2013

Expressions of cultural worldviews in psychotherapy with clients who have experienced trauma: a qualitative study from a terror management perspective

Christopher Ogle

Pepperdine University

Graduate School of Education and Psychology

EXPRESSIONS OF CULTURAL WORLDVIEWS IN PSYCHOTHERAPY WITH CLIENTS WHO HAVE EXPERIENCED TRAUMA: A QUALITATIVE STUDY FROM A TERROR MANAGEMENT PERSPECTIVE

A clinical dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Psychology

by

Christopher Ogle

September, 2013

Susan Hall, J.D., Ph.D. – Dissertation Chairperson

This clinical dissertation, written by

Christopher Ogle

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

Doctoral Committee:

Susan Hall, J.D., Ph.D., Chairperson

John Briere, Ph.D.

Shelly P. Harrell, Ph.D.

Michael Salzman, Ph.D.

TABLE OF CONTENTS

Page

Page

Page

LIST OF TABLES

Page

LIST OF FIGURES

Page

ACKNOWLEDGEMENTS

This dissertation absolutely would not have been possible without the support and guidance of a select few people. First, I would like to thank my chair, Dr. Susan Hall for her steadfast encouragement throughout my graduate training and for her commitment to provide mentorship and direction for the years required to complete this project. I would also like to acknowledge the members of my dissertation committee, Dr. Jon Briere, Dr. Shelly Harrell, and Dr. Michael Salzman, not only for taking time out of their busy professional lives to read and evaluate the content of this document, but for offering their individual expertise for the betterment of this study. I consider myself extremely fortunate enough to work closely with two exceptional lab mates throughout the dissertation process; Rebecca Rutchick and Celine Crespi-Hunt are two of the most genuinely caring and supportive individuals I know, and there are no two people that I would rather have as lab mates or friends. Finally, I would like to thank my family and loved ones. My parents, Mike and Kim Ogle have provided me unwavering love and support throughout my entire life regardless of the undertaking, and my siblings, Chad, Cliff, and Carli, have been a constant source of encouragement. I am very grateful to be a part of this family, and if I have accomplished anything of significance in my life, they surely deserve some credit for it. I also want to thank Chelsea Acree for her steadfast love and kindness, as well as her patience while I was absorbed in this dissertation.

CURRICULUM VITAE

Christopher Ogle

Education

Pepperdine University, Los Angeles, California
Doctor of Psychology in Clinical Psychology

- Expected to graduate in Summer, 2013
- GPA: 3.99
- **Dissertation** (approved 8/30/2011 and expected completion – Spring 2013): Expressions of cultural worldviews in psychotherapy with clients who have experienced trauma: A qualitative study from a terror management theory perspective. Chairperson: Dr. Susan Hall.

Pepperdine University, Los Angeles, California
Master of Arts in Psychology

- Graduated May, 2009
- GPA: 4.0
- **Final Project**: Men in Therapy: Masculinity Considerations

The University of Arizona, Tucson, Arizona
Bachelor of Arts in Psychology, General Business Minor

- Graduated Summa Cum Laude May 2007
- GPA: Psychology 4.0, General Business 4.0, Last Two Years 4.0, Cumulative 3.964

Clinical Experience

VA North Chicago (Captain James A. Lovell Federal Health Care Center), North Chicago, IL
Psychology Intern: September 2012 to August 2013

- PTSD Clinical Team rotation (September 2012 to January 2013)
  - Provided diagnostic assessments and evidence based treatment for Veterans with PTSD
  - Participated in interdisciplinary team meetings
  - Co-facilitated cognitive processing therapy group for Veterans with PTSD
  - Conducted compensation and pension evaluations
- Recruit Evaluation Unit rotation (September 2012 to January 2013)
  - Worked on the Great Lakes Naval Base as part of a civilian and active duty treatment team
  - Provided diagnostic and neuropsychological assessments for naval recruits
  - Met with treatment team to determine recruits' fitness for duty
  - Led support group for Navy recruits having difficulties adjusting to the military
- Homeless Veteran Rehabilitation Program/Dom rotation (January 2013 to May 2013)
  - Provided individual and group therapy to homeless Veterans in a residential setting
  - Worked closely with other providers on an interdisciplinary team
  - Participated in referral and discharge process
- PTSD/Substance Use Disorder rotation (May 2013 to August 2013)
  - Provided assessment and treatment to Veterans with comorbid PTSD and substance use

- Worked closely with other VA programs such as Addiction Treatment Program and the Stress Disorder Treatment Unit

VA Healthcare System Long Beach, California

Psychology Pre-Intern: August 2011 to August 2012

- Spinal Cord Injury rotation (August 2011 to March 2012)
  - Provided individual assessment and therapy to Veterans with spinal cord injuries
  - Participated in interdisciplinary medical team meetings within consultation-liaison framework
  - Received behavioral health training in an inpatient medical setting
- Outpatient Psychology rotation (March 2012 to August 2012)
  - Provided individual, couple, and group therapy to Veterans with a variety of diagnoses
  - Received training in various evidence based treatments

Pepperdine University Community Counseling Clinic Irvine, California

Graduate Clinician / Practicum Trainee: September 2010 to July 2012

- Provided low-cost, individual and couples therapy to members of the surrounding community with a variety of concerns including: substance abuse and dependence, acculturation struggles, depression, suicidal ideations, anxiety, relationship issues, family concerns, financial concerns, and trauma recovery
- Received weekly supervision from licensed psychologists, which included review of video recorded sessions
- Presented clinical cases to supervision group

UCLA Center for the Assessment and Prevention of Prodromal States Los Angeles, California

Clinical Assessment Extern: July 2010 to July 2011

- Conducted structured interviews with patients referred for being at risk for developing a psychotic disorder
- Administered a variety of psychodiagnostic assessment measures including the Structured Clinical Interview for DSM-IV Disorders and the Structured Interview for Prodromal Syndromes
- Conducted structured interviews with patient family members
- Consulted patients' psychiatrists, medical doctors, psychologists, and other treatment providers
- Interpreted and scored a variety of clinical assessment measures
- Wrote detailed reports based on the results of clinical assessments
- Presented clinical cases and assessment reports during case conferences

Pepperdine University Counseling Center Malibu, California

Graduate Clinician / Practicum Trainee: September 2009 to May 2010

- Provided individual therapy to undergraduate students with a variety of concerns including: acculturation struggles, depression, suicidal ideations, anxiety, sexuality issues, relationship issues, family concerns, financial concerns, academic concerns, existential issues, and sleep problems
- Engaged in outreach projects directed toward the undergraduate students including classroom presentations to first year students as well as national depression, eating disorder, alcohol abuse, and anxiety screenings
- Received weekly individual and group supervision from licensed psychologists, which included review of video recorded sessions

Zarephath Tucson, Arizona
Behavioral Health Paraprofessional: June 2006 to July 2007

- Scheduled and provided respite care to clients ranging from 5 to 18 years old
- Evaluated client referrals from contracted agencies
- Worked with clients toward cognitive-behavioral goals established by their primary clinicians
- Assessed and reported client progress

Research Experience

Pepperdine Applied Research Center Dissertation Lab
Lab Member: March 2010 to present

- Independently code data using other lab members' dissertation codes
- Regularly meet with other lab members to discuss coding and improve inter-rater reliability
- Meet with dissertation lab consisting of four cohorts to discuss dissertation progress and offer suggestions
- Submitted proposal to present paper on dissertation results at Annual Convention of the American Psychological Association on July 31, 2013

Pepperdine University Community Counseling Clinic Irvine, California
Research Assistant Supervisor: May 2010 to July 2012

- Created and maintained individual client research files with a variety of demographic and outcome measures
- Supervised research assistants in entering data into a database shared with two other sites
- Monitored and revised any discrepancies in research files or database
- Instructed clinic therapists on proper administration of measures

Pepperdine University Counseling Center Malibu, California
Graduate Assistant: November 2007 to April 2009

- Entered client data into database
- Researched relevant client issues
- Helped conduct, analyze and present research projects including one which was presented at a national conference for college counseling center directors
- Assisted with general office work

Relevant Conferences/Professional Development

Treating Complex Trauma in Children and Adolescents
Presented by California's Child Abuse Training and Technical Assistance Centers
Presenters: John Briere, Ph.D. and Cheryl Lanktree, Ph.D.
June 11, 2010

Tragedy and Triumph: A Multicultural Perspective on Trauma and Resiliency
Presented by the Multicultural Research and Training Lab
Graduate School of Education and Psychology, Pepperdine University

Keynote Speaker: Gail Wyatt, Ph.D.
October 16, 2010

Cultural and Social Justice within the Rainbow
Presented by Students of PRIDE (Students of Psychology Respecting Inclusivity Diversity and Equality)
University of La Verne
Keynote Speakers: Arlene Noriega, Ph.D. and Doug Haldeman, Ph.D.
March 24, 2012

The Collaborative Assessment and Management of Suicidality: An Evidence Based Approach
Presented by the Captain James A. Lovell Federal Health Care Center
Keynote Speaker: David A. Jobes, Ph.D., ABPP
September 6, 2012

ABSTRACT

People who have experienced trauma involving serious threats to physical integrity can react in accordance with various response trajectories, including posttraumatic growth (PTG). PTG is characterized by positive psychological change following trauma that goes beyond a return to pre-trauma functioning as the result of reorganizing one's conceptualization of his or her phenomenological world (Tedeschi & Calhoun, 2004). This study was interested in factors that contribute to PTG from a terror management theory (TMT) perspective. TMT, based on existential philosophy, posits that people defend against the knowledge that everyone must eventually die and the accompanying anxiety by investing in cultural worldviews and deriving self-esteem by adhering to the standards and values prescribed by those worldviews (Solomon et al., 2004). Based on TMT research that suggests that when people are reminded of their mortality they tend to place increased faith in their cultural worldviews (Burke et al., 2010) as well as the assumption that reminders of previous trauma would likely make mortality salient, this study employed a directed content analysis to examine cultural worldview expressions among therapy clients who had experienced trauma.

Qualitative analysis using the directed coding system created for this study resulted in coding 77 cultural worldviews across the 5 sessions from 5 coding categories: other (explicit) (n=32), other (implicit) (n=20), nationality (n=13), religion (n=8), and ethnicity (n=4). The clients referred to cultural worldviews throughout their sessions, even though only one therapist directly facilitated cultural discussion. Worldview expressions amidst trauma discussions were considered potential contributors to PTG as they served a meaning making function. Also, many worldviews and cultural affiliations referenced were different than those commonly studied in previous TMT research (i.e. referenced cultural affiliations other than religion, ethnicity,

nationality, or political affiliation such as gender and age/generation; did not discuss political affiliation). Multiple factors such as differences among clients, contextual factors of the sessions, and therapists' style were considered to potentially have influenced the variance in worldviews expressed. The findings described in this study can contribute to ongoing psychotherapy training and research bridging the gaps among PTG and TMT theory, research and clinical practice with trauma survivors.

