Consent to Future Research	Version 2	21 May 2012
Participant Consent Form	Version 3.0	14 June 2012
Participant Information Sheet	Version 3.0	14 June 2012
Protocol	Version 2	21 May 2012
Questionnaire: Appendix J: Questionnaire Booklet 2	Version 2	21 May 2012
Questionnaire: Appendix I: Questionnaire Booklet 1	Version 2	21 May 2012
Questionnaire: Appendix H: SCID Question Sheet	Version 2	21 May 2012
REC application		12 April 2012
Response to Request for Further Information		21 May 2012

Response to Request for Further Information		14 June 2012

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document *"After ethical review – guidance for researchers"* gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

Notifying substantial amendments
Adding new sites and investigators
Notification of serious breaches of the protocol
Progress and safety reports
Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

Further information is available at National Research Ethics Service website > After Review

12/EE/0194	**Please quote this number on all correspondence**

With the Committee's best wishes for the success of this project

Yours sincerely

pp
Dr Niki Bannister
Chair

Email: suzanne.emerton@eoe.nhs.uk

Enclosures: "After ethical review – guidance for researchers"

Copy to: Mrs Susan Steel
Dr Bonnie Teague
Mrs Alberta Engelbrecht

Appendix D

Table 12

Initial Template

Code	Themes	Sub-themes Level 1	Sub-themes Level 2
1	Trauma perceptions		
1.1.		Psychological Trauma	
1.2.		Physical Trauma	
1.3.		Reflections of Trauma	
2	Trauma Symptoms		
2.1		Somatic	
2.1.1			Eating
2.1.2			Sleeping
2.2		Emotional	
2.3		Psychological	
2.3.1			Avoidance
2.3.2			Psychological Distress
2.4		Trauma Memory	
2.4.1			Wanting to forget/Avoidance
2.4.2			Intrusive memory
2.5		Adjustment	
2.5.1			Group support
2.5.2			Personal strength
2.5.3			Education
2.5.4			Religion
3	Cultural and social roles		
3.1		Expectations	
3.2		Values/norms	
3.3		Social roles	
3.3.1			Loss of role
3.3.2			Self has failed
4	Traumatized self		

4.1		Attitude change	
4.2		Behavioral change	
4.3		Self-blame	
4.3.1			Anger
4.3.2			Shame
4.3.3			Guilt
4.4		Sacrifice self for group	
5	World		
		Negative world	
		World perceptions stay same	
		External world event causes trauma	
6.	External attribution		
6.1		Fate/luck cause event	
6.2		God's plan/religion	
6.3		Recovery	
7	Future		
7.1		Uncertainty/Changes	
7.1.1			Positive/Negative
7.2		No future	
7.3		Same future	
7.4		Immediate/long term future	
8	Relationships		
8.1		Community/Group	
8.1.1			Protects/Exacerbates problems
8.2		Changes	
8.2.1			Breakdown
8.2.2			Strengthened
8.2.2			Traumatized others
8.3		Stays the same	

Appendix E

Focus Group 1

Interview Key: M = Moderator P1, P2, P3, P4 = Participant Numbers

… = Pauses [Actions]

M: What does trauma mean in your culture?

P2: in Indian culture trauma would be someone's death or some accident, some theft, loss of property, erm, it is a personal one to ask with their views.

P3: Erm, I agree with this, trauma for me is everything that happens which is not happy experience, it could be something really small, it could be mild, or a very severe trauma, it could be really bad like a horrible truck accident or I don't know, abuse, and that would obviously be a serious trauma. 1.2

Social appropriateness/ Cultural appropriateness

P1: I think, erm, I second what they say, that it's a bad event, so you become traumatized in some way. I think my culture, you can't … you start to feel traumatized when you feel like the value you gain in your home, from your family is really conflicted in some way, it seems like not right or not true, its kind of like if you were brought up with certain values and then you broke it, then you start to feel traumatized. So I think when your value, the thing that conflicts with the situation, you start to feel traumatized. 2.2.1

So what I mean like, in Arabic culture, in my culture, I think we have this kind of, its kind of like the whole, so the whole culture has kind of values, religious values and cultural values, so its kind of erm you feel bad about, or traumatized from things when these values are like kind of conflict. 2.2

Cultural expectations/ family unit/ Social and family bonds

P2: Can I make one more point?

M: Yes

P2: It's, in our culture its more family bond, we, we take everyone in our home to be some way, you know we expect them to be good or something, but anyone of those persons who 6.1

are going away from our expectations, then we start to feel for that and the whole family will worry about it, you know, they'll have no direction to go kind of, so even when they try 2.1

something and can't solve it people will worry and will be going through really bad situation and, and that I also think should be considered strongly. Because its more culture, in our culture we have very strong feeling for the, you know all people, the family members, my sister.

2.1

Cultural life scripts

P1: I think it depends on expectation, what I mean is you have expectation to live up to, to love and erm like to see your parent die before you, so it's a real trauma if for some reason the parent dies, or if you have children, to like see them grow up, get married and it could be trauma if your children die or so its kind of expectations, so you expect to er study certain degree but once you cannot do it, you choose that but you cannot do it, it is your expectation that you have in certain context.

2.3

Intensely emotional, can get violent? Feel there is a betrayal of expectations

P2: Yes lets say for example that my brother is going the wrong way, he's trying to do something that's just wrong, and you try to correct him and he's arrogant enough to not listen, and you don't know what to do, and you can probably hit him very badly so he may die, you get so angry, because its not that I want to hit him but you really feel that, you really want him to be on the right track or something like that.

6.1.2

P1: And I think going back to the expectations, its not only your own expectations but it what other people expect from you.

2.1

P2 & P3: Yes, that is true.

Cultural life scripts/ expectations/ social roles / failure in roles not acceptable

P3: What I mean erm, in pregnancy, there is that this depression the woman has after giving birth, I don't think its kind of recognized or kind of common in my country cause its kind of you're expected to have kind of, you get married, er, you start to get pregnant and have children and then its, you start to have the cycle of taking care of them, so its kind of you're expected to be erm, so erm, so other people's expectations, like if someone lose, like if you find that there was a birth that you lose, the father is expected to strong so its kind of if he gets traumatized its not recognized in our culture, I think the expectations are from the usual kind of the people around you.

2.3

M: Ok and do you have anything to add? (Directed to P4)

Avoidance

P4: Really, in my culture we not count trauma.

1.1.2

Psychological distress mentioned but not recognized. not supported. Trauma = Physical injury

M: Ok is it not talked about much?

P4: It's not much about the mental hurt, it is about the physical hurt, so it's a little confusing, I can't, I mean, it's not a trauma it's just … 1.1.2

M: So in your culture trauma is a physical injury? 1.2

P4: Yes

M: And it's not a mental injury?

P4: Yes yes, and the hurt, well we call the, mental trauma is a kind of trauma, just something you have to hold. 1.1.1

M: Ok, so the mental trauma from an event is something the individuals have to deal with on their own?

P4: Yes, yes, it's not how to say, it's not, not a kind of hurt, it's just erm it's not a kind of hurt I think in my opinion 1.1.2

Social expectations, family expectations on coping. Recovery – by adhering to social conventions

M: Ok, and how about in your culture (directed towards P3)

P3: I never thought of these things but when I heard the others talking about the family pressure sometimes and I, the expectations from the society on you, on the individual, I think it is to some extent in my country as well, which is like, but erm, I don't think its that strong. I didn't really expect these kinds of pressures but erm I think it is there, erm you are expected to behave in some way and you sometimes are afraid of doing something different from what your parents want you to do. Its like, its just, trauma seems like something that conflicts your opinion as opposed to your parents opinions. Does this make sense? 2.1

Trauma impacts family – intrusions, arousal - worry

M: Yes

P2: If I can … in our case it could so happen in such a situation where knowing the family relationship its happening bad, in terms of family thinking, it may be er that bad also for the family, their expectations are not met and its really going out of the way then it could so happen that the family will do anything to help about it, you know, like maybe the parents will realize they can't do anything, but thinking about it, they're not sleeping, they have increase in worrying about the situation. Those things also happens lots, it happens very much in our culture. I've seen it many times, yes, this is very true.

2.1

6.1.1

1.2.1.2

6.2.3

Cultural values/ meanings influences a person's or group's interpretations

P1: I think with bad and good, this is where culture because it depend totally in culture, I mean how you define your losses or your gain based on your value or how much you value something, so good and bad depend on the value of the culture or the context, so, erm, so it could be, what I mean, for some family, her son to smoke or do drugs or to run with someone and get married, for some countries or other families, they have a different standard or value it would be kind of devastating for the family and the whole foundation of the family, so yes, good and bad these definition of things really affect how much an event can be seen as good and bad and how much of the good affects the person. 2.2, 6.2.3

Trauma impacts the individual and so impact s the family, support system can become traumatized, support can help or exacerbate

M: Ok, so would it be fair to say that even if you as an individual had a trauma, it wouldn't just stay with you, it would also affect your families, because they feel very much a part of the entire process?

P2 & P1: Yes yes yes

P1: Yes because in my culture its kind of believed its related to all the family, in kind of, in not kind of involved in our life, but based on the culture we don't like, if you have problem its normal to go and share with your family, and they can support you financially or with advice, so its kind of if you have problem I think somehow its good but if you are taking this problem with you and reflecting it on other people. 3.1

M: Do you find it helpful that you can share this experience?

P1: Its good and bad in the same way. It's good because erm you are supported in some way and sometimes you are never alone, but its bad because as I like, some, like … yes its bad because its kind of like, having a lot of people in the problem could complicate it, it in some way, especially like, there is some family in my country where, in my family, my parents, but there is other family that have uncles and cousins and things so instead of having problem that is kind of small, you talk about it and have a really big problem with everyone. 6.1.1, 6.1.2

Support from othere sources, friends or self-reliance – coping alone

M: Ok, so the trauma is sort of exacerbates and spreads?

P2: Yes exactly

P4: I would say in my culture, we don't say this to parents, because I would share it with my friends or keep it with myself and because we think erm if we work in other country or other city they may not tell the things to their parents, they always put on smile, happy face, 6.1, 1.5.2

Don't want to burden others/ support wont understand so avoid or ignore problem

especially now China has very strict, every family has only one child, so actually they will not say that to their parents.

3.4

M: Ok so you would not tell your family?

P4: Yes for two reasons, first of all its er don't want the parents to worry about and the second is that you think the parent cannot understand why we are unhappy, then you think I ignore that or you can do better, but actually we don't think they can understand that.

1.4.1

M: Ok so you are saying that you would share a traumatic experience with friends, so there is a different support system in place?

P4: Yes, because they can understand why we are unhappy, our parents always think it's our problem, other's problem.

Cultural framework for support

P1: Which is different, because in my culture you parents, still very, even if you married and have your own family, still very kind of, you're … they are there for you and its even still their business, any problem you would have and like this is something like they do to us and I would do to my children because this is the way you do things.

P2: This is the same in my culture

P3: When I think about it I remember the older generations which is my grandma which was at the time when socialism was still there, my grandparents tend to care more for what their children do, which is my parents, so they tend to be more involved and even try to erm try to make decisions almost on their children's behalf, they children can be 40 50 years old but still want to be really involved and want to just be controlled sometimes, not always but sometimes, its definitely similar but erm in younger generations it is somehow changing, although for some people its still there, but not as strong as in other countries but there is a kind of will to control to some extent, but its not too strong.

6.1.1

M: OK, if I could move on to the next question, what typical thoughts do you think somebody in your particular cultures would have after having been through a traumatic experience?

P2: It depends on the outcome of the trauma, most of the time. Sometime if the trauma is bad or sometime then it takes some time for them to really come back, it really can go on for

Trauma is enduring/ social and cultural appropriateness, failure is detrimental to family. Public self or family image under scrutiny by community – huge pressure on individuals

many months, it takes some months but it depends on the individual's strength to come to turns with their pain and the significance of the trauma again. Sometimes, for example, a loss of something, such as a child, then the loss won't take that long because they know they can have another child. But if its their son or daughter has run away with someone then that stays forever, where just thinking about it they can get suicidal, because something has really happened that has humiliated the family and they don't want to face society, there are cases like that. 1.4.4 / 1.4.2 – 3.2 / 2 & 6.2.1

M: Ok so the trauma can stay with a person as a life long

P2: yes but there are some people that can accept that and start anew, but it's very bad, most will have it difficult. 1.4.4

M: Ok so if the individual had eloped or run off this affects the family strongly?

P2: Yes yes, it will affect a lot but if the girl that has run off comes back some families will accept it, because they want their kid to be good, you know, but some families go to the extent where they will kill both of them. 6.1

City/village = different norms and values systems in place

M: ok so it can be very extreme

P2: yes, but I can say that its in 60-40% in villages, India has more villages than cities, in villages this is think of more, in cities its considered more normal, people do accept, they accept that it is fine. 2.1 & 2.2

Education helps with reasoning through the trauma, helps with adjustment

M: So even within a country and culture it also depends on your location?

P2: Yes, like how much their exposure is to education, because if someone is really educated, he is aware of the world and things happening around and what is really good and bad, and they can really think well, ok, I mean I am going more towards the trauma of the family, but if it is an accident er those things I mean someone's death, within a week they come back because they know they cant get them back and they're seen to know these kind of trauma can happen, but if its unexpected then it can prolong it for us. 7 / 1.5.3 / 1.1.4

M: Does anyone have anything else to add?