Chapter I

Literature Review

Although traumatic events seem qualitatively different from the negative events of life that all people endure, not everyone who experiences a traumatic event develops a disorder or experiences prolonged distress. Research shows that individuals may follow one of many patterns of responses, known as trajectories, after exposure to traumatic events (Bonanno, 2008). Some people respond to such events by developing post-traumatic stress disorder (PTSD) or by experiencing significant distress that may not satisfy the criteria for the diagnosis of PTSD (American Psychiatric Association [APA], 2000). Others may be resilient to pathological distress, or may achieve posttraumatic growth, a degree of personal growth after experiencing trauma that goes beyond returning to their baseline level of functioning (Davis & McKearney, 2003; Park & Blumberg, 2002; Reynolds & Lim, 2007; Tedeschi & Calhoun, 2008). This study is particularly interested in those who achieve such growth in the wake of trauma.

Understanding the various mechanisms by which individuals achieve growth after a traumatic event can be useful in the development of treatment strategies for individuals exposed to traumatic events. Clinicians are encouraged to incorporate a variety of established protective factors in treatment that might be used to move trauma survivors in the direction of growth. One such protective factor might be the incorporation of cultural worldviews into the individuals' understanding of the traumatic event.

From a terror management theory perspective, turning to cultural worldviews allows a person who has been reminded of his or her own mortality the ability to construe the self as belonging to something that will outlast his or her physical existence (Arndt, Greenberg, & Cook, 2002; Burke, Martens, & Faucher, 2010; Pyszczynski, Greenberg, & Solomon, 1999; Vail,

Rothschild, Weise, Solomon, Pyszczynski, & Greenberg, 2010). This use of cultural worldviews for support helps the individual to cope with the anxiety created by an awareness of mortality (Arndt et al., 2002; Burke et al., 2010; Pyszczynski et al., 1999; Vail et al., 2010). Additionally, when mortality is made salient, bolstering of worldviews increases self-esteem, reduces death-related anxiety and cognitions, and reduces the need for additional psychological defenses (Routledge & Arndt, 2009). Moreover, if one is able to find evidence that he or she is part of a valued culture, he or she should consider life more meaningful and purposeful, which suggests greater well-being (Davis & McKearney, 2003).

Some research suggests that providing people with the opportunity to defend their cultural worldviews decreases the accessibility of unconscious thoughts of death, which is assumed to be the source of existential anxiety (Arndt, Greenberg, Solomon, Pyszczynski, & Simon, 1997). Furthermore, an inability to affirm one's self-worth and worldviews may actually inhibit growth and coping, as demonstrated in one study in which subclinically depressed college student participants prevented from defending their worldviews after primed for mortality salience were found to be less likely to report meaning in their lives than those who were provided with the opportunity to defend their cultural worldviews (Simon, Arndt, Greenberg, Pyszczynski, & Solomon, 1998). Therefore, it seems plausible that providing a client who has experienced grave threat to physical integrity the space to integrate cultural worldview discussion into the treatment process would facilitate posttraumatic growth.

The purpose of this qualitative study is to examine the incorporation of cultural worldview discussion in the treatment of psychotherapy clients who have experienced threats to physical integrity from a terror management theory perspective. This chapter begins with a review of the relevant literature concerning the definition of trauma as well as the potential

response trajectories, which include negative outcomes as well as resilience and posttraumatic growth. Next, terror management theory is summarized and the relevant research is reviewed. As this study is particularly interested in how investment in cultural worldviews may support growth, the literature connecting terror management theory and posttraumatic growth with psychotherapy is then reviewed. This chapter concludes with a description of the purpose of this study and a discussion of its research questions.

Trauma

Definition of trauma. The *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; *DSM–IV–TR*; APA, 2000) uses an operational definition of traumatic events for the diagnoses of PTSD and Acute Stress Disorder that is considered by many to be the standard in the field of clinical psychology (Weathers & Keane, 2007). According to the *DSM-IV-TR* (APA, 2000), a traumatic event that meets the criteria for diagnosis is one involving:

> direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate. (p. 463)

The writers of the *DSM-IV-TR* also stipulated that the person experiencing the event must respond with fear, helplessness, or horror in order to consider the event to be traumatic. Thus, there are both objective and subjective components to the *DSM-IV-TR* definition of trauma.

Although the *DSM-IV-TR* definition has provided researchers and clinicians with a useful construct that organizes commonalities of various trauma types and has been the most widely used definition in trauma research, many still argue for and against this definition (Friedman,

Resick, Bryant, & Brewin, 2011; Norris, 1992; Weathers & Keane, 2007). Some have argued that the *DSM-IV-TR* fails to adequately incorporate cultural considerations into its definition of trauma (e.g. Scurfield & Mackey, 2001), and others have argued that the current definition is either too restrictive (Bracken, Giller, & Summerfield, 1995) or not restrictive enough (e.g., Norris, 1992). These arguments are described below.

Many have argued that the *DSM-IV-TR* definition of trauma and related disorders are highly influenced by culture. For example, Tummala-Narra (2007) wrote that "the way in which trauma is experienced by the individual or community and the way it should be approached from a clinical standpoint is highly influenced by cultural history" (p. 39). This author went on to posit that the diagnosis of PTSD, which was developed in Western cultures, was largely influenced by the individualistic value that one's control over his or her destiny is a desirable trait. Furthermore, the assumption that PTSD symptomatology is an expected response to extreme circumstances implies that under normal circumstances, one should maintain control over his or her fate. Tummala-Narra (2007) argued that since little trauma research has been conducted within cultures that value acceptance of one's destiny, even the diagnostic conceptualization of "normal" experiences and responses to trauma may be largely a function of culture. Similarly, Ruchkin and colleagues (2005) argued that such nuances in the expression of trauma related symptoms across cultures are often misrepresented in clinical research and practice as well as *DSM-IV-TR* categories. Other researchers have echoed this sentiment, questioning the cultural sensitivity of the PTSD diagnosis and arguing that the diagnosis should include a wider range of responses to trauma (Bracken et al., 1995; Briere & Scott, 2006).

Scurfield and Mackey (2001) also criticized the *DSM-IV-TR* for not adequately addressing cultural considerations regarding traumatic stressors and ethnic minorities. They

wrote that "the silence in *DSM-IV-TR* about race-related stressors is deafening" (p. 25), and noted that the words "racism" or "racist" do not appear anywhere in the entire *DSM-IV-TR*. Perhaps more concerning, the *DSM-IV-TR* does not reference specific race-related traumatic stressors such as verbal or physical abuse targeting the victim on the basis of race, ethnicity, sexual orientation, etc. (Scurfield & Mackey, 2001).

Underscoring the importance of culturally sensitive diagnosis, some have suggested that the misdiagnosis of ethnic or racial minorities can itself be considered a type of "racially-based trauma" (Tummala-Narra, 2007). For instance, differences in symptom presentation in African Americans with anxiety issues has often led to incorrectly diagnosing these patients with psychotic disorders (Frueh, Hamner, Bernat, Turner, Keane, & Arana, 2002). In one study, Frueh et al. (2002) found that African American veterans diagnosed with PTSD responded to self-report assessment in a manner more suggestive of psychosis than did Caucasian veterans with PTSD despite other assessments which indicated no differences between the two groups. The researchers concluded that symptom presentation suggesting psychosis in the African American sample may have been better accounted for by dissociation as a response to trauma. Similarly, Antai-Otong (2002) cautioned that misdiagnosis and incorrectly interpreting traumatic responses as maladaptive may occur when professionals fail to consider the variance of attitudes and perceptions of trauma within and between cultures.

Some have argued that persecution and discrimination based on one's cultural characteristics itself can be considered a form of trauma, which may affect one's perceptions of mental health care, interpersonal relationships, and sense of security (Scurfield & Mackey, 2001; Sorsoli, 2007). Not surprisingly, traumatic experiences are associated with ethnically motivated oppressive events that target entire populations. Events such as the Holocaust, the African

American slavery experience, and Native American Genocide can be experienced as traumatic collectively by entire cultures across multiple generations (Tummala-Nara, 2007). In referencing this transmission of collective traumatic experiences, Tummala-Nara (2007) wrote, "A racial or ethnic community's collective memory of past traumas helps to create a 'second generation' of survivors" (p. 41). The continued effects of past trauma might also help explain the increased rate of traumatic occurrences among many ethnic minority groups, such as Native American women who are at especially high risk for being victims of child abuse and neglect as well as physical and sexual assaults (Walters & Simoni, 2002).

While much of the literature concerning cultural considerations and reactions to trauma might suggest that a broader definition, which includes cultural considerations, might be needed, some researchers have called for a more restrictive definition. For example, Norris (1992) argued for a more restrictive, objective definition of trauma, which does not depend on consequences or reactions of those who have experienced the traumatic event. She proposed that traumatic events are those involving "violent encounters with nature, technology, or humankind" (p. 409).

Similarly, McNally (2004) suggested that a more restrictive definition might be useful in order to target those who have directly experienced trauma. He contended that the *DSM-IV-TR* definition's expansion to include the witnessing or learning of an event in which there was a threat to the physical integrity of others has led to a dramatic increase in those who would meet the criteria for having experienced trauma. The author used the terrorist attacks of September 11, 2001 as an example of how the current definition may lead to over-inclusion. With the current definition, anyone who felt horrified watching the day's events on the news would meet criteria for experiencing trauma. The author went on to say that problems arise "when seemingly

trivial stressors are appraised as traumatic" (p. 5). For example, the broad definition of trauma offered by the *DSM-IV-TR* might actually hinder research because it may increase the heterogeneity of participants in trauma research and not be as appropriate to the specific population of those who have directly experienced trauma. Yet, as a former member of the *DSM-IV* PTSD committee, McNally (2004) acknowledged that an excessively rigid definition of trauma might deprive some people who had developed symptoms after subjectively experienced trauma of the treatment they needed. On the other hand, in their review of the challenges with defining traumatic events, Weathers and Keane (2007) admitted that including a person's subjective appraisal of an event as part of the definition can make operationally defining a stressor objectively difficult, they still advocated for the definition of a traumatic event proposed by the *DSM-IV-TR* because of it's usefulness in creating a workable construct that provides a common framework for stressors that vary along multiple dimensions such as type, intensity, duration, and proximity.

In their proposal of PTSD diagnostic criteria for the newest edition of the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*), Friedman et al. (2011) suggested changes for how trauma is defined based on an extensive review of relevant research and critiques such as those provided above. Their review suggested that proponents of a broad definition of trauma have argued that any stressor that produces PTSD symptoms should be considered traumatic and that the inclusion of a trauma definition as a diagnostic criterion (Criterion A) may be unnecessary given the clinical research that suggests that very few people who do not meet Criterion A would meet the remaining criteria for PTSD. Conversely, proponents of a narrow definition of trauma have argued that widening or eliminating Criterion A would contradict the basic construct of PTSD as a maladaptive reaction to a trauma. After

considering the data in their review, the authors proposed a restricted Criterion A that stipulates that if a person "learns about" another person enduring a traumatic event, that person must be a "close relative or close friend" (p. 755). They also stipulated that witnessing a traumatic event through pictures or electronic media does not constitute trauma unless witnessed as part of one's "vocational role" (p. 755).

Although the bulk of the article by Friedman et al. (2011) addressed Criterion A, the authors also proposed changes to the remaining criteria. As opposed to the three symptom clusters included in the *DSM-IV-TR* (reexperiencing, avoidance/numbing, and hyperarousal), these authors proposed four symptom clusters in which the avoidance/numbing cluster is changed to two distinct clusters based on factor analysis. The four proposed clusters include intrusive symptoms, avoidance behaviors, negative alterations in cognitions (which includes numbing and detachment), and alterations in arousal and reactivity. The authors also provide proposed changes to each of the diagnostic criteria, but a review of these proposals is outside the scope of this literature review.

In keeping with the rationale that the definition of trauma provided by the *DSM-IV-TR* provides a workable construct for research purposes (Weathers & Keane, 2007), this dissertation relied mostly on the definition of trauma offered by the *DSM-IV-TR*. However, based partly on the restricted definition of trauma proposed for the *DSM-V* (Friedman et al., 2011) as well as suggestions by McNally (2004), the definition was slightly modified so that only those who directly witnessed or experienced a serious threat to physical integrity or death were included. Thus, simply learning of or indirectly witnessing (such as on television) a threatening event did not constitute a traumatic experience for the purposes of this research. Therefore, this dissertation used most of the *DSM-IV-TR* definition of trauma:

> direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or [directly] witnessing an event that involves death, injury, or a threat to the physical integrity of another person. (p. 463)

As described in the Structured Clinical Interview for DSM-IV Axis I Disorders (First, Spitzer, Gibbon, & Williams, 2002), such events might have included life threatening combat situations, serious accidents or fire, life threatening major disasters, physical assault or rape, and seeing someone killed or badly hurt. Even though PTSD research has traditionally emphasized the traumatic nature of *external* stressors such as combat, assault, or natural disasters, *internal* stressors, such as serious medical illness (e.g. stroke) have more recently been recognized as potentially traumatic (Bruggimann, Annoni, Staub, & Van der Linden, 2006; Merriman, Norman, & Barton, 2007), and capable of instigating posttraumatic growth (Leung et al., 2012). In keeping with the literature on cultural considerations and trauma-related diagnoses, this study also accounted for those threats to physical integrity in the form of threatening discriminatory behaviors such as hate crimes (external stressor) or aggressive verbal abuse (internal stressor) that might suggest the person is in danger. Finally, an event was only considered traumatic if the person had the subjective experience of fear, helplessness, or horror.

Trajectories of trauma. In the aftermath of a traumatic event, an individual may respond in a variety of ways. The patterns of behaviors and functioning in response to traumatic events are known as trajectories (Bonanno, 2008). Response trajectories range from "chronic" disruption in functioning, "delayed" onset of dysregulation that increases over time, and "recovery" in which dysregulation decreases over time, to "resilience" in which the individual maintains a relatively stable equilibrium in the aftermath of the traumatic event or "posttraumatic growth" in which the individual actually achieves a degree of personal psychological growth in

response to struggles with the traumatic event (Bonanno, 2008). "Resilience" has been distinguished from "recovery" and "growth" in the context of posttraumatic trajectories in that resilient individuals present with minimal levels of symptoms that are commonly correlated with trauma responses. Westphal and Bonanno (2007) argued that growth is more typical among those who struggle in the aftermath of trauma as opposed to those who remain resilient. These authors suggested that it is that initial decrease in functioning that spurs people to search for meaning and reorganize priorities, and therefore growth is not as typical among resilient individuals.

Negative responses to trauma. One well documented trajectory in response to trauma is a negative trajectory. Not surprisingly, exposure to traumatic events may lead to a host of both short and long-term unfortunate consequences. Many of these consequences are captured in the *DSM-IV-TR* symptom criteria for PTSD, which include: "recurrent and intrusive distressing recollections of the event," "intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event," "efforts to avoid thoughts, feelings, or conversations associated with the trauma," "difficulty falling or staying asleep," and "hypervigilance" to name a few (APA, 2000, p. 468). Physical assaults during and after military service, childhood physical abuse, and adult sexual abuse were among the most common types of trauma associated with the development of PTSD symptoms in both male and female as well as civilian and military populations (Brewin, Andrews, & Valentine, 2000; Clancy et al., 2006). Severe medical illness or conditions such as strokes have also been associated with the development of PTSD and related symptoms (Bruggimann et al., 2006).

In addition to PTSD, those who have experienced trauma may suffer from other negative effects. Research suggests that survivors of childhood trauma, such as physical and sexual

abuse, are more likely than those without trauma histories to suffer from PTSD as well as major depression, attention deficit/hyperactivity disorder, low self-esteem, and other behavioral problems in childhood, as well as similarly impaired functioning in adulthood (Heim & Nemeroff, 2001; Reiland & Lauterbach, 2008). Among adult male veterans diagnosed with PTSD, Clancy et al. (2006) found that 90% had experienced "nonmilitary-related trauma" (p. 1346). Among those who have endured trauma in the form of serious medical illness, PTSD symptoms as well as difficulties with medical compliance, increased somatic symptoms, increased pain perception, and poorer prognosis and immune functioning has been found (Tedstone & Tarrier, 2003).

According to Heim and Nemeroff (2001), exposure to traumatic events early in life is also associated with neurobiological changes, which may underlie the difficulties listed above. For example, these authors found that women who had experienced abuse showed markedly increased amounts of adrenocorticotropic hormone compared to women who had not been abused. They also found that history of childhood maltreatment, such physical, sexual, and emotional abuse and neglect, is correlated with hyperactivity in corticotrophin-releasing factor neurotransmission as well as other neurotransmitter systems, which leads to increased stress responsiveness and sensitivity. Similarly, Santa Ana et al. (2006) found that individuals suffering from PTSD who had either experienced trauma in childhood or as an adult showed very high rates of substance dependence (approximately 50%) and demonstrated less adrenocorticotrophin hormone responsiveness as compared to controls.

When one endures trauma that is repetitive and cumulative, he or she may suffer from stable, long-term disruptions in biological, social, and psychological functioning, or *Complex* Posttraumatic Stress Disorder (CPTSD) or disorders of extreme distress not otherwise specified

(DESNOS; Ford, 2009; van der Kolk, 2001;Williams, 2006). While a single event, such as an early childhood traumatic experience associated with stigma or shame (Briere & Spinazzola, 2005), may cause symptoms suggestive of CPTSD, it is usually associated with more pervasive, complex forms of trauma such as ongoing child abuse, exposure to war, domestic violence, chronic illnesses, and human trafficking (Courtois, 2008). Briere and Spinazzola (2005) identified the following symptom clusters to be associated with complex trauma: altered self-capacities, cognitive symptoms, mood disturbance, overdeveloped avoidance responses, somatoform distress, and posttraumatic stress. Roth, Newman, Pelcovitz, van der Kolk, and Mandel (1997) found that interpersonal trauma occurring at an early age, such as child abuse, significantly increases one's risk for the development of CPTSD. Despite many similarities between PTSD and CPTSD, Ford (1999) argued that the two represent distinct conditions based on differences in functional impairment and symptom clusters. This author also posited that CPTSD can even occur in the absence of PTSD. More research on complex trauma is needed to better understand this response to trauma and its relationship to PTSD.

Although exposure to trauma is empirically linked to cognitive, behavioral, and neurobiological problems, certain factors appear to influence negative responses to trauma. Some research indicates that traumas caused by others, or interpersonal traumas (e.g., rape), are generally more likely to lead to symptom distress, maladaptive avoidance, and negative outcomes than non-interpersonal traumas (e.g., natural disasters or motor vehicle accidents) (Briere & Rickards, 2007; Briere & Scott, 2006; Briere, Hodges, & Godbout, 2010). A meta-analysis conducted by Brewin et al. (2000) noted that the potential for experiencing these difficulties is considerably influenced by numerous risk factors such as gender, ethnicity, age at trauma, trauma severity, posttrauma life stress, and posttrauma social support. Specifically, their

meta-analysis of 77 separate articles, which examined responses to various traumatic events including combat exposure, rape or sexual assault, motor vehicle accidents, natural disasters, and life threatening medical illness, indicated that women and minorities are at higher risk for developing PTSD symptoms. Increased risk was also found for those who experienced trauma at a younger age, those who had less social support following the trauma, those who experienced multiple traumas and more severe trauma, and those with more subsequent life stress. However, the authors noted that the effects of certain risk factors, including age at trauma, gender, and ethnicity were not consistent across all the studies in the meta-analysis despite overall significance. In addition, some interaction effects were found, such as a significantly larger effect size for age at trauma for men than for women. These results offer support for the notion that while traumatic events are associated with a host of negative outcomes, a variety of risk factors likely interact to influence the presence and degree of posttraumatic symptoms.

While research has identified a variety of specific responses to trauma that appear to be relatively common across diverse populations (e.g. concentration difficulties, social withdrawal, sleep difficulties, and guilt), the effects of trauma should not be considered universal by any means (Antai-Otong, 2002). Instead, culture has been shown to significantly impact the experience of trauma as well as the symptomatic expression resulting from that trauma. For example, many Central American populations including Salvadoran refugees often consider somatic expressions of distress, such as headaches, intense body heat, and stomach pains, as more acceptable reactions to negative events than verbal expressions of emotion (Tummala-Narra, 2007). Therefore, one might consider the experience of trauma and the expression of the emotions associated with that trauma to be partly the function of culture.

On an individual level, researchers have found that racial discrimination and the perception of racism is empirically related to psychological distress (Jackson et al., 1996) and multiple negative outcomes regarding physical and psychological health, including paranoia, anger, and anxiety (Clark, Anderson, Clark, & Williams, 1999). Additionally, Scurfield and Mackey (2001) identified confusion and/or ambivalence about one's racial identity as well as difficulties with interpersonal relationships as common consequences of negative race-related experiences. These researchers also identified several moderating variables that might influence the impact of the negative experience, including frequency, severity, onset, and the subject's role in the experience. Therefore, cultural context plays a critical role in understanding various responses to trauma and posttraumatic presentations as well as specific traumatic experiences of oppressed cultural populations.