Self made up of what others think

P1: I think someone's thoughts after trauma, depending on er how tense, feeling of loss you have after trauma, depend maybe how this event er is from the culture values and your family values so erm, its kind of like divorce in some families is er its accepted in some way but in 3.4.1

other families its kind of a really standing challenge for the whole family, and for some family erm if someone left with another guy or something its somehow accepted but in the family it would mean all the girls would not have so much scope for them. So if the trauma falls on you it still affects your family. 6.2

M: What are your thoughts?

Lessons learnt from trauma/ posttraumatic growth

P4: Yes its almost the same but one more point is that we really focus on what we gain from the trauma, maybe people find they, find something they did not know before, some valuable thing they did not know before, like with their family relationship, so … actually people find they gain more out of the trauma. 1.5.6

M: ok so you are looking for the positive that happened?

P4: Yes. The trauma is finished, I mean the whole thing is done, finished, then you think well, what good I learn from that, like that, yes.

M: ok and what about yourself? (Directed at P3)

Religion

P3: It depends, er, it's kind of opposite it's on individuals and also where they grow up, like the others said, in my country there is erm, it depends, in the capital it is quite westernized many things don't matter, you can do what you want, in the more traditional parts of Slovakia, it does matter, the people in the village would talk about it, take it in a bad way. It depends on the family a lot and also whether they are Christian or not. 4.2.3.1

M: Can you expand on that?

P3: Being Christian can make you think about it differently from others and because Christianity is really common in Slovakia now.

Always thinking about family and not the self

M: Ok, so we're talked quite a lot about how the family would react to a traumatic event. What typically thoughts do you think a person who's had the trauma, be it pregnancy, divorce, accident or whatever is considered traumatic within the culture, what do you think their typical thoughts would be?

P2: But you must tell your family, its like you're not really caring for your family like they are caring for you, for example if I do not share any traumatic experience with my family, they would be really mad that I didn't do it, I'm expected to do that, because of something 3.4.1

good happened and then something bad, they would have felt like they could have helped me, mentally they would have supported me. 3.4.1

M: So you would be alienating your family if you didn't share this with them?
P2: yes, yes, they share your experiences, if I am happy they are happy, if I am sad they also feel sad, so that's how you usually handle it, not alone. 6.1.1

M: OK so would your thoughts include how this is going to affect your family?
P2: Yes

M: What typical thoughts would you have? (Directed to P4)
P4: … … …

M: So if you were going through a physical or mental trauma, what typical thoughts do you think somebody would have about it?
P4: Erm if fate …

M: Fate?
P4: yeah, sometimes we think fate, and there was a reason so … it must be something you had to experience/ 4.2.1

Fate – out of your control

P1: I think how personally er I think after the trauma you feel, sometimes, it not like … with religion, at the end in my culture my religion says that everything has happened is a plan from god and its kind of a test, god might think it's a test. 4.3.2.1

How much you loss and the trauma is kind of depend how you move forward after this trauma, and how much like … how much you can remind this fact or these things, maybe like praying, or giving, when you want something you give money to poor people, its kind of charity, so you know, like, this depend on person, that some people could like er could have this on their mind and this is where they move forward from their loss, but some people will then have this on their mind, of this is fate, god take my son for some reason, like it didn't make, I think really my cultures religious, religion is kind of er, erm a factor in how people deal or sort or accept erm trauma things. 4.2

1.5

Religion/prayer/God – recovery, moving forward

M: ok and do you think this helps them deal with things and move forward from the trauma?

P1: Yes I do, like in my religion and country, you give money and ask god for forgiveness or mercy and its like this is test, this is a test, god tests us to see how we will do this, so it, if you have this thought, you would, you would act differently from certain person who think that this happened, I have a bad life, in Islam there is no life, everything it has a plan. If you in this kind of trauma do not have this thought I think you will react differently. 4.2.2 4.2.3.1

P2: I just have one more point to make, in our culture sometimes when a trauma happens, when socially people are recognizing you and what this person has gone through, its very obvious the person wants to leave that place. If the person is in one place the trauma happens, it's quite common that people move to a different place, so that you can lead a quiet life, because the people surrounding them doesn't know, they also can have some time to get the thing out of their mind. That's very, very often. In any kind of trauma situation. They would like to get away from that place and see if they kind of calm down with the family, they want to lead a normal life, they may not come out for some time, to mingle with anybody outside. Maybe any situation in our culture they try to stay away from general society, even who they know very well, so that can work on it.

Avoidance – no reminders, people, places

P1: I think this is the main difference between our culture, because there is really wide recognition of everybody around you, what I mean, you have something to say about your neighbour, about your friend, about your family, when you hear, like you can hear what ever you want, do anything in your home, but on our culture, the, this kind of being by yourself or not matter other people's business is not the case; and that can sometimes make trauma, this could make the trauma bigger and go longer and longer, because in our culture, you have a retribution for everything, we don't have this mentality of don't matter anything is not of your business, its kind of like you recognize everyone around you. 1.1.4

Family/community does not allow avoidance to take place sometime

M: So you're saying you are very connected with those around you?

P2: I think it is so strong, and if something goes really bad, they start in the same way, talking about you. 3.4.1

Interconnectedness with family

P1: And this would help as well as making you depressed even more. 6.1.2

Support – not from community/ self-reliance

P2: Yes

P3: It's not the same, in my culture its not the same, if something happened, if you live in a village then er its really, they may gossip about it, talk about it, but they wont come and help you. They might offer but it depends on relationships, talk about it and other things, erm if a trauma happens to a person that person often ruminate about it and amount of problems because they might not want to talk about it with their family and friends. But it's not so much in my culture and if they do it might not help as much because it's not so connected. 6.1.2

But different things happen to different people and they can take it well, it was meant to happen, I will try to live with it. 1.5.2

Avoidance/ very emotional/ high psychological distress = because others know about your trauma/business – public image is damaged, causes internal strife

P2: In our culture I think to add on, I've known a person who was very silent and he had a lot of debts, which he couldn't pay, and one person, I mean the one who had given him money, told this in front of everyone and he got suicidal and I think he died. So yeah because he couldn't live with it, he couldn't face the people he told in front of so many people about his loss. It is so strong. 1.4

M: So it has a very high mental impact?

P2: Yes, yes this is it

Mental illness hidden – support system is not longer as strong

P1: There is all the gossip, sometimes if there is a big issue we will hide it even from close family, if you have kind of a mental illness, say child, you would take care of the child but you wouldn't tell anyone about it, the same if you had someone who had depression, things you have you would not tell.

M: Ok so a mental illness would be treated differently to someone who suffered a physical trauma.

P1 & P2 & P3: Yes

P3: Yes I just wanted to say that mental illness in my country is still stigmatized, and seeing a psychologist or psychiatrist for example depression is ok over here in England but its still stigmatized in my country. 1.1.3

P1: And these things you wouldn't talk about it in public, or if you have an appointment you just lie and say that you are going somewhere. You wouldn't talk about, even for very close, like you would maybe discuss it with you kind of very close family like parents, sister, those kind, because you are in the same house with them, but with your uncle or cousin you wouldn't share it. The family tends to really hide it and never share it, you never talk about it. — 1.1.3

Support yourself, wont burden others even at expense of self

M: And is this similar in your culture? (Directed towards P4)

P4: Yes, er we do not share with other people I think other people cannot give the answer you want and er only yourself can put yourself forward other people cannot understand your condition. We deal with it ourselves. Just … when it happen a long time the impact is reduced but just deal with ourselves will not burden, sometimes we will share this with old people not our parents but our grandparents, but it's not very normal. — 1.5.2 / 3.4

Social conventions – should adhere to them

M: ok so its something you deal with very much yourself?

P4: Yeah

M: What typical thoughts do you think people will have after a trauma about themselves?

P2: I think they will just stick to how they are, how they should be, just stick to it — 1.5.7

God will support me, because cannot talk to others

P1: You never stop think about it, it's not recognized I think, like you would sometimes ask god, like erm, I'm not feeling ready, like I cannot see, like you would think about any health issue part, you wouldn't sit and think since this is happened I'm not thinking really, I'm not spending time with my family, I'm just grieving most of the time, I'm just avoiding, just feeling, you never stop to say all these things to recognize that these are the symptoms an you should see someone. — 1.3 / 1.4.1

Family vs professional help

P2: It's very rare I think to see a physician I think, in this situation really, I think if they have a good family it helps them a lot, for a person to come and talk about things like posttraumatic situation, they're very sensible about it, they've had this experience and they will take their son or daughter, or if the husband is in a bad situation then the wife would help him come back from the bad situation. Those kinds of things do happen, very rarely going to see a psychiatrist or something. — 1.5.5 / 1.5.1

Self-blame – values influences perception which influences coping. Religion influences coping. Don't want to seek help if self-blame – embarrassed? Shameful? Guilty?

P1: I'm thinking about your question, when everything, when something happen that seems trauma, the first thing would be self-blame, like I brought this to myself, er, erm, this is not right, this happened because I wasn't good enough, and I think maybe its kind of confident, like when someone, again it depend on your values and how you deal with your loss and your religion and your perception on how to deal. I think in some way people think this happened in some way because I didn't do things, I haven't done things as it should have been done; and I don't think someone who is feeling like this would talk about it or seek for help, because this is my fault and I am dealing with the consequence.

3.3

2.3.2

4.2.3.1

M: Ok, and would you say the same? (Directed toward P4)

P4: It depends, I mean if the trauma is an accident, or cancer or illness, I mean if the people who hurt you did not mean to hurt you then you admit that, nothing you will do it will not influence others, but if a terrible breakup with girlfriend or boyfriend then I think, I mean its … at this time, you may blame yourself, you may erm show some other kind of guise, so it depends on the condition.

3.3

God/religion/fate – to alleviate trauma - coping

P2: I think er, the person will also think er, as she said [acknowledges P3 & P4], gods, you know something like fate, most often in our culture, in the Hindu religion they try to er, do certain curses, ceremonies for gods, they go on for some time and very regularly, and they carry pictures which is to bring hope, those kind of things are very common after a traumatic situation. They want to, you cannot, in our culture, our religion, they very much, these kind of what you call puja's are religious ceremonies, they are very common, which take place after this traumatic event, to kind of, they believe that something really happened from us, and we are really sorry, maybe we are accepting it, we're praying god to give more strength to us, that really happens, and after this cleans your spirit, we could see there is a change in their mental belief that something is really, there's some peace that will come to us because we prayed to god, that belief comes to people, and they kind of come to normal situation after that ceremony, that's very common, in our religion.

4.3.2.1

1.5.4

M: Ok and you're saying this has a positive impact?

P2: Yes, yes, often it is the thing that happens. Often we go to religious places, Hindu's especially, and they try to visit that place and come back, things that I'm praying god, he will do something good for me because if something really bad happened and the things that is I did something wrong and the effect of this they try to change.

M: Ok, so the way they think afterwards changes, so they may have blamed themselves for the event that happened but after they go through a religious ceremony like puja, the way they feel and think about what happened and their perceptions about themselves change?

P2: [nodding agreement]

P1: Yes because I think in, which is similar to my culture, people tend to look for support, like, this situation is not people who will help you, they will look for support, so for like a child you will pray and it will come through pray, so after this traumatic experience they will pray to god.

1.5.4

M: So this is where they draw their strength from to deal with the situation?

P2 & P1: Yes, yes

P3: It always depends; our culture is changing, and has been changing for 20 years now. But er, different people, like I said in our culture also, people will go to religious places to pray if something happened to them, or if some, or if nothing happened they will still go and pray for someone else or their family in general; but after a trauma I would say they go either to this places or to church or maybe talk to the priest but I would also say they would go to the doctor, er, I don't know how common this is but erm as I said before it is stigmatized but if people don't see other options they do go to a doctor.

1.5.5

M: Ok if we could move on to the next question, what typical thoughts do you think people have about the world in which they live after a trauma?

P3: I think they might feel more threatened.

4.1.1

P1: After a trauma I think you start to look back at everything you took as advantage, as part of your culture or bond.

P2: I think the community after an event, do you mean to say right after it all or after some time?

6.1

M: Both if you could; their immediate reaction and after a certain amount of time?

World is a dangerous place/others cannot be trusted

P2: Yes, I would say immediately its about the community, it's the first, everybody I have seen they bare all to the community in the first place, then gradually, they went away with the people and they always have the feeling that someone could come for them and they'll get away with that. But most often they get over it and start over again and get back to normal. During a bad period they may think the same stuff is happening and the trauma, things like that but gradually that reduces and people come back to normal and people treat them as normal. 6.1 4.1.4 1.5.2

P4: I don't see the question?

M: What thoughts would people have after the trauma about the world?

P4: Like change?

M: Yes it could be about change; would you think the individual's view of the world would change after the trauma?

Cleansing experience – return to normal – in the past

P4: Yes, for example, in New Year it's very serious in China. Yeah erm we try to create a cleaning environment so for anything bad, when this is finished, all is returned to normal, everything changed. 4.2.3.1

M: So it's a cleansing ritual?

P4: Yes so its, how to say, closure, so I think Chinese people cannot remember something that's its past things. 1.6.2

M: Ok so they leave the traumatic events in the past?

P4: Yes

M: And what typical thoughts do you think people have about their future after a trauma?

Very emotional – paralyzing. Think about immediate future

P1: I think when something happened, when something makes your paralyzed and you face things like experience these bad feelings, then you, you try to move forward but at the time, I think someone is just paralyzed trying to deal with this feeling. I don't think you start to think about the future. Maybe to think about the solution to what's next after what has happened, but not what's the future as the future. 1.3 5.4

Avoidance/long-term future not thought about. Karma – trying to make sense of experience Attitude change for worldview, self-view

M: So they would be thinking about the immediate next step? Would the person be seen as living very much in the present?

P1 & P2: Yes

P2: They just want to get through the trauma; in Indian culture they want to really think of anything except that moment. Erm, just to get over that moment, they don't go around really thinking about the future. They think about karma and how this came to happen. 1.4.1 4.2.3.1

P4: If the trauma is a hard experience it may change their attitude towards life, so think, er, I must take time to enjoy my life, not spend or waste my time out walking or something, so maybe they will change their attitude, I think it depends on their extent of the experience, how bad they had to face. 3.3

P2: And I think this is one of the reasons why they are traumatized, because they are worried about their future. So after the trauma they are worried about what could happen to me, but they do not have answer, normally, they are worried because of the future, but still they won't plan anything. They'll be too much worried about the world for some time. 5.1

M: Ok so there isn't very much of an attitude change toward their future?

P2: It depends very much on the family support, for example most of the cases I see for the family, if there is support, they will come back to normal life, and if for example one person feels completely differently after the trauma, obviously that person changes, but if there's a lot of support for the person people understand why that happened and they want them to come back. So the family help in how the person changes or not changes after the trauma, the traumatic event. 5.3 3.1

P1: After trauma I think you change your attitude, like to be closer to your family, to be good, and normally being good by being more religious, good by enjoying your life, its kind of this things that we are to be good thing and you hold life and maybe you strive to change your attitude to this way of life to maybe bring peace to yourself, you would change your attitude in a way that brings you closer to what you think is right. 3.2 1.5.7

M: So the cultural values you mentioned earlier come in to inform how you should behave?

P1: Maybe more of a social norm, its your self norms and values, maybe somehow you feel this thing has happened to me because I am bad and has happened to me for some reason, this kind of attitude to your self blame, and this kind of attitude to the trauma to be good, because it kind of resulted because you did something wrong. I think you would feel some peace if you did the right thing. 3.3

P3: I agree with that people change after trauma, they change their view on the world after trauma, but I don't think they are immediately, but after some time and it depends on the type of trauma, and really personal or er … accident … er something really different, it has a 4.4.1

different impact on the person, I don't know how early after the trauma they think about the future, because obviously immediately after they think how to deal with it now and the future comes to mind later. 5.4

… … …

M: Ok, so we've talked about the family and friends, I now want to ask you what typical thoughts do you think people have about their relationships with others after a trauma?

P2: It depends on the trauma I think, it's something which the whole family it may change, some trauma is very personal for example and lasts, maybe some physical accident, so yes the relations, so they way the person acts can change and they can go more into themselves and can be very different. If there's a chance for them to come back then their attitude don't change because people accept them, but if its something really personal then it can have strong impact, I think they will change. 3.1

P1: I think with the dynamic you would include yourself and limit your relations with just close people at this stage, and maybe your best friend, and even with your best friend, how much you can let them be involved can depend on how much its accepted by your family to let this issue out of your family. So yes the dynamic can change, because if it's very personal for the family, even if you had a best friend you would not share. 6.2

P3: For us its not about sharing with people, I think that every person climbs into himself or herself and they are more likely to feel they don't want to talk to other and feel detached from people even those who are close. But maybe they meet people who are close that they may share some things with, even if they are afraid, when I think about it they still need someone

Relationships are dynamic and subject to change
The self can become more introverted – separate from others

to share it with, maybe not whole family or all close friends but just one. But er, I think it definitively changes things. 6.2

P4: Yes, er it changes, er, in China people tend to erm, help some people who experience the trauma, but after those people have, I mean, gave up, er tell of their condition. 6.2

M: OK and lastly, how do you think these thoughts influence adjustment?

P2: I think family plays a very big role in Indian culture for any person that has experienced a trauma and how sensible people are, how educated they are, how experience they are, for example how experienced people are with these things can help with supporting them better than if they are alone or with someone who is not so experienced with dealing with this situations. Some people who are very experienced with these things, they can help them come back to normal life. Especially in cities if they are living, I don't think there will be a lot of support for them to come back to normal life, in cities it's most like they live by themselves, people around don't care. But if they live in medium or small places people tend to have more interactions, they relationships with people are also good to come back and the community can help sometimes. More often you see in Indian people they help people come out of it. 1.5.1 1.5.3 1.5.1

P1: I think relations and social expectations is the most things that could affect you and how you will deal with the trauma or proceed after the trauma. 2.1

M: Does anyone else have anything else to add?

[All shake heads]

M: Ok, if I could ask you to please complete this questionnaire, please read through the instructions and complete in your own time, if anything is unclear please ask me. Thank you.

[Everyone completes questionnaires]

M: Could I just ask if anyone has any initial thoughts on the items, did you think they were appropriate?

P2: I think it depends on how long after the trauma you ask these; and I think these are all very negative, I mean would you really ask these to someone who has just had a trauma? I

think it would remind them and build more a bad feeling in them instead of a sense of help because they have come here searching for help, so you should not ask questions that will bring back the bad feeling, that is what I think. If they share their sad sorrow with someone it should reduce their bad feelings, it would be more understanding to positively tackle it, instead of making them feel you are really a bad person, because if you read some of the questions you will really feel like you are bad.

P1: I think it should include items for what you have learned from this experience, for your personality after the trauma and … items on what is their thought and what's next for future plans or something.

P4: I think the first one or two pages are a little negative, I think more positive questions are needed.

P3: I think the first 2 pages were quite harsh and in my culture they might be like taken aback – why are you asking me – you might think these things but everybody will be surprised to be asked them. I understand you need to ask questions to see if something is PTSD or not, but maybe the wording can be different.

1.5.6

8.1

M: Ok so to sum up then, not all the questions were as appropriate as you would like, perhaps they shouldn't be so confronting and so should be worded in a way that people would respond to better.

P2 & P3: Yes yes [P1 and P4 nod].

M: Thank you very much for taking part.

Appendix F

Focus Group 2

Interview Key: M = Moderator P5, P6, P7, P8 = Participant Numbers

… = Pauses [Actions]

Psychological or mental trauma
Very emotional

M: What does trauma mean in your culture?

P5: Trauma specifically, well, trauma can be caused by anything, you know, that alleges distress. Like monsters or something, you know, like tragic things that happen to your family or friends, like that. Yeah, you know, kind of like a minor matter, or a mental imbalance, I believe it is trauma.

1.4

P6: Yes something which gives you a strong feeling like sadness or anger, strong feelings like that.

1.3

M: So are you saying it is only a trauma if it elicits a great deal of emotion?

Trauma memory endures

P6: Yes and you need to feel and remember hat for a long period of time.

1.2

P7: Yes it can also be like an injury or something like, you know, like you met with some kind of accident, you would be scared for some months or some years. Like when I met with an accident I was scared to travel in a car or something you know, an experience like that. It stays with you. It effects how you think about things afterwards.

1.4.4

[All participants nodding]

Impacts on future behavior

P8: Yes on how you move forward.

P5: Yes, yeah, on how you move forward.

P8: Erm, what I think about trauma, it's like some accident that happens to you, some kind of physical accident, it can also relate to the stress you feel in your job. I had the former experience, when I was younger I had a bike accident and now I have a fear of driving a bike.

1.1.4

P5: There are also things that happen in your childhood that may affect you later, even if it's minor. I was really afraid of dogs for a long time, because I was attacked by a dog when I was a child. I think recently when I came to this country, all the dogs were well trained, unlike in India and I am kind of ok with it now.

M: So to summarize then, the trauma event that happens, whether in adulthood or childhood stays with the person and has a long-term impact on them and possibly how they behave because of that event or experience?

P5: Yes I believe that is something happens in childhood that may last a long time, I think.

1.1.4

Change mind-set – helps adjustment

P6: But I think if you can change the mind-set of someone, so if someone helps you get out of it, there will be some kind of shift in your mind, yes, so you need mental support. [Twists his hands] I had a, me and my sister, it was an accident, she passed away when I was 6 years old, it was an accidental death like we were playing near a water tank and erm in the evening erm err our parents come and we, erm, err, we were playing with our cousins and me and my sister and err in the evening my mum called us for snacks so we all went but we didn't check whether everyone came or not with us and when we went back she fell in the water tank and erm we couldn't save her life, like she died on the way to the hospital.

1.5

M: You don't have to [P6 speaks over moderator]

Negative emotions
Trauma impacts behavior

P6: And after I have very guilty feelings, like if we were em like if I was erm a bit more careful it would have been avoided and after that since I saw that she was in the water tank I was scared to enter the water like whenever you go to the beach or swimming pools. I won't enter into the water. It was during my college days, my friends took me to the beach and it was, I mean it was for that long period of time, I was not ready to go to the beach or enter some place where there is water. Now at college, I mean my friends, they made me, I mean they supported me and gave me confidence, that it won't happen, they gave me mental support. Then I started to begin to feel comfortable.

3.3.3

1.4.1

1.1.4

6.1.1

Need support to overcome trauma

M: So a support system is need to move forward from a traumatic experience?

P6: Yes [All others nod agreement]

M: Is trauma talked about in your culture?

All participants: No, no.

P5: Because of what other people will think

M: Whom do you go to for support?

P7: Maybe close friends.

P6: Parents. [Others nod]. 6.1.1

M: Ok, my next question is what typical thoughts do people have after the traumatic event?

P7: What kind of thoughts? I think like scary feelings will be there, like during the trauma 1.3 and how do you overcome that? Some people come to doctor or like check up for that because erm the parents will be erm err can't help. Like one of my cousins is very scared of cockroaches and spiders and whenever she sees this creature she feel itchy. We tried to help her overcome this, we tried a lot to help her recover but she did not recover from that. Then we told the doctor and that doctor was telling us it is difficult to get rid of these feelings. She sees a doctors and now, 5 or 6 years, now she is somewhat ok, not so serious but she didn't take any medication for that. 1.5.5

M: Do you think a visit to the doctors helped?

P7: He just gave some advice, so just some advice.

M: Advice on how to cope?

P7. Yes yes advice on how to cope with the scared feelings.

Avoidance
Negative emotions

M: [Directed to P5, P6 and P8] What typical thoughts do you think people have?

P5: Depends on the situation but erm normally I think err like it is a physical err will probably try to avoid that kind of situation. 1.4.1

P6: I don't know … I mean like, because scary sometimes they have guilty feelings like I told you earlier, that you are responsible for something. 3.3.3 3.3

P8: I think it depends on the situations like say an accident, I had an accident, I was driving the car, I slept and hit another car and I had a small wound and my sister hurt her leg and my brother-in-law got a cut on his head. For nearly the next year when I think of these things I

feel like … before this accident I slept for 3 hours a day, I feel like maybe if I had a good sleep this wouldn't have happened, I wouldn't have committed that accident. After that accident I have a good sleep when I travel in the car whether I'm driving or not. Also I was feeling a little bit guilty because of that and so now I sleep before a long journey, before I drive a car. 3.3.3

M: Do you think other people in your cultures would have similar thoughts?

P7: I think it depends on the situation.

P5: I think it depends on the person.

P6: I think if they are educated it helps.

M: How would that play a part?

P5: Well typically when a person is not much educated, they will not have a broad mind, that will affect their decisions. The mind would be weak and an educated person is supposed to have a strong mind, this will help them.

P6: Yeah because they can think what went wrong.

P7: Think rationally.

P8: Yes think rationally about what happened. 7.1

Education

M: Do you think it's important for the person to think about what happened?

P5: Yes to get past that.

All participants: Yes

M: What typical thoughts do you think people have about themselves after the traumatic event?

P6: I think it is something … if you are the sufferer of what happened, then it's easy for you but if someone else is suffering because of you then you will be extremely guilty about what happened. 3.3.3

Self-blame

P5: I think after a trauma, it's quite hard to convince me that there's not a fault, the person becomes aware of the facts and gets away from the situation.

P8: They blame themselves.

3.3

M: What typical thoughts do you think people have about the world after the traumatic event?

P7: The world?

Concerned about others not self

M: Yes about the world they live in.

P6: I think they have a feeling, will focus on what others will feel because of me.

P5: Yes, if we go back to the accident again, I'll drive more carefully because it might hurt people if I don't, just thinking about other people, I will be more concerned about other people.

3.4.1

Fate – external causes

P8: Some people will tell you 'my time is not good'. Like you cannot always blame, like he is not always careless, so we cannot blame him or the other person. So they will say 'my time is not good' I cannot do anything about it.

P7: They blame fate.

All participants: Yes, yes fate.

M: So people think fate is the cause of what happened?

Yeah some people think in that way, but mainly our religious people.

P8: Yes.

P7: I agree.

P6: Or those who believe in signs, astrology, they say this time or week is not good for you, it is the signs that's responsible.

4.2.1

P7: Yes that's what happens.

P8: Yes it is a cultural thing.

P5: So if someone blames fate, I don't think it will change how they think of the world. [All other participants agree].

4.2.1

M: What typical thoughts do you think people have about their relationships with others after the traumatic event?

P8: It doesn't change my relationships, but with the car accident, I will not go in the car with him again. It's just that particular person, he's still my friend, I don't thinks it's changed our relationship.

6.3

P6: Maybe he would think about his life more, be more friendly with his friends.

P7: I think relationships can change. I feel relationships matter.

P6: I'm not sure if this is trauma, but my friend's sister, she is from a village and goes to the city to an international school. She had very strong bullying and teasing, the situation was really bad and on one day she tried to commit suicide and after that she always has this feeling that someone is trying to kill here. When she goes back to her family she feels like her brother is trying to kill her, it's changed her relationship with her brother. In this case all her relationships have changed, with her brother and many other people, parents, friends.