Resilience and coping. Another response trajectory, resilience, has frequently been misunderstood. Since most clinicians expect some level of dysregulation in response to trauma, it has even been viewed as maladaptive (Bonanno, 2008). Furthermore, Quale and Schanke (2010) argued that people from Western cultures often hold the biased assumption that physical traumas are so devastating and finite that individuals who experience such trauma cannot return to their pre-trauma levels of functioning. These authors suggested that this cultural bias toward underestimating the human capacity for resilience is the result of researchers outside a target population making erroneous predictions about the consequences of life stressors that are often more negative than are actually experienced by people inside the target population. This research suggests that clinicians may need to become aware of their biases when working with those who have experienced serious trauma in order to avoid ignoring resilience as a possible response.

Bonanno (2008) suggested that resilience is likely more common than has traditionally been accepted by mental health professionals. Resilience is estimated to occur between 10% and 70% of those who have experienced trauma (Pan & Chan, 2007). The numbers likely vary because of the various definitions of the construct. Miller (2003) suggested that a unified conceptualization of the term is needed in order to differentiate between resilience and other positive responses to trauma as well as the degree to which an individual must achieve "success" following serious trauma and less significant stressors. For example, although it is often broadly used to refer to "coping," resilience has been described as broader, more general term for a response to trauma characterized by minimal disruption (Gillespie, Chaboyer, & Wallis, 2007). Gillespie and colleagues (2007) argued that coping is a "defining attribute" of resilience characterized by cognitive and behavioral efforts to manage stress. Therefore, while adaptive coping fosters resilience, the two terms are not identical. Commonalities among various definitions of resilience include adaptive behavior, the absence of pathology or PTSD symptoms, and persistence in the face of adversity (Levine, Laufer, Stein, Hamama-Raz, & Solomon, 2009; Miller, 2003).

Another reason for the inconsistent definitions of resilience has to do with the shift from defining resilience as a personal trait, as was common in earlier resilience research, to defining resilience as an individual process, which emerged in later research (Pan & Chan, 2007). According to these authors, earlier work on resilience described it as a set of characteristics, developed from experiences with adverse or stressful situations, which allow the individual to "rebound" from challenging events. Conversely, research in later years defined resilience not as a stable set of personal traits, but as an ongoing process in which the individual interacts with a changing environment in an adaptive manner by drawing on internal and external personal

resources. However, despite this theoretical conceptualization of resilience as a life long process and the frequent application of the concept to adult populations, Miller (2003) noted that most research on resiliency has utilized young participants. This emphasizes the need for a comprehensive conceptualization of the term that stems from empirical research which can be generalized across the lifespan as well as continued research with adult populations with histories of trauma. For the purposes of this study, resilience referred to the response of an individual exposed to trauma characterized by minimal disruption and the emergence of few, if any, symptoms of mental disorder.

Early research on resiliency was primarily concerned with identifying risk and protective factors of resiliency, which was considered to be relevant since resilience was widely believed to be a personal characteristic (Pan & Chan, 2007). Risk factors identified in this first generation research included personal characteristics such as psychiatric history (Bonanno, 2008; Pan & Chan, 2007), low intelligence (Bonanno, 2008), and struggles with pre-trauma coping (Bonanno, 2008; deRoon-Cassini, Mancini, Rusch, & Bonanno, 2010; Lyons, 1991), as well as long-term environmental factors (Pan & Chan, 2007) such as limited access to education (Bonanno, 2008), limited social support (Bonanno, 2008; Ellis, Nixon, & Williamson, 2009; Lyons, 1991), and community stressors (Pan & Chan, 2007). Therefore, researchers argued that supportive social networks (Lyons, 1991), adequate access and participation in education (deRoon-Cassini et al., 2010), and the inverse of other risk factors (Bonanno, 2008) constitute protective factors. Finding meaning in traumatic experiences has also been demonstrated to be a protective factor (Lyons, 1991). Furthermore, the nature of the trauma itself has been indicated as an important factor that influences resiliency (de-Roon-Cassini et al., 2010). For example, these authors demonstrated that trauma perpetrated by another person (e.g. rape or sexual assault) is more

likely to create chronic distress while accidental trauma (e.g. motor vehicle accidents) is more often associated with resilience.

Current views of trauma trajectories, or patterns of behaviors and functioning following exposure to trauma, indicate that individual responses to traumatic incidents vary widely amongst survivors and can even vary within an individual throughout the lifespan (Bonanno, 2008; de-Roon-Cassini et al., 2010; Quale & Schanke, 2010). The factors that promote resilience in one area may not be generalized across all experiences (Bonanno, 2008). Moreover, protective factors are thought to vary across cultures though some commonalities have been observed, such as the role of social support in coping. For example, "family resilience" has been observed in Chinese cultures when individuals within the family face stressors outside of the family system (Pan & Chan, 2007). This diversity in the manifestations of resiliency within individuals as well as cultural systems suggests that resilience may be more common than has traditionally been accepted by mental health professionals.

In the aftermath of traumatic events, it seems only natural to turn toward cultural beliefs and communities for meaning and support. Tummala-Narra (2007) observed that cultural communities can provide trusted relationships and shared attitudes of hope that may help counter the effects of racial oppression and violence. This author described such "collective resilience" as the "construction of coping processes within a particular social and political context" (p. 46). Furthermore, research suggests that support from family members fosters resilience is a significant protective factor against the negative outcomes of traumatic experiences (Banyard, Williams, Siegel, & West, 2002; Hernandez, 2002). Within certain ethnic groups, artistic creation and spirituality have also been shown to help with coping after trauma (Walters & Simoni, 2002). Tummala-Narra (2007) suggested that cultural and spiritual beliefs may not only

function as a buffer against the trauma, these belief systems alter the way in which survivors of trauma present themselves, noting that individuals within certain cultures may endure suffering more quietly for the good of their communities.

Another protective factor against the negative consequences associated with trauma is a strong cultural identity, which has been shown to be predictive of resilience following stress (Clauss-Ehlers, Yang, & Chen, 2006). Therefore, Clauss-Ehlers and colleagues argued that strong ties with cultural histories promotes coping among families faced with a variety of stressors, and cultural factors can potentially promote growth and resilience for individuals from culturally diverse backgrounds. Furthermore, certain personal traits may be more helpful in some cultures than in others. For example, while personal autonomy and individual achievement might be associated with resilience in individualistic (i.e. Western) cultures, Tummala-Narra (2007) noted that these same traits would likely be viewed as liabilities in collectivistic (i.e. Eastern) cultures where a "shared sense of self efficacy, or communal mastery may be more central to people's resiliency in the face of stress and adversity" (p. 43).

Consistent with the aforementioned theories and research on culture and its potential for promoting positive outcomes, Walters and Simoni (2002) created an indigenous stress-coping model, which posits that cultural identity factors act as moderators within one's experience of life stressors or trauma. In their model, individual and cultural factors, environmental context, and identity processes are all considered influential variables affecting one's experiences following trauma. Thoughts and feelings regarding one's identity protect against negative responses to traumatic events and promote psychological and emotional well-being. Specifically, Walters and Simoni (2002) stated that "the extent to which one internalizes or

externalizes attitudes toward oneself and one's group" (p. 523) is an important cultural factor capable of bolstering self-esteem and facilitating adaptive coping.

Although cultural factors have been shown to be highly influential regarding resilience, defining and measuring resilience within a cultural context has been problematic. Clauss-Ehlers (2008) critiqued resilience research for its reliance on assessment instruments (usually self-report scales) that are not relevant across diverse cultural contexts. This author argued that a definition of resilience is not culturally relevant unless it accounts not only for personal development, but for cultural belief systems and community impact as well. To counter this lack of adequate assessment and conceptualization of resilience Clauss-Ehlers created the "Cultural Resilience Measure." This measure is intended to assess individual responses to trauma among people from various cultural backgrounds as well as the impact of various cultural factors on coping and resilience. Overall, the variability of protective factors and resilient responses to trauma indicates a need for understanding these intricacies by both researchers and clinicians in order to benefit from the implications of the research described above.

Posttraumatic growth. The idea that experiencing adverse events can potentially foster positive changes has been present throughout human history (Tedeschi, Calhoun, & Cann, 2007). For example, numerous world religions contain beliefs about meaning and transformational qualities gained from suffering, including Christianity, Islam, Hinduism, and Judaism (Sheikh, 2008; Tedeschi et al., 2007). In the field of positive psychology, many cite the work of theorists such as Victor Frankl (Tedeschi et al., 2007) and Carl Rogers who both went to great lengths to describe the growth that can occur following adversity (Sheikh, 2008).

According to Tedeschi and Calhoun (2004), researchers have become more interested in positive outcomes in response to trauma as reports of growth following adversarial events

became increasingly common. In order to account for such growth, researchers turned to the catastrophic perspective, which states that psychological growth may occur in direct response to emotional traumas (Tedeschi & Calhoun, 1995) that create dramatic changes in life circumstances (Showers & Ryff, 1996) and challenge individuals' pre-existing understandings of the world in which they live (Tedeschi & Calhoun, 2004). These types of experiences lead some people to reorganize their conceptualizations of their universe and reformulate previous assumptions in order to accommodate their experiences with trauma (Tedeschi & Calhoun, 2004). For these people, significant adverse events can foster an increased sense of meaning, connectedness, well-being, and spirituality (Tedeschi & Calhoun, 1996; 2004).

The phenomenon just described has been referred to by many names including posttraumatic growth, stress-related growth, adversarial growth, thriving, benefit finding, hardiness, and optimism (Tedeschi & Calhoun, 2004). For the purposes of this study, the term "posttraumatic growth" (PTG) was used to describe the distinct response trajectory characterized by positive psychological changes in the aftermath of significant trauma. Researchers and theorists have based much of their conceptualization of PTG on the organismic valuing process, a theory which states that human beings are intrinsically motivated to reconstruct their phenomenological worlds in the wake of traumatic events in a manner that is consistent with pre-existing tendencies toward personal growth and actualization (Joseph, Linley, & Harris, 2005). Tedeschi and Calhoun (2004) have asserted that this type of meaningful restructuring toward growth can occur after a variety of unpleasant circumstances, which they call emotionally "seismic." Thus, traumatic events have been likened to earthquakes in that they challenge both one's physical and mental structure by shaking one's understandings of safety, worldviews, and personal identity. Based on the assumptions that trauma can shake one's core conceptualizations

of him or herself and the world at large, and that one can respond with an intrinsically motivated drive toward rebuilding those conceptualizations in a manner consistent with tendencies toward actualization, Tedeschi and Calhoun (2004) defined PTG as "positive psychological change experienced as a result of the struggle with highly challenging life circumstances" (p. 1).