6.2.2

Relationships remain the same
Some can change very negatively

M: Does anyone else have anything else to add?

No answer.

M: So to sum up then people's relationships can change, even with close family members.

[All nod assent].

M: What typical thoughts do you think people have about their future others after the traumatic event?

Immediate future concerns
Trauma impacts on future plans

P5: To be honest I don't think they think much about their future after a traumatic event, they will think about their immediate future, they will think what will I do now … 5.4

P6: They will try to avoid the same situations. 1.4.1

P7 & P8: Yes, yes.

P5: They will think about what happened and erm try to make it not happen again.

P7: They will think about the future, in my case when I was 6 something happened and it was in my memory for like 10 – 12 years. Whenever this picture comes to mind, like it actually stopped me from doing some things so we have to think of future.

P5: It would be about immediate future.

P8: I agree it would be about immediate future. For me when an accident happened I felt like I might get terminated from the company, I had a fear of that thing for the immediate future, I didn't think of all the things for a long term future, just the immediate future. 5.4

P7: I think it is like that for any accident, but I also think it stays with you for a long time and you have to stay careful.

M: How do you think all these thoughts we're been discussing influences a person's adjustment after a trauma?

…

P5: How do you mean?

M: How do you think these thoughts influence how you recover or get better after a trauma?

P7: I don't know.

Enduring trauma memory

P5: Some people are very good at getting on with things after an incident and maybe if its minor traumatic incident they will get over it soon. The relationship with other people and family members won't change what happened in the situation.

6.2.3

P8: Maybe for some months you feel bad things, maybe that incident will haunt you, but after that, after some time you will be free.

1.4.4

P6: I agree.

M: Would people seek help?

Outside help not acceptable for many

P5: In India people are not that comfortable with psychiatrists, I mean not many people are.

P7: I think they will go to a psychologist if the case is extreme.

P8: Yes if they had kind of depression.

P5: But I don't think many will go see a psychiatrist. It is like, if I go to a psychiatrist other people will talk.

1.5.5

P6: Yes.

Community can make judges

P5: They talk a lot.

P8: Yes.

P7: They think you are insane.

[All agree].

P7: They can exaggerate what is wrong.

6.1.2

P6: If one of the family members goes to the psychiatrist it can affect the whole family.

6.2.3

M: How does it affect the whole family?

P6: Yes the whole culture in India is very different, there are a lot of arranged marriages, so if my sister is taken to a psychiatrist it will be difficult for a marriage to happen later.

[All agree].

P6: You know people say things.

P5: When I was young my parents took me to a speech therapist so I went and my parents were understanding so it wasn't too big a deal. But if the family is not understanding I don't think they will be ready to take their son to a psychiatrist. And if they do they will take him somewhere far away.

[All agree].

P8: In my cousin's case they took her to Bangalore, which is 300 kilometers away from where they are living.

6.2.3

M: Because they didn't want anyone to know?

P6: Yes but this only comes with mental problems.

P7: Yes these types of issues.

M: Ok so a physical problem is treated differently to a psychological problem?

P5: Yes, very differently.

[P6 & P8 nodding]

P7: The community as a whole is not understanding.

[All agree].

M: So to help people adjust after a trauma what do they do?

P5: Keep it to themselves and support themselves. Sometimes family.

1.5.5

Mental health problems stigmatized

P7: They will tell certain family members, father or mother. 6.1.1

P5: But sometimes that doesn't happen, they keep it to themselves. 1.5.2

M: Would it be fair to say that people's thoughts are concerned with how others see them and this influences their adjustment posttrauma?

[All agree].

P8: How others see you matters.

P5: Yes because you don't want others to find out if it is a serious issue. 2.3

M: Ok, now if you could complete the questionnaire. Please read the instructions and complete in your own time. If anything is unclear please ask me.

[Everyone completes questionnaires in silence]

M: Did anyone have any thoughts regarding the questions? Did you think they were appropriate?

P5: I think most were not appropriate.

P7: I don't think so either.

P5: I didn't like the self-blaming questions, I think it should have a positive outlook. 1.5.8

P8: Yes I think that would be better.

P6: Because a lot of people blame themselves, they commit suicide. 3.3.4

M: Any other comments?

…

M: Ok thank you for your time today.

Appendix G

Focus Group 3

Interview Key: M = Moderator P9, P10, P11 = Participant Numbers

… = Pauses [Actions]

Trauma – psychological vs physical

M: What does trauma mean in your culture?

P9: O trauma, yes yes, er there is some bad thing, some accident, erm memorable in the past, normally we never mention this word, we have a relation with the good things, I say that the accident, the earthquake, I think that's fine, its not concerned with the mental, it's from the outside, the for the body. 1.1.2

M: So you're saying it physical?

P9: Yes the physical not the mental, I think that's all.

M: Is mental strain recognized?

P9: maybe. Yeah yeah, maybe include, but depends on erm … … …

M: Is it more emotional distress than mental distress, or is it then mostly physical?

P9: Its mostly physical but maybe its 60% concerned with physical and 30% concerned with mental, I think that proportionately that's ok.

P10:I think in my culture, the trauma mostly means the physical injury like when people have an accident or something, erm, now its increasing about trauma meaning, many people also aware that the trauma can be the mental problem, like if you live in the family with the parent and not have a good relationship, it can effect to the children or something, it can also be a trauma, but now its increasing, but mainly, most people in my country think its trauma just physical erm problem. 1.2

M: OK but you're also saying that culture is slowly changing and accepting psychological or mental problem as well?

P10: Yes yes.

Trauma is something out of your control

P11: According to my understanding trauma means the state of mind after some disastrous event or something shocking happened, this is what I think trauma is. 1.4.2

M: What would be considered a disastrous event or a shocking event?

P11: For example if you lose somebody you love or if you are in the circumstance that is out of your control. 4.2

M: You also said trauma is a state of mind, do you think it is also physical?

P11: I think it's very mental. 1.4.2

M: What typical thoughts do you think someone in your culture would have after a trauma?

P9: Sorry that doesn't make sense.

M: After someone has had a traumatic event, what sort of things do they think about?

Avoidance
Intrusive memory

P9: Oo I think maybe it depends on the level of the traumatic things happened, if it is very bad I don't think everyone want to have a memory, but they just want to forget it as soon as possible. 1.4.1 Maybe in the future, they face some ordeal they can't remember that is horrible, sometimes they can't have a good sleep and they can't eat anything. 1.2.1 But for me I think that's fine its I don't know I think I have accepted you know it's a bad memory, its past and I need to learn something from that and if the traumatic is slightly, I think that's fine, it's for the very bad memory I don't want to remember it. 1.5.6

Negative emotions
Change of worldview/future

P10: I think people will be kind of disappointed and sad after this and they have a kind of pessimistic view of life and something and, and the life and the future. 1.3 4.1.1

M: Sorry did you say a pessimistic view of their life and their future?

P10: Yes yes, I think so.

P11: In my culture when somebody is in a traumatic situation, people they feel some sympathy, but that's very visible to the person or to the victim, and he cannot forget that traumatic event, that the people maybe there to be sympathetic but they are there and you cannot calm down in a very short period of time, they are reminding you. 6.1.2

M: Ok, so you're saying that although they are trying to be helpful, they are reminding the person about the trauma?

P11: Yeah, yeah.

M: And would this be the family or the community or both? 6.1.1

P11: Both, especially community.

Avoidance /forgetting/memory
Intrusive thoughts

M: And what would the individual's thoughts be about the trauma?

P11: I mean, he thinks about that event over again, and it may take a long time to get relief from that state of mind. 1.4.2 Even for example if a person is dead from the family, the community come to give you some kind of comfort or something but they keep talking about the dead person and how he's dead and that makes people cry and I think that's not good, because I prefer it to be people came in to talk of other things.

M: OK, what typical thoughts do you think they would have about themselves after experiencing a trauma?

Self-blame vs fate

P10: I cannot say many or most people, but I think some of them maybe think that the problem comes from just himself or herself like he or she is the reason for the accident or problem, and they felt it's a particular problem about themselves. But some people anything is erm a small number is a kind of fate and comes randomly and like they just reason some kind of fate and erm the reason is not come from themselves. 3.1

M: OK so you're saying that this other group of people blame fate for what happens?

P10: Yes because of fate it's happened, some people blame themselves but some other people think it's because of fate.

M: Ok so you're saying there are two groups of people and they think differently and one group blames themselves and the other group blames it on fate?

P10: Yes there are two groups of people and I cannot say which group has much people, because I think actually we have two kinds of people and so two groups, I cannot measure the numbers in which one.

P9: Maybe they think of themselves as very weak and not very strong to face these problems, 3.1 not even the traumatic event and er I think again it depends on the level of the traumatic, for

Lasting impacts

example if someone was faced with a car accident maybe they can't travel by car after that, I have friends, my friend was in the same situation, he is very sensitive and just as he left the home and crossed the road a car ran the red lights, he pays very much attention to the situation of the road. Every time when he crosses the road there must be nothing in the road. Even some cars stop there, he can't go across. It's a very bad memory. 1.1.4

M: Do you think the view of themselves changes after trauma?

Self can change
Worldview can change

P9: Yeah, yeah, sometimes maybe they think they are different but I think its acceptable for themselves, I mean that bad thing they face not other people have face, so maybe other people can't consider the situation, they never face it, so yeah they think they are different and that's fine I think, so they just concern the life, themselves, even they face the very very horrid problems, so they take care, I think that's fine. I mean some days it's very dangerous everywhere, you know in China sometimes even you drive a car, not you hit others, you drive normal, but other rookies, they just learn the car, maybe several months they drive in public, and they hit you, you can't avoid it, so its random if you face it, maybe you will lose your life. 3.1 4.1.1

P11: Typical thoughts, for example?

Family important
Survivors seen as victims

M: Thoughts they would have after a trauma about themselves?

P11: Its very common in my culture that family tie is very very very high and especially when I mean the family who has a small income someone is lost, the people get shocked and this is very common, and people keep reminding them again and again, and sometimes, when people see for example, a youngster or child, people "tss" kind of "tss" this sound is to express sympathy that they give comfort to the victim. 1.5.1

M: Ok I see, and after a traumatic event, do you think the individual's thoughts about themselves would change to what they thought before?

P11: Through time yes I think it could change, through time, it depends on the person and the type of person, and you know some people naturally have a better way of understanding the situation.

M: Ok, so you're saying it's easier for the people who have a better understanding of the situation, of why the trauma happened?

P11: Yes yes.

M: Ok, what thoughts do you think they have about the world after experiencing a trauma?

P11: The world, I don't understand.

M: So how an individual thinks about themselves in the world they live in? What is their world view?

P11: Ahh ok, yes … … …

M: Do you think this could change?

P11: I think so.

M: How do you think it would change?

P11: Because when this kind of feeling happens in very small communities, if the people can think of that there is other opportunity in the world there are other lifestyles the feelings of that victim would be better.

Outside influences - adjustment

1.5.5

M: So you think their worldview could change and it would be for the better, but they need to find a different way of coping, one that is outside a small community?

P11: Yes.

M: And what do you think? (Directs question to P9)

P9: Sorry?

M: After a trauma what would people think of the world?

P9: Maybe a little sad a little blue, yeh I think its not normal, either you face this problem, this is your memory and you confront it, even you try to cut it sometimes I remember, I believe everyone can recover this memory, so its in your life, directly and maybe when you say the sky is very different colour now, its grey not very blue, its not the same sky. From emotion of themselves they think they are very weak, not as happy as before, just concerned everything you know. Maybe after I am very sensitive, I think after the bad memory I think that's fine, but my family don't think so, they are sensitive of everything, they never lose the hope of the future, but they are more careful than before.

1.4.3

Negative emotions
Negative self views

3.1

M: So you're saying the perception of the world then does change slightly?

P9: Yeh yeh absolutely, I mean maybe if we have 10 people and 4 of them faces a bad thing, maybe after that I think almost 50% of them will change their attitude forward.

P10: Normally people will think the world is going to be worse, like erm after the trauma I guess the kind of injury can be both mental and physical so they will lose confidence about themselves so they think thoughts that the initial they are not have enough tough enough to adapt, so maybe they are having trouble and difficulty. 4.1.1

3.1

M: Ok so then does their view of the world change?

P10: Yes

M: What thoughts would they have about their future after a trauma?

P9: Just sometimes they worry about that. What about if they don't have the power, they don't have ability to do this to do that, when they face a problem how do they deal with it. Just concerning, very sensitive.

Worried about future
Attitude changes – self/future

M: So their thoughts on the future potentially change as well?

P9: yeh yeh yeh I think must be changed, or potentially. 5.1

M: Do you think their life goals would change?

P9: Yeh I think that will be changed, when I was a little child I just have a good dream maybe several dream, you can think maybe in the future you are doing this you are doing that, but after you're faced some things you need to change your thoughts, you must be maybe after they are adults you can realize even 30% of our dreams is fine, 30 – 50 I think that's very great.

P10: Thoughts about their future, they have bad thoughts, negative yes.

P11: Their future, it depends actually, but most people especially from very small communities they think that the future is dark and maybe some people very very rarely they will try a suicidal attempt, very rarely, but yeh it depends on the people, some are very strong, even if they feel inside they won't show it on the outside. 5.1.1

Lack of future – can become suicidal

M: Do you think their plans would change? So if they had future goals, do you think this would change?

Avoidance

P11: Ok, sometimes, sometimes, if someone, I'm just thinking what if that person dies from the family, but there are many different kinds of traumas, but in that case er people will you know going to school will have another plan, they want to stop going to school and find a job as kind of a help … … Yes, some who have a traumatic experience, they would change their place and want to live a new life. 1.4.1

M: Ok so they would want to get away from where the experience happened?

P11: Yes

M: What thoughts do they have about their relationships with others?

P10: What you mean relationships? With parents, family or the friend?

M: Yes any or all of these relationships.

Relationships impacted – some are stronger, others negatively changed

P10: Erm, yes I think, in my country because some, after the trauma the family will take care more about the people, that's their habit, because of this trauma the relationship with people in the family is much more stronger than before. 6.1.1 But sometime, in another relationship in a couple of friend or something maybe it changes negatively, 6.2.1 because some people have a kind of real problem, its personal, have a problem with their physical appearance, and maybe they lose a hair or maybe their face is something ugly, so its they lose ability to walk around and do other things, the future is not a future so effects to them and the couple or the relationship, 5.2 like they some people they don't feel their partner is good enough. Like so its affects their relationships, actually I see some husband, they change their thinking about their wife after the wife got accident or even after the wife got children, so think they of not leaving but having a relationship with another.

M: Ok, so if somebody were to have a traumatic event, they would share this with their family?

10: Yes yes, I think so, most people would share with the family. 6.1.1

M: So would the family be an important support for them to help them get over the trauma?

P10: Yes especially the parents.

M: You mentioned that family is very important and community ties, so after a traumatic event do you think a person's relationship with others changes at all? (Directed at P11) 6.3

P11: No, it's not changed.

M: So it stays the same?

P11: Yes and very rarely, the victim is trying to avoid the people's sympathy. 1.4.1

M: Ok, but you say that's rare?

P11: Yes that is rare.

M: Would somebody in your culture then be thinking about others after the traumatic event? 4.1.1

P11: Yes, very much.

P9: Also it depends on the level, if they face very big problem, for example, if they have a relationship with his friend maybe the relation is totally changes, they don't trust each other 4.1.4 and they sometimes they just make a complaint to each other, they are not friends after that, one was the relationship must change. Sometimes when the friend faces the same problems, the attitude that they saw their friend do is different than when they are normal, after that it is very strange between the two people. Sometimes even in the couple, for my girlfriend and me if something happened I mean the relation is different. 6.2.1

M: So it changes?

P9: Yeah it must change.

M: So if somebody had a traumatic experience or stressful life event, whom would they go to for support?

P9: For my point of view I think I would support by myself, I would do it, not just consider to ask someone else to heal me, it's not reliable I think 1.5.2, er, but for my friend, I think both, he just tried to finish himself but also asked my friend and his friend to help him, and I had this though, I had this though, he want someone else to help him, because after that car accident this is sometimes, not sometimes, if no one pull him out he would lose his life, I mean from this point of view his view of the world is positive not negative. 1.5.8

Adjustment and support from family and friends
Self-reliance
Community can make problems worse

M: Ok, so he took something from that event?

P9: Yeah yeah, maybe I think 3 or 4 people pull him out, it's very important I think and they saw him to the hospital.

M: So what thoughts do you think influence recovery?

P10: To recovery, I think the help from the family is very important, because it is the most important people to help this problem, and they have, there is a significance and it come naturally. They have, the people in the family have the sole responsibility to the people who have the problem, so they have people like by themselves, they don't think about any kind of benefit or something, they have to encourage people, so I think this help is very important and it has a chance to help people. 6.1.1

M: what thoughts would be needed for recovery from the trauma? (Directed to P9)

P9: maybe sometimes just avoid same situations, another one may be find some good, for my case, just try your best to make you happy. Sometimes I just blame myself. 1.4.1 3.3

M: How would the thoughts we talked about help someone recovery? (Directs to P11)

P11: I think that to, I mean its, for a death it's a normal thing, it's a natural thing, that they can live their life, just to think to give the company and to help them see what other opportunities there are.

M: And how would they see what other opportunities there are?

P11: The individual especially, friends, but the community is not like that, even sometimes in my community, when somebody was in a traumatic condition the topic is always that it should end, they associate everything with the traumatic event, and they are worsening it to be honest. 6.1.2

M: So you're saying the community can make it worse?

P11: Yes.

M: How can the individuals help themselves recover?

P11: If they have a good friend they should let them know, keep some kind of company and get advice. 6.1.1

M: Do people seek professional advice?

P11: Professionally, it's not very common in my country. 1.5.5

M: What do people do to get advice?

P11: They go to church. Church is the only thing that you can do, go and pray and get strength and advice from the priest. Because they associate with their luck, especially because of them and luck, because God is angry, they are not a good person. 4.2.3.1

M: So their strength comes from going to church, talking to the priest and unburdening themselves, is that what you're saying?

P11: Yes.

M: Ok, thank you, if I could now ask you to read through and fill in the questionnaire.

[Participants read through and fill in questionnaire]

M: What were your initial thoughts?

P11: Actually it's related to my experience, it's inappropriate to ask.

M: Why do you think it's inappropriate?

P11: Because I am hopeful and I have a bright future.

M: Ok so you want to concentrate on the positive?

P11: Yes, not to be reminded about that.

M: Ok is there anything else you would like to add? (Directs to P9 andP10)

P9: I think your questions is too negative, I mean you can add some question for the positive. 1.5.8

M: And your thoughts? (Directed at P10)

P10: Yes I agree with some of what the others said that some may be inappropriate, but I also think there are some questions that are ok to ask, that is how you will find out how to help them.

M: Ok, thank you all for taking part.

Appendix H

P12 Key Informant Interview

Interview Key: M = Moderator I = Interviewee [Actions] … Pauses

Covers physical and psychological – but more on physical – to survive

M: If I could start with the first question, what does trauma mean for individuals in collectivistic cultures, which are typically non-western?

I: For me trauma is both physical and psychological … so … I think in those cultures it maybe more … its more physical than psychological that would be my belief. But it would cover both but it may relate more to horrible events and how that impacts on your health and well-being. Primarily it would be in terms of their ability to survive, you know, eating and drinking, illness and then there would be how they would feel afterwards I think. 1.4 1.2

M: So are you saying the psychological injury would be secondary and not hold as much precedence as the former injury?

I: Yeah yeah

Worldview helps them accept the trauma

M: Following on from there, what typical thoughts do you think people from collectivistic culture would have after experiencing a traumatic event?

I: To some extent I think there might be fatalism that erm they are probably more accustomed than us to the effects of seasons and weather and natural disasters, so they may actually take it, they may have a more sort of fatalistic, more sort of accepting view than we would. 4.1.3

elf-blames – ersonalizes event

M: OK and what typical thoughts do you think they would have about themselves following a traumatic event?

I: They might sometimes personalize it and think its because of something I've done, so self-blame rather than seeing it as er a sort of random event, I suspect they may personalize it more than seeing it as a random event something that's just happened and there's nothing much you can do about it and you are in the wrong place at the wrong time. 3.3

Worldview changes

M: And what typical thoughts do you think they would have about the world in which they live in following a traumatic incident?

I: This is quite difficult because erm they may feel let down by the world and their worldview, I mean they might have, they might have quite a strong view of the world and 4.1.1

how it works and how they fit in to it, and its possible that a big disaster then disturbs that, you know, has an impact. 4.1.1

M: So are you saying that potentially, there is a shift in their view of the world?

I: Yeah … maybe … yeah

M: Do you think the same for the previous question, that there may be a shift in their perception of themselves after a traumatic event?

I: I think that some people erm they may be themselves as being victimized or being cruelly marked out, you know why me, you know I've done everything right, erm, you know I've been a good citizen, I've followed my religion, I've fitted in, I've been a good citizen, why has this happened? Erm so they might be some change.

Self is victimized – because they have done everything correctly – been socially/culturally appropriate in their behavior

M: And do you think this links in to the self-blame mentioned earlier?

I: Yeah, yeah … or its some other, you haven't recognized them or that they've been cruelly treated, that their contribution and their place has, hasn't been recognized by whatever has caused the problem and there's been some failure of communication or something. 2.1 & 2.2

M: And what typical thoughts do you think they would have about their future?

I: It's a difficult one, erm, is it ok to think?

M: Of course it is, yes.

I: Because I don't want to give you a glib answer, and I'm trying to think back to when I been abroad and visited these sort of cultures, erm, I've never been involved in a, in a horrific disaster, so I'm going partly on what I've seen on the television, erm, and what I've read by people like Derek Summerfield, erm, see if they have a very strong collective belief, erm, it may not change their views about the future, erm, and you know, if they, if they've got a very resilient, sort of engaged culture then they'll probably belief the futures going to be ok, that they've got you know some internal strengths that will enable them to overcome things, erm, things can be alright, that this is just a temporary thing that they'll get over. 5.3

Future stays the same – it will be ok, the trauma is temporary – previously held beliefs help in adjustment

M: So you're saying that future goals are not impaired by this traumatic event?

I: I think so, yeah I think so, yeah.

Immediate future concerns – long term future remains same

M: OK, what you are saying then is that they are concentrating more on the immediate future?

I: Yeah I think they'd be immediate concerns but there would be a more positive view about the longer future. 5.4

M: OK and lastly what typical thoughts do you think they would have about their relationships with others following a traumatic event? And do you think that would alter at all?

I: No if anything they could be strengthened I'd have thought, you know in adversity people draw closer together, gather strength from each other, erm, that's my sort of observation of the recent events in Japan, that people seem to pool together and look after each other. 6.2.2

M: Do you think this is just within the family or within the community?

I: No, I think it's within community, yeah yeah.

M: And how do you think these thoughts about themselves, the world, the future, about other would influence adjustment? Do you think it would have an impact?

I: Erm, yeah I think it would help them manage and help them get through the initial crisis, yeah I do.

M: Ok, could you expand on that please?

Community support – go through trauma together – group – supports, motivates

I: Erm, I think people draw strength from getting support from other, feeling that they belong within a group, erm, feeling that they're being helped and supported, and that gives them the motivation to put things right and to start you know trying to rebuild, er, it also helps them with the grieving process if they're lost friends close family, erm, and again you could maybe draw strength by seeing that other people have been through a very similar situation, so you can sort of go through it together, erm, so, yeah I think the sort of beliefs I'm talking about are positive ones, because I feel that these beliefs have been formed with close knit societies that their cultures have been formed in adversity over a long period of time so its there for a purpose, you know, it's a tried and tested way of existing and its evolved in relation to adversity as a way of supporting people and getting them through these crises. 6.1.1

M: You mentioned earlier that trauma within collectivistic cultures was more contingent on physical trauma.

Not psychological – instead seen as help from friends/friendships
There are cultural frameworks in place to provide support
Social appropriateness needs to be followed even when dealing with trauma

I: Yes.

M: Regarding psychological trauma, do you think people within these cultures would come forward to see somebody or would it be something they would keep to themselves and try to cope with it themselves?

I: I think they would come forward and engage, but they probably wouldn't use the world psychological. You know it would be more to do <u>with help</u>, or friendship or erm, maybe just telling people how they feel, rather than psychologicalising it, it would be on a more sort of erm <u>emotional level</u> of saying you know I'm really fed up with this how do you feel. But there would also be some cultural, <u>some cultural framework</u> as well, <u>because there would be certain emotions and certain sets of behavior that are valued and considered appropriate and others that are taboo, so there would be put through some sort of cultural framework.</u>

6.1.1

2.1

M: Thank you, if I could now ask you to read through the questionnaire, these are the items used in the Posttraumatic Cognitions Inventory, they assess the thoughts and beliefs of people who have been through stressful life events. If you could read through each item and indicate how appropriate you think they are to ask people from collectivistic cultures.

I: So what do I do, just say what I think?

M: Yes, if you could just circle how appropriate you think the item is on the scale, it ranges from 1 totally inappropriate to 7 totally appropriate, and at the end if you can add any items that you feel would be appropriate to ask someone within a collectivistic culture that has been through a stressful life event that would be great. Thank you.

I: [reads] Nothing good can happen to me anymore … erm … yeh it seems appropriate, erms, I'm sort of between the two, slightly and very, yeah, I'd say very.

Future is culturally determined

My life has been totally destroyed by the trauma, yeah it seem ok. I have no future … futures a cultural concept … but then I suppose trauma is as well, yeah <u>future I think is a tricky one</u>, because it is culturally determined what you think it is, erm … I'm going to say that's slightly inappropriate. I'm a weak person … again weak I think erm, my idea of what weak is not going to be shared necessarily, erm, cause even in, you know, erm, I'm doing a study of Britain, hopefully I'm doing a study of Britain and how we coped with trauma in 1950s and a weak person would be somebody who wept openly whereas nowadays that would be considered a sign of strength, whereas in those days it had to be stiff upper lip, don't cry.

Language/interpretations/meanings

M: So even within cultures, over times?

I: it changes, yeah, a lot. Erm, so I think weak is slightly inappropriate.

I can't stop bad things happening to me. Yeah that seems ok. I've permanently changed for the worse. Erm, this is not easy to do actually. [reads] Cause with this I'd struggle over 'permanently' again that's erm … it doesn't seem that erm I think that's probably ok, I've permanently changed, I'd say neutral. [reads] My actions since the event show I am a lousy coper. That seems really … slightly inappropriate, cause the word lousy erm coping, they seem to me both culturally determined. Erm to me, I would say its more neutral if it says I don't do well or something like that. 8.1

M: so are you saying it's the word?