Like resilience, PTG is considered a possible outcome trajectory of trauma. Although the two terms have been used interchangeably, Levine et al. (2009) argued that resilience and PTG are two distinct trajectories, and they provided a discussion which sought to clarify differences between the two. As mentioned earlier, resilience was described as both a set of personal characteristics and the process of utilizing those traits in response to traumatic circumstances that allow one to remain relatively unaffected with minimal distress or impairment in functioning. Conversely, PTG was described as a response pattern indicated by initial distress and vulnerability followed by a coping process that ultimately leads to positive outcomes in the form of meaning-making and more adaptive behaviors (Levine et al., 2009). Thus, while resilience represents a response pattern of minimal disruption, PTG is characterized by disruption followed by personal growth that goes beyond a return to baseline.

Mols and colleagues expanded on the definition of PTG by describing the positive psychological change in response to trauma as a process of bolstering one's self-perception, capacity to relate to others, and ability to find meaning in experiences following the trauma. Furthermore, Tedeschi and Calhoun (1996; 2004) provided a model of PTG in which positive changes occur in five domains: "greater appreciation of life and changed sense of priorities; warmer, more intimate relationships with others; a greater sense of personal strength; recognition of new possibilities of paths for one's life; and spiritual development" (p. 6).

The posttraumatic growth process. According to Tedeschi and Calhoun (2004), PTG is not the direct result of the trauma itself but instead is the product of the individual's struggle to confront that trauma in a meaningful way. A model provided by these authors suggests that six components following the traumatic event are responsible for growth across the domains of change described above. Those components include distress following the trauma, ruminations or recurring intrusive thoughts of the traumatic event, cognitive processing of the trauma and its aftermath, self disclosure, turning to social support systems, and restructuring beliefs and schemas related to the trauma in order to experience growth. These elements in the PTG process should not be considered linear or reflecting a stage process (Tedeschi & Calhoun, 2004). Instead, they represent incorporated factors that support the overall experience of PTG (Sheikh, 2008). Thus, the six components of the PTG process discussed below describe one's movement toward growth while simultaneously experiencing struggle in the wake of trauma.

The process of PTG starts with an interruption in functioning and marked distress resulting from experiencing the traumatic event (Salsman, Segerstrom, Brechting, Carlson, & Andrykowski, 2009; Tedeschi & Calhoun, 2004). According to Tedeschi and Calhoun (2004), the traumatic event which activates the growth process is one that challenges the way a person views the world and functions within it. Sheikh (2008) described the catalyst of Tedeschi and Calhoun's model fittingly: "According to this model, a trauma is an event that profoundly challenges an individual's fundamental schemas, beliefs, goals, as well as the ability to manage emotional distress, and profoundly affects that individual's life narrative" (p. 87).

This challenging disruption of the individual's pre-trauma way of being in the world initially presents as general ruminations of the traumatic event, which is considered the second component of the PTG process (Salsman et al., 2009; Sheikh, 2008; Tedeschi & Calhoun, 2004).

Ruminations or ruminative thoughts have been referred to as a type of conscious thoughts that revolve around a common theme and repeatedly occur without environmental demands which require such thoughts (Martin & Tesser, 1996). The PTG process model suggests that ruminative thoughts following a traumatic event often stem from the victim's attempts to reconcile the incongruity between their preexisting schemas and the unfathomable traumatic event (Tedeschi & Calhoun, 2004). These recurrent, intrusive thoughts have been described as the individual's initial intrapsychic attempts to work though the trauma (Salsman et al., 2009; Tedeschi & Calhoun, 2004). Although ruminations about the traumatic event are often associated with PTSD, they also seem to contribute to cognitive processing, which can lead to PTG through meaning making and an integrated understanding of the traumatic event and cognitive schemas (Salsman et al., 2009).

Cognitive processing, the third element of the PTG process, was described by Tedeschi and Calhoun (2004) as an important progression from ruminations, which consists of intrusive, recurring thoughts, to actually working though cognitions regarding the trauma. They suggested that cognitive processing results from repeated exposure to thoughts related to the traumatic experience. In contrast to ruminations, which is usually associated with distress, cognitive processing is thought to foster adaptive thinking that allows the effected individual to cope with the psychological challenges resulting from the trauma (Salsman et al., 2009). Furthermore, while people who ruminate about their traumatic experience tend to focus on prior goals that they believe were made unattainable because of the trauma (Martin & Tesser, 1996), those in the cognitive processing stage begin to release less attainable goals and move on to develop adaptive and realistic goals for themselves (Tedeschi & Calhoun, 2004). Sheikh (2008) argued that cognitive processing is a crucial element of the PTG process because it allows the individual to

manage thoughts about the trauma and mold their sense of the traumatic experience into a more adaptive worldview. Thus, cognitive processing fosters an adapted understanding of the trauma that is integrated into the way in which one views the world and functions within it (Tedeschi et al., 2007).

As the individual who has experienced trauma continues to process the event, he or she may move into the fourth element of the PTG process, self-disclosure. At this point, the individual moves from internally processing the traumatic experience to expressing his or her sense of the trauma, in either verbal or written form, in order to achieve a degree of relief through cathartic expression (Sheikh, 2008). Tedeschi and Calhoun (2004) suggested that there is insufficient evidence as to whether written or verbal self-disclosure is more beneficial, but both seem to aid with cognitive processing. Additionally, self-disclosure to supportive others may provide the individual the opportunity to gain new perspectives that might be incorporated into the constructed view of the trauma and the world at large (Tedeschi & Calhoun, 2004). In this manner, self-disclosure and novel perspectives gained from such disclosure seem to facilitate the individual's reconstruction of his or her personal narrative (Sheikh, 2008). Therefore, disclosure not only allows for the cathartic expression of cognitive processes, it provides the opportunity for empathic understanding from one's social support network.

Closely related to self-disclosure, turning to social support systems is the fifth component of the PTG process. While Tedeschi and Calhoun (2004) suggested that social support is often an important element in the PTG experience, they note that the quality and stability of the individual's social support system affects the extent to which the individual experiences much needed empathic understanding from that support system and the individual's likelihood of sharing feelings related to the trauma. Sheikh (2008) echoed this sentiment by arguing that both

seeking social support as a coping strategy as well as subjective satisfaction with such supports are vital elements associated with PTG. Nolen-Hoeksema and Davis (1999) found that people with ruminative coping styles often seek social support and experience less depressive symptoms because of that support, despite initial discomfort when discussing their traumatic experiences. Thus, effective supportive social networks seem to provide those who have experienced traumatic circumstances a space in which they can experience cathartic self-disclosure and verbal processing of the trauma in the presence of an empathic other.

Lastly, the individual organizes and integrates the above elements in a manner that helps him or her conceptualize growth and reduce stress. Tedeschi and Calhoun (2004) described the final piece of their PTG process model as occurring when the individual explores opportunities for new schemas and an adjusted self narrative. While it should be stressed that those experiencing significant PTG may still concurrently feel some lingering distress associated with the trauma, Sheikh (2008) posited that this distress can further facilitate growth through continued cognitive processing of the trauma. Thus, PTG is not considered to be a linear experience but rather an "ongoing and interactive" process (Tedeschi & Calhoun, 2004, p. 12).

Outcomes of posttraumatic growth. As mentioned earlier, PTG is associated with reorganization of one's priorities and values, improved interpersonal relationships, positive changes in one's self-perception, openness to new life experiences, and spiritual growth (Tedeschi & Calhoun, 1996; 2004). As these changes occur, those who experience PTG are likely to move toward psychological and physical well-being. A recent meta-analysis conducted by Sawyer, Ayers, and Field (2010) examined PTG research concerning cancer and HIV/AIDS. This analysis sought to explore the relationship between PTG and well-being among adults with

medical illnesses that seriously threaten physical integrity. Their analysis suggested that several moderators impact the interactions of critical illness, PTG, and well-being.

This meta-analysis included 38 studies on PTG with populations of adults diagnosed with HIV/AIDS or cancer (Sawyer et al., 2010). Many of theses studies used the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) to measure perceived benefits associates with PTG. Sawyer et al. (2010) concluded in their analysis that PTG following diagnosis of cancer and HIV/AIDS is correlated with improvements in both mental health and physical health. Additionally, their analysis identified several moderators of PTG and critical illness. These included amount of time since diagnosis, age, and ethnicity. Specifically, there was an increased likelihood of younger adults reporting positive mental health and PTG, and older adults reported more symptoms of negative mental health. Non-white samples were also found to be more likely to report PTG, positive mental health, and improved physical health than predominantly Caucasian samples, which reported more negative mental health (Sawyer et al., 2010). These researchers also found that gender did not seem to be a moderator in the relationship between the outcomes of PTG and serious illness as suggested by earlier research. Sawyer and colleagues (2010) argued that their analysis provided important implications for future PTG research and suggested that the field would likely benefit from future longitudinal research.

In a related study, Mols, Vingerhoets, Coebergh, and van de Poll-Franse (2009) used a non-experimental correlational approach to examine three variables common to the experience of receiving a diagnosis of breast cancer and living with that knowledge. These variables included well-being, PTG, and benefit finding; each was considered a separate construct and analyzed accordingly. Their study used multiple self-report measures, such as the PTGI, to examine

relationships among their three variables of interest with a random sample of women in the Netherlands who had survived breast cancer for ten years. The results from this study indicated that women who had survived breast cancer and remained disease free for a ten year period generally demonstrated benefit finding. Moreover, those who exhibited high levels of life satisfaction frequently experienced PTG. Mols et al. (2009) concluded that long-term breast cancer survivors generally attribute some positive outcomes to their experience with cancer. These researchers also found PTG to be positively correlated with the emotional intensity of the cancer experience, perceived threat to life or physical integrity, opportunities to discuss the breast cancer experience with others, communication with other cancer survivors, supportive partners, effective coping strategies, socioeconomic status, and the amount of time since the initial diagnosis. Though Mols and colleagues argued that their findings are generalizable to broad populations and generally consistent with existing PTG research, most of which was conducted in the U.S., it remains unclear how applicable these results from the Netherlands are to more global populations.

Although the studies described above are concerned specifically with medically-related traumas, similar outcomes have been observed in studies with participants who have experienced other forms of trauma. For example, a recent study by Hobfoll et al. (2009) examined the response trajectories of people who had experienced ongoing difficulties associated with war and terrorism. While these researchers used different terminology to describe response trajectories than were used in the studies discussed above, their findings suggested the presence of similar response patterns in the wake of trauma. Specifically, they found that chronic distress as well as resilience and PTG were common responses to an individual's experience with trauma. Similar response patterns across a variety of types of trauma, such as sexual assault (Frazier & Berman,

2008), physical abuse (Grubaugh & Resick, 2007), and medical trauma (Sawyer et al., 2010; Leung et al., 2012), suggest that PTG and the positive outcomes associated with such growth may be more common among survivors of a range of traumatic experiences than was once thought.

Summary. As described in this section, a variety of perspectives exist concerning the definition and trajectories of trauma. While many people suffer from various negative symptoms in the aftermath of trauma, others remain resilient or even achieve personal growth. Furthermore, one's reaction to trauma appears to be highly influenced by cultural variables. As described earlier, cultural variables have been shown to mediate posttraumatic trajectories, and cultural beliefs, practices, and identification have been shown to be protective factors against negative responses to trauma. This author hopes that a better understanding of cultural influences on positive responses to trauma might facilitate additional growth. The assumption that this knowledge of cultural influences on growth may contribute to promoting such growth is consistent with much of the research described in this section, which suggests that cultural beliefs, values, and backgrounds shape one's reactions to traumatic experiences. One theory for understanding the function of cultural worldviews as a whole and in the context of serious trauma is Terror Management Theory (TMT). TMT provides the main framework for this study and is discussed in detail next.

Terror Management Theory

In discussing the beginning formulation of Terror Management Theory (TMT), Solomon, Greenberg, and Pyszczynski (2004) acknowledged that they were influenced by the writings of existentialist authors such as Ernest Becker. The founders of TMT sought to integrate multiple fields of philosophy and psychology to develop a theory that would help explain core human

functioning across a variety of situations. To do this, they focused on what they considered to be the most basic, universal fear: the fear of death or nonexistence. In the theory's infancy, these authors' ideas were rejected by the scientific community for being overly abstract and idealistic. After more than twenty years of research on this phenomenon, TMT has become widely accepted in social psychology with hundreds of studies supporting this theory (Burke et al., 2010). This section provides a brief description of TMT including discussion of relevant structures within the framework followed by different modes of assessing TMT and cultural considerations.

Brief description of TMT. According to the tenets of TMT, humans have evolved into cultural beings who developed mechanisms to manage the terror associated with the knowledge that they will eventually die (Solomon et al., 2004). The evolved characteristic of self-awareness has led to the presumably unique human knowledge of one's eventual demise. This knowledge provides a constant fear of death, which is managed through faith in cultural worldviews, such as religion, nationality, and political affiliation, as well as through self-esteem. According to the founders of TMT, self-esteem is derived from the belief that one is adhering to the values and standards of significant cultural worldviews (Solomon et al., 2004). By investing in relevant cultural worldviews, one is able to construe the self as part of a meaningful universe (Pyszczynski et al., 1999), which allows the individual to become part of something greater than the self that will outlast his or her earthly existence. Put differently by Hayes, Schimel, Arndt, and Faucher (2010), "Whereas the life of an individual may be short and fleeting, cultures and nations can endure" (p. 700).

Worldviews. As noted by Koltko-Rivera (2004), TMT offers very little in terms of defining cultural worldview as a construct. Instead this theory describes why these worldviews

are needed. This can be problematic for studies attempting to measure a range of worldviews simultaneously because an operational definition for worldviews in general does not exist.

Instead, theorists have provided broad, conceptual definitions for worldviews. The following definitions are examples of this type of theoretical understanding of worldviews; one from a TMT perspective and the other from an eclectic standpoint. First, Pyszczynski et al. (1999) offered the following definition of a cultural worldview, which has been used in guiding the theoretical development of TMT:

> A humanly constructed symbolic conception of reality that imbues life with order, permanence, and stability; a set of standards through which individuals can attain a sense of personal value; and some hope of either literally of symbolically transcending death for those who live up to these standards of value. (p. 835)

Second, in order to assist theorists, researcher, students, and clinicians in their conceptualization of the concept of worldviews, Koltko-Rivera (2004) drew upon multiple fields of study including philosophy, anthropology, psychoanalysis, philosophy of psychology, social psychology, and multicultural counseling. He built off the concepts of other noteworthy theorists, such as Freud's Weltanschauung, Jung's notion that worldviews can be largely unconscious and culturally transmitted, and Nietzsche's recognition that worldviews are informed by a sense of existential purpose. The author offered the following definition of a worldview:

> A worldview (or "world view") is a set of assumptions about physical and social reality that may have powerful effects on cognition and behavior… Worldviews are sets of beliefs and assumptions that describe reality. A given worldview encompasses assumptions about a heterogeneous variety of topics, including human nature, the

meaning of life, and the composition of the universe itself, to name but a few issues. (p. 3)

Thus, Koltko-Rivera considers worldviews to include existential beliefs, evaluative beliefs, and prescriptive and proscriptive beliefs, or values. He argued that the worldview construct is useful for understanding the variance in human behavior that is yet unexplained by experimental manipulations.

Although these definitions are aimed at helping people better understand this abstract construct, they remain very broad and do not contribute much to the operationalization of worldviews for the purpose of psychological research. Instead, the majority of TMT research has identified specific cultural worldviews assumed to be relevant to the participants and tested the effects of experimental manipulations on those specific worldviews (Burke et al., 2010). Worldviews targeted in previous research range from religious, nationalistic, political, and ethnic identification to faith in one's university or favorite sports team (Burke et al., 2010).

Vail et al. (2010) suggested that religion is a particularly well-suited worldview within the TMT perspective. The authors argued that religious beliefs are especially useful in mitigating the anxiety caused by thoughts of death because religions are all encompassing, rely on concepts that are not easily disconfirmed, and usually promise literal immortality. They went on to suggest that while religions frequently offer a literal immortality in the form of Heaven or a similar afterlife, the religious community also offers symbolic immortality by allowing followers to attach to a worldview that will outlast the physical self. From a TMT perspective, both literal and symbolic immortality serve the function of denying that death entails complete non-existence (Vail et al., 2010). Just as other worldviews do, religion serves to imbue people's lives with meaning, which provides protection from the potential fear of mortality (Pyszczynski et al.,

1999; Vail et al., 2010). The authors suggested that religion's particularly powerful method of terror management is reflected in previous research that indicates that people committed to specific religions tend to live longer and be better adjusted psychologically (e.g., Pargament, 1997; Smith, McCullough, & Poll, 2003). Of course, religion is just one of many worldviews used for terror management functions, and researchers have tested the effects of death related cognitions on a variety of worldviews.

Dual-process model of TMT. Because faith in cultural worldviews does not necessarily defend against the terror associated with death in a logical, practical manner, TMT theorists have proposed a dual-process model of TMT, which includes both conscious and unconscious cognitive processes (Arndt, Cook, & Routledge, 2004; Arndt, Greenberg, & Cook, 2002; Pyszczynski et al., 1999). According to this model, once a person has conscious thoughts of death, he or she uses proximal defenses to manage the anxiety resulting from those thoughts. Proximal defenses are rational means of dealing with conscious thoughts of death at the level those thoughts are construed (Pyszczynski et al., 1999). These defenses might include pushing thoughts out of awareness, rationalization, denial, and considering thoughts of death as only relevant in the distant future. The function of proximal defenses is to suppress anxiety until thoughts of death are out of conscious awareness (Pyszczynski et al., 1999).

After the proximal defenses have served their role and thoughts of death are no longer conscious, the proximal defenses subside and there is an increase the accessibility of death related thoughts at an unconscious level. This is the point in which distal terror management defenses are utilized (Arndt et al., 2004; Arndt et al., 2002; Pyszczynski et al., 1999). Distal defenses include investment in and defense of cultural worldviews and self-esteem bolstering. These defenses serve to decrease death-thought accessibility and manage the terror associated

with these thoughts as described earlier (Pyszczynski et al., 1999). These distal defenses are the primary concern of TMT researchers because of their function of coping with such an overwhelming existential concern. As Pyszczynski et al. (1999) wrote, "Attacking the problem of death at a level in the hierarchy that is distal and remote from the actual physical reality of death may well be the only way to deal with something that the individual knows is absolutely certain to happen" (p. 839).

Researchers such as Arndt et al. (2002) have used principles from cognitive psychology literature to test the dual-process model. These authors suggested that distal defenses are effective because associative pairing has linked cultural worldviews with thoughts of death. Therefore, death related thoughts activate worldviews that function to quell the anxiety created by these thoughts. If distal defenses such as increased faith in cultural worldviews are the result of unconscious processes, the defenses should be more accessible once thoughts of death have faded out of conscious awareness.

The TMT research supports the dual-process model. A meta-analysis conducted by Burke et al. (2010) showed that studies which used conscious mortality salience (MS) manipulations, such as answering essay questions about death, had an increased effects size if there was a delay between the MS manipulation and the dependent measure (mortality salience research methodology is described in more detail in the following section). These studies used neutral tasks such as word searches or filler questionnaires to allow death thoughts to fade from conscious awareness but remain easily accessible. Furthermore, the effects size increased between studies as the number of tasks between the MS prime and the dependent measure increased from one to three tasks. No delays were needed for studies which used subliminal MS manipulations. These results support the dual-process model in that they suggest that as the

proximal defenses subside, death-thought accessibility increases, which leads to an increased need for distal terror management defenses.

There is still contradictory evidence regarding whether MS leads to investment in cultural worldviews when there is not a delay used before measurement. Burke et al. (2010) seem to suggest that there is an effect on worldview activation when no delay is used, but the effect is greater as the delay increases. This suggests that the proximal and distal defenses may not be as mutually exclusive as terror management theorists assert. Regarding practical application of this theory, the inconsistencies in the TMT research may be problematic because it is unclear whether distal defenses can be used to dispel anxiety shortly after clinical discussions of traumatic events or whether a delay is required to achieve anxiety reduction. Nonetheless, it is clear that distal terror management defenses are needed more after thoughts of death have subsided from immediate consciousness.

Assessing Terror Management Theory.

Mortality salience hypothesis. The most common method of testing the notions put forth by TMT is by assessing the mortality salience (MS) hypothesis (Burke et al., 2010). The MS hypothesis posits that if one is reminded of his or her own mortality, death related anxiety and the need for faith in cultural worldviews should increase accordingly (Pyszczynski et al., 1999). Burke et al. (2010) conducted a large meta-analysis of research from the past two decades regarding the MS hypothesis. According to these authors, 83% of the studies testing TMT involved directly testing the MS hypothesis. This study, which was the first large scale meta-analysis of TMT, included 164 journal articles with 277 experiments. This review suggested that the effects of MS manipulations are robust. The authors note that the "magnitude of the effect

was r = .35, which attained the top quartile of effects for psychology in general and the 80th percentile for theories in personality and social psychology" (p. 185).