I: Yeah its the word, the meanings ok, but … [stops talking and reads again]

M: Are you referring to lousy?

I: Yes it comes from the first world war, because soldiers in the trenches got lice and you had to burn them off with a candle. So lousy meant feeling, it came from the trenches and feeling just uncomfortable and dirty

M: I see.

I: Yes it comes from lice.

M: Would you say that's a Western colloquialism?

Mental illnesses – culturally determined

I: Yes definitely. [reads] If I think about the event I will not be able to handle it. Yes, I suppose that's ok, although handle it is erm a colloquialism isn't it? [reads] I'll never be able to feel normal emotions again … I feel like an object not a person … er, cause, a person can be an object [laughs]. Yeah, it depends on your culture, because I'm the object of this survey aren't I? [reads] 'My reactions since the event means I am going crazy' … my problem with that one … is that actually all mental illnesses are culturally determined isn't it? In terms of symptoms and interpretations, so my view of crazy behavior is not someone else's, erm, and even something that looks crazy could be perfectly understandable in a particular context, erm, so Derek Summerfield view, so I'd say sort of neutral, but I don't know …

M: So potentially that item can be explored further?

I: Yeah. They all strike me as being perfectly reasonable questions, erm … by neutral I don't mean that's bad, I'm just you know neutral in some ways is sort of quite good for me, because its, a neutral question to me is quite a good question because its not loaded, but I know you want me to say whether its appropriate or not. I suppose, yeah, what I'm thinking is that they're all appropriate questions, its sometimes words that sort of catch me out.

Language 8.1

M: So what you're saying is that potentially changing the wording of the questions for these particular cultures then you could have very different results?

I: Yes, I'd say that's very appropriate [reads questions silently]' People cant be trusted' that's quite loaded isn't it? That's a loaded question. Rather than saying can you trust people? [reads] 'I feel dead inside' that to me may be quite a strong cultural thing; there may be some cultures where that doesn't apply at all, that's what I'm thinking. Cause I have a feeling I know what that means but in a different culture it may mean something completely different. [reads] 'I feel like I don't know myself anymore', that's quite complicated; yeah that's quite a difficult one. There's two here which are quite similar, 'there's something about me that made the event happen' and also 'the event happened to me because of the type of person I am' the second ones more complicated [reads].

M: Having gone through the questionnaire?

I: it does seem skewed about to the self with only 7 on the world view, I would have thought that is a bit biased. I mean if I'm putting myself in the situation and something horrific happened er I would be putting much more many more proportion of my beliefs would be in my view of the world, rather than, you know if there was an earthquake here I wouldn't be thinking 'oo I've caused this' or it's because or I mean I would have views about, I would have probably have negative views about, cause I know when I've been in crises afterwards I always think 'oo I could have done better, why didn't I do this? Why didn't I do that?' I certainly think that's right. But I think I would have erm, yeah I would probably go more to having a larger section of views about the world.

M: Do you think this would apply to collectivistic cultures?

I: Yes to these groups, I don't see why not, I mean, erm I'm conscious that when I answered your questions at the beginning I certainly thought 'o my god I've gone into some awful stereotype, erm about people in other cultures, thinking they're less sophisticated than I am,

erm and their worldviews may be far more er well worked out and elaborate than mine. You know they may be much more appropriate. Because they're evolved over a long period of time, and they've probably as a culture, as cultures, they're got much more in their recent history of disasters, you know cause we're had industrialization for a long time which is controlling the environment, whereas they're will have seen many more sort of starvations, they're much more at the influence of climate, and to some extent until recently their medical services are much poorer so they will have seen much more of death, so it may be that they actually erm have evolved much more sophisticated views of how the world operates and their place within it.

M: So potentially then more world questions need to be asked?

I: And subtle ones maybe, erm because my hypothesis would be that their world views are there to enable them to interpret and cope so they might have to be very subtle and sophisticated, you know capable of tuning, you know and applied to slightly different circumstances and different group of people.

Worldviews important – helps them interpret and cope with traumatic events

4.1

M: Yes that makes sense; culturally sensitive questions need to be asked.

I: Yeh yeh which would certainly be Derek Summerfield views, that you know we go out there with our western questionnaires and the answers you get are largely irrelevant because they're not understood or the persons being polite, they're trying to work out what they think you want them to say and just providing that information.

M: Ok, so you undermine those mechanisms by almost forcing labels onto them?

I: Yeah yeah, which either they don't understand or they're not appropriate erm, and he thinks it quite dangerous, he's a really erm, a very sort of extreme holders of that belief, you know, so he's used a lot in debates, because he's very powerful on that.

M: OK, well that comes to the end of the questions so thank you very much for your time today.

Appendix I

P13 Key Informant Interview

Interview Key: M = Moderator I = Interviewee [Actions] … Pauses

M: What does trauma mean in collectivistic cultures?

I: Gosh ... what do I think it means because I'm not from a collectivistic culture?

M: Yes, what would your thoughts be on what trauma means for people in collectivistic cultures?

I: What are my thoughts on what it means to people from collectivistic cultures? Okay ... erm I'm thinking in terms of rupture, rupture of bonds ... I guess ... if you're from a collectivistic culture then bonds are everything, so it's something which breaks families, breaks relationships, breaks your bond to the society, so torture for example, within a group could be seen to break the bonds of trust between individuals and that society. Are you with me or would you like me to unpack that a bit? 3.5

Social bonds broken – break trust
Group = support, so break down the group = no one has support

M: If you could, I am with you, but if you could also unpack that and go through exactly what you mean, it will be easier for me when I'm going through all the data later.

I: Yeah yes okay, what I mean by that bit is that thoughts on the purpose of torture is to break down the ability of the group to act together to be powerful, so the group. So these are thoughts that I've got through someone else's reading of, erm Martin Burrows work in El Salvador.

M: Yes I've heard of him but have not yet read through his work.

I: You should read some of his work, its storming [laughs]. Erm, he's a really interesting guy, there's one book, erm, that's great, I've got it up there. But the idea is if you take a group, a village or whatever of fifty people, that's quite small isn't it, but you only need to torture one person and make them ... and let everybody believe that that one person revealed all the names of their contacts, for everybody else to then realise that if you have contacts you're going to betray them and they're going to betray you.

M: Okay so it has this knock on effect?

I: Exactly. So then you have a broken up group. You make sure no one talks to each other.

M: Ok, so it's very psychological then, to break up the group?

I: Emm totally. Erm ... so coming back to the question, it's very much to do with social bonds, so breaking; so together people are more powerful than they are separated. So that's what I mean by torture and breaking social bonds. Erm ... but also ... erm ... if you're from a ... not just collectivistic, but a much more family ... if that's your raison d'etre, your family, you know you think of a ... women who's only ... you know you say, I'm going to kill myself. Why don't you? Because of my kids. So family is all, so if something happens that means you can't ... talk with your family or be with your family in the same way, you can't give your kids what you want to, , you have to send your children away, they're, or you're seeking asylum and your husband didn't make it.

3.5

6.1.1

Strongly family oriented – can become physically and psychologically separated from group/loved one

M: Ok, so the emphasis is on both the physical and psychological?

I: Yes, I think its physical separation and psychological separation, so a man who used to have a close loving relationship with his wife and his children who now can't bear to see his children because he just gets angry and irritated and, or just hits his children and he's horrified because he was not someone who would do that before. So they are still living together in the same house but the relationship between them has been changed.

3.2

Self changes/ relationships change

M: So the dynamic has changed?

I: Yes, damaged or destroyed, changed or ... so I'm thinking trauma is about breaking those things.

6.2.1

M: Ok, what typical thoughts do you think people from collectivistic cultures would have after the trauma?

I: I hear a lot ... what thoughts do people have after trauma? That makes me think immediately people talking about roles. They don't say I've lost my role but men ... typically ... are rather saying or one way or another you're led to a thought that this is somebody who had a place in the family, a place in society, erm, had a role who now doesn't. So you know, going from provider and head of the family to being the one who is looked after because he's … you know, he's traumatized.

2.3.1 & 2.3.2

Roles – changed/lost

M: Yes, okay and what about typical thoughts about themselves after a trauma?

I: Well that's an interesting question, because my understanding in collectivistic cultures is that would be the same thing, role and selves would be very much intertwined, no? [Laughs] 3.4.1

M: What typical thoughts do you think they would have about the world after a trauma?

I: I think, I mean this is just of the top of my head but my immediate response to that is that that will be much more similar in terms of safety. That's what's changed. Well ... no actually, no, that depends, no that depends, for some people their world has gone from safe to unsafe, so the shattered assumptions idea, but actually what's interesting is that that's our assumption, that's a safe cultures assumption, a lot of people are born into unsafe situations so that's not the shift for them ... now I don't know if I can, having said that I don't know if I can now make a generalization about ... so for some group ... ok so I'm thinking, this is coming out randomly ... for, I'm thinking of Turkish men or similar who fought in the struggle, so who were born into the struggle and have fought with it, and then at some point for some reason have had to give up and immigrate. So for them ... it's about ... for them the world hasn't changed, they failed. So that may answer the previous question. 2.3.2 For erm, , I mean for Kosovo women their danger was, well it really wasn't danger it was depressing and misery as far as I would work out. Erm so their misery just shifted into a different type of misery.

4.1.1

4.1.2

Worldview changed – safe to unsafe
Worldview stays same – self has failed

M: Ok, so the context of the misery changed but its still a constant for them?

I: Em yes, although no, there's an interesting story among Kosovo women which is a whole erm, opening out of their world, which intrigues me, when I did clinical work with them, with asylum seekers, I did a lot of work with women who had grown under this so completely oppressive regime of misogyny and who have come here and found out that there are different ways of being in the world and women are able to be different in the world, and for the, some have discovered it, and for some of the lucky ones their husbands have also discovered it. So it's complicated and I'm quite intrigued to know whether is there a new Kosovo culture, because of the diasporas to other countries, whether that's being taken back or whether it only exists outside of Kosovo, but that's way beyond your question, but it is interesting isn't it?

1.5.5

Exposure to different worlds/culture – so of it is assumed in to their own lives. Discover there are other opportunities – enables better coping/recovery from these influences?

M: Yes, because women in Kosovo would have a very different view of the world than women who have come over here and been exposed to something quite different.

I: Yeah, yeah, and so people, you're talking about people in different cultures, I'm only talking about, because my own experience is with refugees, so that's going to be very different than people who have left and moved rather than people who are traumatized and stay. So I'm getting away from your question. I don't now if you've got enough on that one or if you want more? [Laughs]

M: [Laughs] Ok, just so I have this right, in some instances you think thoughts on the world wouldn't change, for instance the Turkish men who have left the fight so to speak and come here? So their perception of the world is as it was before?

I: Yes, cause in a sense the fight carries on, some people are carrying on with the struggle over here, so yeah, exactly. Their view of the world hasn't changed. } 4.1.2

M: But for some people it has?

I: it's all about safe to unsafe. } 4.1.1

Safety
Safety of group over the individual

M: Ok, and what typical thoughts do you think they would have about their futures after a trauma?

I: People from collectivistic cultures who have been traumatized?

M: Yes.

I: ... ... erm, well I wonder if that's, there's an advantage then, because if you have a sense of a bigger group, then the bigger group can survive even without you can't it?

M: Yes ... if you think like that.

I: So, and where I see that played out in a therapy room is a woman saying my life's over but for my children it is not … and that's a migration story as well. I don't care for myself but I've got my children here now and there's this Kosovo woman's story … its going to be different for my children because they're living in this culture and have different opportunities to them, and I'm making sure that they work harder in school and you know? } 3.4

M: So she's helping them help themselves but she's, her life, has taken a back seat now?

Self-blame, emotions of shame, guilt

I: Yes, so the future is not about her and that's kind of a mother discourse anyway isn't it? Erm but much stronger there for the women, especially you know if they're had whatever experiences they see as shameful, so they don't deserve to live anymore, but they can, the future for them is the children. 3.3.2

M: Ok, so it's all about social bonds again? That's where the focus for the future is?

I: Yeah, absolutely ... and then I'm speculating about whether that exists in a bigger way, whether those freedom fighters, erm, you know, say well ok, you know I've dropped out of the fight and I feel guilty and bad about that but erm it still carries on and I send money to the organization ... 3.3.3

Some goals/attitudes change

M: So their goals then stay the same, is that what you're saying?

I: I guess I am. I'm trying to think of er, if I've come across anybody who's ... like completely disillusioned in terms of their goals. There certainly are people who turned, again I'm thinking about Kosovo women, who, you know they've had sons and they do not want them to grow up like Kosovo men. They had it with them. 2.2

M: Ok so in that sense it has changed their view?

I: Hhmmm … change, yes.

M: And that way their children would grow up in a different way?

I: In a different way, yes exactly

M: With different values?

I: Yes

Values shift

M: Is that, am I understanding correctly?

I: Yes you are understanding correctly, but it's not a generalization, I suppose what I'm saying, I'm thinking, I'm drawing on different groups now ... so that's one of the responses that I've had.

M: Ok, so the next question I had was what typical thoughts would people have about their relationships with others? Which has been touched upon as we've been going through this.

I: Hmmm … well of course the most obvious one is people who don't want to see anyone else in their culture. Erm, so, which, you know when you do a PTSD assessment it gets put down as avoidance.

M: Yes.