When testing the MS hypothesis, researchers have used a variety of methods to manipulate MS by priming participants with ideas concerning death. The most common method for manipulating MS is to have the participants write a short essay describing their thoughts of death (Burke et al., 2010). Other methods include having the participants watch gory film clips, flashing subliminal death related words on a screen, and conducting an experiment in front of a funeral parlor (Burke et al., 2010).

Research has shown that participants in the experimental group, who have been primed for MS, are more likely than participants in the control group to defend their cultural worldviews (Pyszczynski et al., 1999). Participants' defense of their worldviews has manifested in multiple ways, including positive evaluations of people and ideals that affirm their worldviews as well as negative evaluations of those that threaten their worldviews (Pyszczynski et al., 1999). Unfortunately, these negative evaluations can take the form of aggression toward those who threaten one's beliefs. For example, when participants were allowed to decide how much hot sauce a person who openly disagreed with the participants' political values would have to consume, those primed with a MS manipulation required the target to consume more hot sauce than controls (McGregor et al., 1998).

Death-thought accessibility. Unlike manipulation of MS in order to induce thoughts of death to test their effects on attitudes and behaviors, other methods of assessing TMT focus on measuring the thoughts of death themselves. These latter methods, known as death-thought accessibility (DTA) research, were reviewed in detail by Hayes and colleagues (2010). Their review included research from over 90 empirical studies in the past two decades. These authors

described a marked increase in the measurement of TMT principles by means of measuring the accessibility of death-related thoughts since the inception of TMT. This increasing amount of DTA research was credited as largely responsible for the distinguishing between proximal and distal defenses as described in the dual-process model, and these authors praised DTA studies for contributing to the "growth and refinement of the theory" (p. 717).

According to Hayes et al. (2010), this type of research is largely based on the DTA concept that while proximal defenses may suppress thoughts of death to an unconscious level, these thoughts become "hyperaccessible" shortly thereafter and thus capable of easily finding their way back to the conscious mind. Therefore, DTA research aims to measure these thoughts that are assumed to be readily accessible to be brought into consciousness. Hayes et al. (2010) offered the following definition of DTA assessments: "indirect testing procedures designed to enable inferences about the level of activation of death thoughts" (p. 699). These authors described the DTA research as having used a variety of techniques borrowed from cognitive psychology based on the notion that unconscious mental processing can be inferred from responses to unrelated tasks.

Greenberg, Pyszczynski, Solomon, Simon, and Breus (1994) began measuring DTA with ambiguous word fragments. Specifically, they embedded six word fragments which could be completed with a death-related word or a non-death-related word among a list of other word fragments. They found that when mortality was made salient, participants completed more word fragments as death-related words following a short delay. This research provided a starting point for DTA research within the TMT literature, and the vast majority of DTA research has followed Greenberg et al. (1994) in using word-fragment completion tasks to measure DTA (Hayes et al.,

2010). Another method used for measuring DTA, lexical decision tasks, will be described later as it applies to a relevant study.

In their review of DTA literature, Hayes et al. (2010) divided DTA studies into four broad categories: mortality salience DTA studies, death-association DTA studies, anxiety-buffer threat DTA studies, and dispositional DTA studies. Each of these categories is discussed in turn below.

Mortality salience DTA research. Hayes et al. (2010) described mortality salience DTA research as those studies which demonstrate the effect of mortality salience (MS) on the accessibility of thoughts relating to death. Like the Greenberg et al. (1994) research just described, other studies have shown that MS increases DTA, such as Arndt, Greenberg, Solomon, Pyszczynski, and Simon (1997), who demonstrated that subliminally priming for MS led to an increase in DTA without a delay between MS priming and DTA measurement. In this study, the usual delay between MS priming and measurement of the dependent variable was assumed to be unnecessary since thoughts of death did not need to be removed from consciousness via proximal defenses because of the subliminal manipulation.

Other studies suggested that bolstering self-esteem (Harmon-Jones et al., 1997) and affirming valued cultural worldviews (Jonas & Fischer, 2006) prior to the MS manipulation eliminated the effect of increased DTA after the MS manipulation. This elimination of the effects of MS manipulation was interpreted to be the result of temporarily strengthening self-esteem and cultural worldviews as terror management defenses against the anxiety caused by thoughts of death. This research provided additional support for the TMT contention that self-esteem and worldviews effectively manage death-related anxiety. Moreover, based on the reasoning that distal defenses should eliminate the source of anxiety (underlying thoughts of

death), researchers have found that providing participants the opportunity to defend cultural worldviews (Arndt et al., 1997) and make self-serving attributions to build self-esteem (Mikulincer & Florian, 2002) decreased levels of DTA relative to participants who were not provided with such opportunities.

Death-association DTA research. Based on the concept that activation of certain thoughts can spread to related thoughts by association, death-association research have suggested that thoughts of death are more accessible in response to thinking about topics associated with death (Hayes et al., 2010). In their review of DTA research, Hayes et al. (2010) divided the death-association studies into two basic categories: those that test direct death-associations and those that test indirect death-associations. Direct associations are those topics that are so strongly related to death that thinking about these topics often elicits thoughts of death. Studies have shown that thinking about such topics leads to changes in DTA similar to those found in the MS studies. These topics have included cancer (Arndt, Cook, Goldenberg, & Cox, 2007; Goldenberg, Arndt, Hart, & Routledge, 2008), risky behaviors such as unprotected sex (Taubman-Ben-Ari, 2004) and unsafe driving (Jessop, Albery, Rutter, & Garrod, 2008), and terrorism, war, or violent conflicts (Landau et al., 2004; Vail, Arndt, Motyl, & Pyszczynski, 2012).

Indirect death-associations are those that are less obviously connected to death but still lead to increases in DTA, presumably because of their subtle associations to death (Hayes et al., 2010). For example, observing the human body in old age (Martens, Greenberg, Schimel, & Landau, 2004) and thinking about people with disabilities (Hirschberger, Florian, & Mikulincer, 2005) were assumed to highlight human "creatureliness" and frailty, and have both been shown to increase DTA. Another indirect death-association study showed that thinking about the

meaning of life, which was assumed to require an understanding of its finality, led to higher levels of DTA (Taubman-Ben-Ari, 2004). This body of research suggests that a variety of human experiences may elicit thoughts of death, which in turn may call upon terror management defense systems such as worldview defense.

Anxiety-buffer threat DTA research. The TMT position that certain culturally constructed beliefs serve the function of reducing the anxiety caused by thoughts of death, and threatening those protective beliefs should make such thoughts more readily available, is the basis for studies which measure the effects of anxiety-buffer threats on DTA (Hayes et al., 2010). These studies have suggested that threatening an individual's cultural worldviews, which are assumed to buffer the anxiety caused by unconscious thoughts of death, should lead to an increase in DTA because those worldviews become less effective in managing thoughts of death. Furthermore, bolstering terror managing beliefs should reduce DTA by strengthening the mechanisms which effectively manage thoughts of death. Terror management researchers have supported these hypotheses by demonstrating that threatening cultural worldviews such as nationality (Schimel, Hayes, Williams, & Jahrig, 2007) and religious beliefs (Friedman and Rholes, 2007; Schimel et al., 2007) led to increases in DTA. Similarly, threatening self-esteem was also shown to increase DTA (Hayes, Schimel, Faucher, & Williams, 2008). Also, related research has demonstrated that having participants affirm important personal values (Hayes et al., 2008) or providing the participants with arguments against those that threaten their worldviews (Schimel et al., 2007) eliminates the effects of self-esteem threat on DTA.

Providing additional support for the anxiety-buffer threat research, Schimel et al. (2007) found that the effects of worldview threats on DTA were not due to a general increase in the accessibility of negative thoughts. In their study, Canadian participants were shown either an

anti-Canadian or an anti-Australian website. Afterward, the participants' reaction times were measured on a lexical decision task. The group who had experienced a worldview threat by viewing anti-Canadian websites showed faster reaction times to death-related words but not to negative words in general. These results suggested that thoughts of death are more readily accessible after a worldview threat, which is likely to be the result of the diminished ability of the threatened worldview to provide an effective buffer against thoughts of death rather than an increase in the accessibility of negative thoughts in general.

Dispositional DTA research. The final category of DTA research, dispositional DTA research, has measured predicted relationships between baseline levels of DTA and terror management defensiveness (Hayes et al., 2010). For example, Friedman and Rholes (2009) reasoned that people with highly fundamentalist religious beliefs should have strong anxiety reducing belief systems in place to reduce the accessibility of thoughts of death. In support of this hypothesis, their study showed that people with highly fundamentalist religious beliefs tended to have lower levels of DTA. Similarly, higher levels of DTA have been found to be associated with indicators of poor psychological well-being such as decreased perceptions of meaning in one's life (Routledge et al., 2010).

Hayes et al. (2010) argued that these studies, which measured naturally occurring DTA rather than experimentally manipulated DTA, provide support for TMT as it applies outside of research settings. Similarly, Hayes and colleagues (2010) suggested that all four types of DTA studies have moved TMT in an important direction by providing a framework for measuring the tenets of TMT without being restricted to experimentally manipulating thoughts of death as in the mortality salience research described earlier. By measuring the accessibility of thoughts of death instead of manipulating those thoughts, TMT researchers have added additional support for

the notion that thoughts of death are directly responsible for terror management defenses, instead of simply a byproduct of other motivation systems as some critics have argued (more on these critiques will be provided later in this chapter). Thus, DTA research has provided needed support for the dual-process model as well as TMT as a whole, and by reducing TMT's reliance on experimental manipulations of mortality salience, Hayes et al. (2010) wrote that this research "showcases the relevance of these processes for experiences that people encounter as they navigate the daily affairs of life" (p. 711). Still, these authors contended that more research is needed which examines dispositional DTA in response to acute life circumstances such as serious illness or exposure to trauma.