I: [Laughs] Yes that one ... which obviously is, I don't know if it's damaging or not, but its separating them from their culture and their society. Erm ... that is partly avoidance but the other thing is, the other reason it comes about is shame, so erm, you know again, the woman who had been raped thinks she has a big sign on her forehead saying I've been raped and everyone can see it and then people who can really see it are the other women from her culture.

Avoidance - due to emotions such as shame

1.4.1

3.3.2

M: Ok I see what you mean.

I: Yes do you see what I mean, yes they will know so I have to stay away ... and that keeps a lot of people away from what is probably, at least in part, social support. I'm no longer a believer in one's lovely culture is a lovely place to be, there's a lot of crap in ones cultural pressures.

6.1.2

M: Yes so for somebody like that, where would they get their support from? Would they try and deal with it themselves? Or talk to a close friend? How would they go about it?

I: Well the, again just drawing on people I remember working with, in extreme circumstances, they get it from their therapists, which is terrible (laughs) to have as your best friend but it certainly happens and that challenges psychologists and presumably other peoples' way of working from your normal boundaries, I'm not your best friend to realizing that actually you probably are (laughs).

M: Ok so there is a shift there in that dynamic?

I: Absolutely. Erm, and the other thing I hear a lot of people talking about is people like erm you know the English classes, where the teacher is amazing and someone, some of those teachers are doing incredible semi-counseling work I think. Helping people to write things, helping people to feel a bit more confident about themselves. I've been astonished about some of the stories I've heard.

1.5.5

M: Ok, almost an untapped resource?

I: Yes, well I think its being tapped [laughs].

M: [Laughs] Yes by the sounds it is very much, unrecognized yes, that's the word.

I: Yes unrecognized [laughs].

M: Ok, and do you think their relationships, with their community or their families can change quite drastically?

I: I think that goes back to your first question and is quite the tragedy, where even if people have been through them together, they can't talk about them, they can't address them. 6.1.2

M: Ok so its a huge challenge then, if it's all about community and everything is for the community and then they can't speak to the community, because they're avoiding the shame that's associated with the trauma, that is the challenge, am I understanding that correctly?

I: You're understanding it totally correctly, and then take that to the next step, that is why those things were done, the intention behind it. You destroy a community, and I don't just mean in torture, I'm thinking the use of rape in war, that's how it works. 3.5

M: And how do you think these thoughts would influence adjustment?

Helps group at the expense of the individual
Outside influences to help individuals recovery

I: Well I suppose ... what we being psychologists in the western world ... are ... trying to do ... is and I think ... ok I don't know how controversial this is going to be ... I think there's a, what we're doing is introducing the western individualistic ideas to try and help with these things and that's been hugely criticized ... but I haven't thought this trough before, so we'll see if it makes sense, but I wonder actually if, without being unthinking about it, whether there are some differences of ideas that are helpful, because just as we've just described the culture which works on being together and collectivistic and thinking of the whole, but, but the downside of that is the way that you keep people together is, one way is shame so that you keep everyone conforming to the group, which preserves the group and devalues the individual, and that's wonderful for lots of wonderful reasons … but … where its gone wrong, how do you fix it within that culture? So there are lots of ways in that culture of fixing it, but they will tend to fix the group. So if we want to help individuals then those ways ... that quite interesting, I probably should be writing this down shouldn't I? [Laughs] I think, is it? I don't know.

1.5.5

6.1.2

3.4

Group not aiding recovery – ideals and conventions of the group is keeping the group traumatized

M: Yes.

I: So those ways are not going to help the individual, so if you want to help the individual, the individual Kosovo woman, kind of getting her together in a group full of other women to make each other all feel ashamed is not going to work, getting them together and putting to them the idea that, that they can choose to stand back from that shame and think about well who's shame is it? Whose idea is that that we should hold this shame for things that were done to us, which is a very challenging idea but it can only come from outside the culture. 3.3.2

M: Yes, because if not it would only be perpetuating itself.

I: Yes, and that's its job [laughs] and, what was the question?

M: How do these thoughts influence adjustment?

Help coming from outside the group

I: Erm, so I'm arguing, I'm answering in terms of how do we help, which (laughs) is a different question. How does it influence adjustment? Well I suppose what I'm meaning is the adjustment is coming from outside ... from different ideas, that's what I see because that's where I'm located, outside, I don't know how its happening within cultures. So that not just, that goes back to what I was saying, that not just sort of having an intervention, but also living in a different country, looking around and seeing different ways of being. 1.5.5

M: Ok, I see, I'm just wondering, its slightly off topic, do you think they self-blame? 3.3

I: The Kosovo women I've worked with totally self-blame. I mean you've got to think of the attitudes to rape that we had in this country, and its probably not that long ago, but that attitude of, well, one of my clients said a long way down the line one of the things that bothered her was she, because they were leaving the house the day she put on her best clothes, so was it because she was wearing nice clothes that she got raped?

M: Ok so she sort of brought it back on herself?

I: Totally, totally. To put the context on this with regards to Kosovo, the, well its not law, but its kind of, its kind of, the way is if a woman … ok if a woman has sex with someone outside of their marriage the husband takes the children and leaves and she's left on her own and has no chance of anything or anybody or anything ever again.

M: So she's completely ostracized?

I: Yes she's completely ostracized, and so if you don't separate rape from having sex with someone, which they don't, that's still the situation, so when I say families can't speak to each other, we had at the clinic I was working with, we'd be working with women and men who would, could not, could not talk about the fact that the woman had been raped, because then they would have to go through with him leaving and taking the children, however much he understood and didn't want to, he didn't want to hear it and she knew that she couldn't tell him because that would destroy the family. You see?

M: Yes, so she can't help herself in that way by discussing it and try to move forward?
I: No no no no no, absolutely cannot talk to her husband, because then they would be forced to break up the family.

6.1.2

Cultural framework – not necessarily helping

M: So it's the cultural framework of what you do when these things happen?
I: Exactly ... so nobody is acknowledging rape and the same in Bosnia, there's no rape, I mean these programmes that are working in Kosovo and Bosnia now who have been raped they're tiny and you know, very, very courageous, very few women, and I don't know but I'm guessing that a lot of them are single women, although that's got its own problems.

M: So in a sense they are then introducing the idea that you can look at it (referencing rape) from a different point of view and introducing sort of that outside influence almost?
I: That's what I mean about, exactly. Loads of my work was talking about different ways of thinking about rape, thinking about rape as an act of war or as an act of violence, as something that you don't have any choice about as the person who is raped.

1.5.5

M: Ok, well thank you so much for answering my questions, if I could just get you to look at this questionnaire and have a read through.
[Overlaps with M] I: OK, all right. Do you want me to put any notes on here?

M: Yes if you like.
I: I'll put something here to remind you. [reads]
This is quite a tough intellectual challenge, I have to think about that, because it's not whether somebody from a collectivistic culture who would have been traumatized would endorse that but the range of things they would endorse pre and post. [Reads]'I feel like an

object not a person' – depends on what we were saying about roles. [Reads] 'I can't rely on myself' – yeah now there you can imagine somebody saying, well of course they don't, I never relied on myself, so it's pointless. [Reads] 'My actions since the event mean that I am going crazy' – yes I've met a lot of people that would say that. [Reads] 'I'll not be able to control my anger and do something terrible' – now that's something I hear a lot of. [Reads] 'You have to be especially careful because you can never know what can happen next' – that's not, that's not the, that's not the split that we were talking about. That's the split you and I talked about earlier, to do with erm what you've grown up in, so Turkey comes down on the individualistic side of the thing doesn't it, but look at all the erm, Kurdish fighters in that part of the world, they've grown up with political ... so … so that wouldn't be discriminatory for them, I'll make a note of unsafe backgrounds. I think what I'm saying is if you've had somebody that's always believed that, as a child, I mean really developmentally, so they were taught that both implicitly and explicitly by their parents, because the police came randomly to their house for as long as, as far back as they can remember and beat people up and went away again, that's it you don't know why, so ... that, if you give them this question before and after some bomb it's not going to change.

2.3

4.1.1

M: Ok so it's the context again, they've grown up with it, they're used to it, somebody, who is, this is unique to them?

I: Exactly, you measure me before and after 7/7 then it makes a difference, a change. [Reads] 'I can't rely on other people' – yeah I think that shifts, and again it depends on the trauma because people may have let you down or worse you've been in a situation where you have let other people down and that's much worse to handle … but also it teachers you that whole premise of relying on other people because you thought you were somebody who other people could rely on, above anyone you know, someone who has very strong morals, this is the kind of person I am, you can rely on me, some, some soldier type person or freedom fighter, the type of person you know, I'm solid, I'm not going to let my friends down.

2.3.2

M: Ok so under pressure they've done something contrary to what they thought they would do?

I: Yes and then their whole value goes. So what I'm trying to say is that can get generalized and then the whole value is rubbish. So I thought I could be relied on and then I wasn't. So why would I think anyone else could?

2.2

2.3.2

4.1.4

Language
Individualistic type thoughts being measured

M: Yes so you think you know yourself, and then you find out you don't, how do you know other people?

I: Exactly. [Reads] 'The event happened because of the way I acted' – well … yeah, no I think that's more appropriate than ever, somebody who subjugates themselves to the, it's my fault that everything's destroyed. Which is odd isn't it because that's a very individualistic thought, hhmmm I still haven't got my head completely around this yet. [Reads] <u>There are passive and active statements. The event happened, but this is I should have done something and that's very different. So that's requiring a sense of being able to do something to change things … how interesting.</u> [Reaches the end of the questionnaire] OK. 8.1

M: Great, thank you, thanks for taking the time to do this.

Appendix J

P14 Key Informant Interview

Interview Key: M = Moderator I = Interviewee [Actions] … Pauses

M: What does trauma mean in collectivistic cultures?

Trauma impacts the group
Collective trauma

I: Well I think the, the big difference I would notice is that, that trauma is possibly thought as, or experienced at the group level. I mean thinking very much of the cultures I deal with a lot, Turkish Kurds and Tamils, I suppose are what erm, the Kurds certainly I think you do, there is a lot of sense, of the what's important is what happened to the group and how the group responded, the family, the party, the village, the town, or whatever it is, the Kurds as a whole, you do, I have worked with clients, who will … if you sort of think, if you listen very carefully to the contents of the session when you're working with them, what you will get a lot of the time are, is Kurdish history, history of oppression of them as the Kurds; and I think this is to do with, is not, if you could possibly think about that as a defense mechanism, as avoidance of dealing with what actually happened to you, and in a certain sense it is, but 3.5

Language

there's another element of it which is that actually that the "we" is more important than the "I" and if; I speak Turkish and Kurdish and certainly the Kurdish people are speaking to each other in either of those languages, the words they use are "we", "us" and "our", erm you very rarely hear anyone say "I", "me", about all kinds of things and I think trauma is within that, and so its quite, it can be quite unusual to hear somebody talking very directly about themselves or me as an individual, what happens, there's also among the erm, on the other side of everything erm, if you haven't, have you come across the work of Daya Somsundaram, he's a Tamil psychiatrist? 8.1

M: Yes somebody recommended I look up his work, which I was going to do.

Collective trauma
Recovery at the community level. Individualistic vs collectivistic recovery frameworks

I: Yes you really need to read him, because he's written a lot about of collective trauma, he very much thinks about the only way you can think about trauma, erm to the Tamil, for the Tamil society, is to think about it at the community level, but in terms of the way everybody, 3.5

in Tamil society has been traumatized and that hence interventions are at the community or the group level rather than at the individual level, in practical terms of the provision of psychotherapy, it often is more effective at the group level, and we find this, not overly, but we have found this here, that for instance, we have a Turkish speaking men's group, which works very very well, because they have a natural affinity to be to exist, to interact, to 1.5.5

experience as a group rather than as individuals, and I think there is a very, it is a very northern European thing to do north European, American thing to do, to go and see a therapist on your own and talk about yourself, and talk about your family from a very particular perspective, so erm, I definitely would recommend you try and track down some of his work. 1.5.5

M: Yes I will thank you, I've written his name down in my diary again, so I will do so. My next question is, what typical thoughts do you think somebody from a collectivistic culture would have after a trauma?

I: Right, well, I mean … I suppose, it is really a difficult question … I think having said everything I've just said, it certainly is true that you would meet people, I've worked with Tamils and Kurds, who have, who come in and talk about nightmares and intrusive thoughts, all the classic PTSD symptoms, they're all there, but I suppose it's a question of whether, if they would feel, if symptoms are addressed, is that enough, the answer for me is no it isn't, because the sort of people who are suffering, or erm… all these wrongs that have been done to my people over the years, and all of those needs to be addressed … erm, I think erm … I think somebody from an individualistic culture will be worried about their family, their friends, but possibly in a slightly more exaggerated, and er there might be more erm … I suppose I don't know if the thoughts would be different, but it might be more to do with the emphasis of where the worry lies. 1.4.3 3.5 6.1

M: Ok, just to break down on the question I just asked, what typical thoughts do you think they would have about themselves following a trauma?

I: Well erm … I suppose, it is very difficult to generalize, I think in terms of erm … it's important not to think that to group people together, although it's difficult not to given what we are talking about, erm … certainly with torture it effects everybody in slightly different ways, erm and its very easy erm one of the difficulties in starting to think about the collective cultures and the group, is that you lose sight of the individual, and you begin to think well all Kurds will respond in a certain way, all Tamils will respond in a different way and actually erm I think I've probably noticed for, that's true to a certain extent, but you always have to particularly, you always have to allow for the fact that there are occasions that you might meet for instance somebody from a particular community who has been so badly disturbed and traumatized and damaged by what's happened to them, that they're unable to play their part in the group any longer and this is the thing about collectivistic cultures, the group is 3.4 2.3.1

Individual vs the group

Roles – loss of roles/ failure to fulfill roles – not being part of the group – impacts on coping

everything, you don't just take, you've got to give something into it and its often people who have come to that point that would come to us for some form of assistance, erm and erm … 2.3.1

or the people who are here to make use of the group still , and have good support network and socialize and got to their community centers for particular cultural activities are coping fairly well as opposed the person is so depressed who can't get out of bed and go and access it, or the person who is being rejected by the rest of the community because they're perceived as being mad or etc so erm it's a … there's a range there, but I think, I agree, that the western medical construct of PTSD is a western medical construct and on its own it isn't erm always used appropriately around the world, I certainly agree with that, however I disagree with those colleagues and some of whom have famously worked here in the past, Derek Summerfield, he worked very briefly, he, what he does, he's never provided an answer to the question I've had for years, which is, ok if this isn't a western multicultural concept, lets accept that … but then this man from the Ivory Coast who is setting in front of me, he's been tortured, and is complaining quite spontaneously, without me prompting, he's complaining of nightmares, flashbacks, avoidance, hyper-vigilance, intrusive thoughts, so now, and he's in huge amounts of distress because of this and needs some kind of assistance, and so I think you need to be quite sort of pragmatic, and if erm, its more, you know and possible because of this, you know as I was saying he's not able to access community support, but that said, I would recognize, very much the power of group work and would bring him together with others who have had a similar experiences.

1.5.1

2.3.2

1.4

1.5.1

M: Ok, so following on from the last question, what typical thoughts do you think they would have about the world in which they live following trauma?

I: Erm … what I'm trying to get at is what would be different from somebody who is individualistic.

M: Do you think there would be a difference?

Trust - in others - broken World is not safe

I: Will there be a difference? I think … there's something, the most typical thing that you hear is expressed in many ways is the idea the world is no longer a safe place, the … erm and the, that erm … that other people can't be trusted, men can't be trusted, or whoever it is, erm that you hear, that can express itself in all sorts of different ways, it manifest very plainly in relation to the therapeutic relationship, can the therapist be trusted. The er … it's also, erm at the moment with the riots in London, erm it's a rational response to be frightened about the riots, but erm, that safely is a very big thing. I mean it could also be, you might find, erm,

4.1.4

Responsibility – to group/society
Social roles

possibly a sense, more of a sense of guilt having left, the country, they've left the struggle to come here, that may be more pronounced, I think its erm if you want to think in some psychoanalytic terms, to think of the superego, containing much more than simply the internalization of parents, it will include erm the internalized objects of much broader, broader range of objects, and relationships and responsibilities and things and community and society etc, and responsibility to society, and I think erm, I mean it was very interesting er watching the coverage of the riots, erm, where, I don't know if you saw the news, in Kingston Rd in Hackney, where the Kurdish shopkeepers and friends and relatives came out in mass.

3.3.3

2.3

M: Yes I did.

I: To protect their shops and to chase people away, and erm, the er sort of I imagine the Pakistani community in Birmingham did the same thing, and so erm, this erm, and it being er kind of positive sort of something everybody expects, and it's a positive thing, there wasn't any sort of discussion about it, it sort of happened more or less spontaneously.

M: Yes.

Support from community

I: But sort of English people do that, now ok, they may have been right wing, that's fine fair enough, but instantly the response of the sort of community, society is that they're vigilantes, or they're racist or something, and so its interesting that in the Kurdish community it was an honorable and expected thing and they were in the news that evening, they were interviewing Kurdish waiters and they were talking about it, and he was making this very point, its very interesting, he was saying that you've got to understand that the culture, our culture, that if somebody attacks your home, or he attacks your village, or attacks you, your street, everybody will turn up and try to protect you.

6.1

M: Ok, so social roles coming into play?

I: Yes, and that's what we were doing, that's all that was happening here, its regarded as a positive thing about that community, whereas with, its very interesting to think about the different responses to the, you could, ok there did seem to be an element of involvement from the English defense league and other unsavory characters, but, you know really you need to think of the societal response to people doing that was different.

M: Yes.

I: that's why I'm telling you about the different ways.

M: Ok, so you're saying that although the action is the same, but because you're coming from different cultural backgrounds it's interpreted very differently.

I: Yes yes.

M: Ok, and what typical thoughts do you think they would have about their future after a trauma?

I: Well, erm … you get that, the really noticeable thing is the absence of thoughts about the future, that's the problem. In the sense that there isn't a future. Some people can get so badly traumatized, so badly depressed they want to commit suicide, they can so badly lose their trust in the world and so they can't actually see themselves surviving, which is extremely difficult, worrying, because that's where people become very seriously suicidal. But I think that erm, you might, I mean saying, I'm thinking about young Tamil women who I've worked with over the years, who have been raped and will … erm shame coming into this at quite a communal level as an example, where a considerable story reminds me of a young woman who had been imprisoned in Sri Lanka and had been burned with cigarettes, on her upper back and arms and if you think if you are a Tamil you wear a Sari.

No future – can become suicidal
Lose trust in the world – self not able to survive in this world

5.2

3.3.4

M: Of course so it's in the exposed areas.

I: So she comes under scrutiny, so its a signal to the community that this young woman has been imprisoned and it was assumed that if you're a young woman and you had been imprisoned then you would have been raped. And so what we discovered was happening, was that then because you had been raped shame falls on you and your family erm and women would talk to us about feelings that they were impure, they were never able to get married erm and as we got into it more and more we discovered that actually what would often happening is that they would have to flee for their own safety and their family would have to entirely relocate because of the sense of shame.

Shame – self-blame
Community scrutiny – prohibits recovery
Relocate/avoidance

3.3.2

M: Ok, so the shame stays with the family, so again affecting the entire group.

I: Yes and then they would have to come here, and that's a good example of how the trauma is shared and impacts on everybody and it can kind of erm and those who feel no thoughts about the future, and you can meet people who er, we've had cultures who have a belief in

5.2

Religion/beliefs
Community judges/blames – impacts recovery

karma, the Hindu's they believe in karma and reincarnation, hence the idea that if something horrible happens to you in this life its because you did something terrible in the previous life, and this is quite an active belief, I work with people here, who talk about being blamed and judged by members of their community because of their misfortune, they've been tortured, or somebody's been killed, or whatever, they've been blamed for it, because of what they did in a previous life.

3.3

4.2.2

M: Ok right, so past transgressions coming back.

I: Yes, yes and hence erm, and that they hold, its very difficult to shift because its on the level of a religious belief, its extremely hard to get over. Now, I don't believe in reincarnation, and even if I did I don't feel that the responsibility lies the torturer, in the same way the responsibility of a riot lies with the rioter you know … I guess I've gone off the question, trauma in London (laugh). So that element comes into it, plus also erm … I am a bad person, this is another thing that its like they phase into that thought, its my fault that this has happened; which I think and also as I said, the level of I'm a erm … I've let everybody down by leaving and coming here.

M: Ok, so going back to the first question regarding thoughts they'd have about themselves after trauma, these appear to be self-blaming?

I: Yes, yes, it can be, it affects everybody slightly differently, I'm generalizing, yes.

3.3

M: OK and concerning relationships with others, what typical thoughts do you think they would have about their relationships with others after experiencing a trauma? Would that change or strengthen them?

I: Err … well … erm … again there would be a massive variety, I think it would it can with certain people undermine their relationships or isolate it because of the feelings of guilt and shame, erm there is a lot of work about you know adversity activated developments, there's ideas of posttraumatic growth, resilience, and whereby people eventually grow, when they come to realize and perceive themselves as survivors and it takes along time but when you've been working with a patient and they begin to realize that they've survived. That in itself is an extraordinary thing, then that's where you see people grow and develop. But, as so what I think erm, and that can include people sort of being, coming closer, it can destroy relationships, having somebody, the trauma of, you know if you have a family, trauma is somebody leaving, being taken away, imprisoned and tortured then coming back into the

3.3.3

1.5.8

6.2.1

Relationships impacted – damaged/broken
Self-growth

family, and when they come in could be perfectly normal, and the fact that they are traumatized, shaken, angry, frightened and not sleeping, shouting in their sleep, hyper-vigilant, on a short fuse that can place enormous pressure on a relationships; and the, I think that er and that why we have here such a big family team, because we think about families even when people are referred to us as individual clients. Very often the families come in too. Erm … so, you can get situations where people are left feeling - unless you've been through this as well you can't understand what I've been through. I think it does, erm they also can be all kinds of mistrust and suspicions, and particular as often happens when the family were all arrested and all tortured, dad was the one who was in front of everybody else, so they can directly affect the relationships of the family very seriously, which hence can have a knock on effect on the children.

1.2.1 & 1.3

3.2

6.2.3

4.1.4

Trust/safety

M: and lastly, all these thoughts that we have been talking about, the self, the world, future, how do these thoughts influence adjustment?

I: Well, if, the community, erm if one exists, I thin certainly where, the Tamil community are extraordinary in how they look after each other, they've been amazing since about 2005, 2009 that period of the war, and then afterwards, they are the biggest part of our clients here, and a very very high percentage of them are being taken in by friends and distant relatives, its extremely unusual to meet a homeless, destitute Tamil, somebody will take them in and look after them, and they are very organized, for instance they are old-boys and old-girls cricket team and you can find out who you went to school with and you can come here and find out and meet them and go and play cricket. The huge demonstrations in Trafalgar Square during the war, the Kurds do that as well, there's a real sense of responsibility, and that I think being part of it, if you are at the stage of making use of it, is a wonderfully protective factor. Now it can be used as an idea within I think in both of those cultures, the predominant political parties, have exploited that collective spirit, they've in turn put pressure on people to support them. It can also mutate into something incredibly perverse, the honor killing, it is a mutation, that comes out of a collectivistic culture, in the sense of the, that the, a woman who looks at a boy or who has a boyfriend, or something ridiculous like that has brought shame on the family, and a lot of that goes on, and I think that it needs to be thought about, the downside, the shadow to be considered. It would be wrong to idealize this, but certainly most of the time I think it's a very, and I think the events of it in Hackney the other evening was a very good example of it, where they said they're not going to kill anybody but we are going to protect ourselves, which is a perfectly legitimate thing to do, a very positive thing to do.

6.1.1

6.1.2

Adjustment – community – protects supports but can also cause many problems

Erm ... and there were, certainly when I worked in that community a long time ago in London, it was wonderful being a part of it, it was very seductive actually, to be pulled into and feeling this sort of living organism thing around you, the group, which is the community and feeling it can go to help very quickly. And so once you get your head around the way it works, you have to put something in and you get an awful lot back, lot of support, and but it does have its danger, its downside as well … but anyway I'm going off the point here. 6.1.1 6.1.2

M: No, no, it's been very helpful. If could ask you to please read through this questionnaire and fill it out. If there are any items on there you feel are inappropriate please let me know your thoughts on it.

I: Nothing good has ever happened to me – yes I think that's very appropriate. I think again when they are saying, my, I, my life has been destroyed, I have no future, it again depends really on what kind of level, distress or traumatization, or aggression I suppose, you can call it what you will, but you will meet people who you won't ever hear that, what you'll hear is sort of thinking about the future of the Tamil, or Kurds, or we are weak as a group. [Reads] I feel like an object not a person … yes I think, I don't think that would make sense, another thing I think you need to factor is language, that Tamil and Turkish are very different languages, and the grammar and the vocabulary is very, very different. 8.1

M: Ok, so they have very different nuances?

I: Yes, yes, so you might have here, in Turkish, I don't feel myself, but it would be interesting to see how this would be translated into Turkish. [Reads] I can't deal with even the slightest upset, yeah – my reaction is that people as feeling that they are going mad, you suiciddo hear that. [Reads] I feel dead inside, yeah. [Reads] The world is a dangerous place, yeah. Yeah the guilty ones at the end, the event happened because of the way I acted, you hear that a lot, unrealistic guilt. We had a client who had been beaten unconscious by a group of soldiers who attacked his family and then his mother was killed, so he was actually unconscious at the time she was killed, so there was nothing he could have done and he was wracked by guilt. I suppose that I mean, have you read anything by Renos Papadopoulos? 3.3.3

M: No, I haven't at the moment. But any references would be much appreciated.

I: There's a book called therapies of care for refugees by Renos Papadopoulos, he's a clinical psychologist and a systemic psychologist, he's lovely, now I think he's based in Essex, some centre there for refugees. He's got his idea of a trauma grid, which is to do with tracking

responses at the individual, family and community level and also tracking the resilience; there are many lines of the grid and it's a very good way at looking at it, you cannot just look at it at the individual level. He's worth reading.

M: Ok, thank you, I will do so.

I: And Daya is preparing a book at the minute on trauma in Tamil community, which I contributed to as well. Part of what we were writing about were what clients were telling us about how their trauma was impacting on the people they were living with. So the types of experiences people had and how they were dealing with them. For a period of 3 years during the war we saw I think about 12% of all Tamil society who came through, but until its published I cant give you a copy but he's based at the university of Adelaide, so you may be able to track him down if you wanted to. Also they are a very topical people to be writing about, because of the cultural trauma.

M: Yes definitely, I will look into that. Thank you again for the suggestions and for taking the time to do the interview, it's been really helpful.

I: That fine, yes, and what sounds interesting from what you're doing is that it's a much needed piece of work, there is a lot of interest in collectivistic cultures, especially from psychotherapy, but very rarely is it broken down in how it expresses itself and language is very important.