Cultural considerations. Terror management theory (TMT) attempts to describe a human phenomenon, and evidence suggests that it is applicable across multiple cultures. Landau, Solomon, Pyszczynski, and Greenberg (2007) wrote that over 300 separate experiments provide empirical support for TMT in at least 15 countries including Japan (Heine, Harihara, & Niiya, 2002), Iran (Pyszczynski et al., 2006), and Aboriginal Australia (Halloran & Kashima, 2004). Hein et al. (2002) demonstrated that some terror management effects can be generalized to Japan by replicating past TMT research. Their results showed that Japanese participants, like previous Western participants, were more likely to defend their nationality after primed with MS conditions. Pyszczynski et al. (2006) demonstrated that college students in Iran who were reminded of their mortality showed more support for martyrdom attacks on the United States than those students in the control condition. The results from research with Aboriginal Australians indicated that participants were more likely to validate ingroup worldviews and reject outgroup values after MS priming, and the worldviews that were validated depended on

whether traditional Aboriginal social identities or contemporary Australian social identities were made salient (Halloran & Kashima, 2004).

Despite similarities across cultures, it is essential to remember that much of TMT is built on the premise that people have adapted to the constant threat of annihilation by attending to the worldviews that are relevant within individual cultures. The cultures themselves create, define, and mold various aspects of a person's worldviews and vise versa. Thus, the worldviews of central value to any given individual are those embedded in the milieu of the culture in which he or she lives. TMT stresses the significance of cultural consideration, which one might argue is a cornerstone of the theory. As Salzman (2011) wrote, "It is culture, then, that offers the anxiety-prone human creature the possibility of the heroic transcendence of our existential dilemma of our big-brained awareness of our precarious existence and certain annihilation" (p. 177).

Furthermore, as Burke et al. (2010) noted, TMT research shows individual variability in worldview defense based on cultural influences. For example, researchers have shown that mortality salience (MS) leads to a change in driving behavior only for those who have deemed driving ability to be culturally valued. (Ben-Ari, Florian, & Mikulincer, 1999).

Arndt et al. (2002) highlighted the importance of cultural variability in a series of experiments designed to assess gender differences in spontaneous worldview activation after MS primes. These researchers conducted seven separate studies with American college students (other demographic information was not provided) to test the hypothesis that thoughts related to death should activate worldviews that are most central to the individual and bolster self-esteem. They noted that previous TMT research had directed participants to defend specific cultural worldviews with measures such as questionnaires about worldview attitudes or using a confederate to directly challenge the participants' worldviews.

In contrast to these previous studies, Arndt et al. (2002) designed experiments to test the natural, spontaneous sequence of worldview activation under MS conditions. More specifically, they presumed that American males were more likely to support nationalistic values than their female counterparts, and American females were more likely to support romantic worldviews than the males. After priming for MS, the experiments measured participants' responses to word fragments which could be filled in to make a neutral word or one related to a worldview construct, such as F _ _ G, which could be "FLAG" or "FROG," or _OVER, which could be "LOVER" or "COVER." The results indicated that males were more likely to be spontaneously activate nationalistic worldviews than females and females were more likely to activate romantic worldviews than males after mortality had been made salient. These gender differences highlight the notion that individuals are flexible with regard to the worldviews that are used to manage the terror associated with death, and individuals are more likely to utilize worldviews that have become central to their value structure as influenced by their cultural surroundings (Arndt et al., 2002).

Some limitations of this set of experiments were present, including that gender differences were attributed to culturally created norms within America, but the authors did not discuss variability between cultures in America. Furthermore, the authors' descriptions of the participants included that they were male and female college students, but failed to account for other cultural variables such as race, ethnicity, and geographical background. Despite its shortcomings, this article demonstrates that the worldviews most likely to be accessible to an individual are culturally influenced.

Although this set of experiments represents one example of cultural variability in regard to the effects of MS, TMT was essentially built on the notion that people adhere to those

worldviews that have been culturally validated. Accordingly, one might argue that every study showing the effects of MS on worldview promotion has accounted for cultural considerations. For once it has been acknowledged that cultural considerations are imbued in the theory, one assumes that cultural variability is inevitable. For example, Maheswaran and Agrawal (2004) argued that the effects of MS on consumerist behaviors should differ between people from individualist and collectivist countries because of the differences in cultural values placed on material success. These sorts of assumptions are made possible by the understanding that cultural implications are deeply embedded in TMT. Although not all of the TMT researchers explicitly address cultural differences in their work, the theory itself is based on the assumption that culture shapes those worldviews that people turn to in order to manage existential terror. Therefore, sensitivity to individual and cultural influence is paramount for promoting post-traumatic growth from a TMT perspective.

Critique of terror management theory. Despite ample research supporting the tenets of TMT as described earlier, there are still those who disagree with many of the pillars of this theory and argue strongly for reconsidering the implications of its research. While most critics acknowledge the impressive collection of findings in support of TMT that researchers have amassed, they still argue for alternative theoretical approaches. In the sections below, discussions of the major arguments against TMT are provided. These include arguments by some evolutionary psychologists who feel that TMT has misused evolutionary theory, by theorists who disagree with the meta-theoretical approach of TMT, and by theorists who critique TMT's reliance on cognitive defenses against the threat of mortality.

TMT from an evolutionary perspective. Among those who criticize TMT are evolutionary psychology researchers who have argued that terror management theorists have

made misguided attempts at adding evolutionary perspectives to their theory post-hoc in order to add credibility (Kirkpatrick & Navarrete, 2006; Navarrete & Fessler, 2005). While these authors commended TMT researchers for their impressive portfolio of empirical studies providing evidence for the theory, they targeted the evolutionary assumptions on which the theory is based. Specifically, these authors argued against the outdated assumption that humans have a general instinct for survival, which TMT claims is the mechanism for producing the terror associated with death. Instead, they contended that motivation for survival is situation specific, and is merely a byproduct of an evolved motivation for reproduction. As Kirkpatrick and Navarrete (2006) stated, "Survival matters only to the extent that it leads to success in generating replicable information" (p. 289).

Some evolutionary psychology researchers (Kirkpatrick & Navarrete, 2006; Navarrete & Fessler, 2005) have also argued that terror management systems as described in the literature are far too complex to have evolved for the purpose of alleviating anxiety. Instead, these authors suggested that if having less anxiety was an adaptive trait, humans would have simply evolved into organisms with less anxiety. Furthermore, if anxiety serves the function of promoting survival by avoiding situations which increase the likelihood of death as TMT suggests, an evolved system of managing this anxiety would undermine its value and function. These authors concluded that the empirically demonstrated terror management strategies of worldview defense and self-esteem are simply by-products of a much simpler evolutionarily based theoretical model.

They proposed an alternative "coalitional psychology," which asserts that people are motivated to align with others in order to benefit from coalition with ingroups. These benefits include warding off predators, gathering food, keeping diseased outgroup members away from

the ingroup, and access to reproductive partners. These authors claimed that the terror management defenses found in other studies could be better accounted for by an underlying motivation toward aligning with others rather than alleviating fears of death. To support these claims, these researchers conducted six studies in the U.S. and Costa Rica, which demonstrated that participants defended nationalistic worldviews in a variety of situations, many of which did not prime for MS, such as theft of personal belongings, social isolation, or soliciting aid from others for a cooperative task (Navarrete & Fessler, 2005; Navarrete, Kurzban, Fessler, & Kirkpatrick, 2004).

In a response to Navarrete and Fessler (2005), Landau and colleagues (2007) defended the compatibility of TMT and evolutionary psychology. They criticized Navarrete and Fessler (2005) for their shallow interpretation of a brief subset of the TMT literature and an inadequate presentation of the substantial evidence supporting TMT. Regarding the argument of a survival instinct, Landau et al. (2007) recalled that the earlier work in TMT acknowledged that the need for self-preservation was ultimately in the service of genetic reproduction. They contended that conceptualizing a drive for survival as an adaptation of a need to pass on genes does not alter the theory, and they maintained that humans have a general proclivity toward avoiding death and staying alive. They asserted that "it is uncontroversial to assume that with few interesting exceptions, organisms are predisposed to approach things that facilitate continued existence and to avoid things that would likely cut life short" (p. 487).

Landau et al. (2007) also argued that the contention of Navarrete and Fessler (2005) that evolved terror management defenses would be counterintuitive to the adaptive function of anxiety is based on a conflating of fear over impending threats and fear about non-imminent threats. Therefore, anxiety is considered by TMT to be adaptive for avoiding death, but this

anxiety needs to be managed when death is not an immediate concern. These authors offered the following to explain the TMT perspective on the function of anxiety:

> Although we strongly concur with Navarrete and Fessler, as well as with Darwin, Freud, and many others that fear evolved to serve an adaptive function, this in no way implies that fear is adaptive in all contemporary or past circumstances. (p. 492)

Furthermore, these authors critiqued the coalitional psychology model offered by Navarrete and Fessler (2005) for being an inadequate alternative in that this model cannot account for many of the TMT findings such as the supernatural dimension found within virtually all cultures or the symbolic nature of cultural worldview defenses that are unrelated to specific threats. The authors concluded that while TMT does stand up to the critiques of a few evolutionary psychologists, the two fields should work toward integrating TMT and evolutionary psychology findings in order to promote a better understanding of cultural worldviews.

TMT as a meta-theory. While some authors, such as Navarrete and Fessler (2005), have commended TMT in that it "unabashedly stakes claim to having identified fundamental aspects of human nature that explain a broad swath of observations about behavior and motivation" (p. 288), others (i.e., Muraven & Baumeister, 1997; Pelham, 1997) have criticized TMT for taking a broad sweeping approach to human motivation and behavior. Muraven and Baumeister (1997) noted that macro-theories such as TMT inevitably invite criticisms in the form of counterexamples and exceptions. They argued that a major shortcoming of TMT is its reductionist approach to conceptualizing fear of death and strivings toward self-preservation as the sole motives from which all other motives are derived. Instead, these authors contended that self-preservation is one of many motivations that interact to influence human behavior, and they offered several exceptions that seemingly contradict the assumptions that fear of death is at the

root of human motivation, such as suicide and unsafe sex. Pelham (1997) also argued against the notion that fear of death is the "master motive" superordinate to all other motives, stating that there is insufficient evidence for such a claim given the complexity of human thoughts and behaviors.

Although their critiques of TMT seem valid, the major assertion made by Muraven and Baumeister (1997) and Pelham (1997) that TMT views fear of death as the "master motive" from which all other motives are derived may have been a misunderstanding of the TMT literature of that time. In the target article by Pyszczynski, Greenberg, and Solomon (1997), on which the authors above based most of their critiques, the TMT researchers argued that the instinctual desire for continued life is the most basic of all human motives and fear of death is a mechanism promoting the avoidance of death. They went on to admit that the self-preservation instinct was ultimately in the service of gene reproduction as described earlier. Although Pyszczynski et al. (1997) suggested that a survival instinct was at the root of human motivation, they were quick to acknowledge a host of other motives, such as defensive motives and motives toward self-expansion and growth, which interact to influence the way people live their lives. Critics of TMT may be justified in questioning the validity of self-preservation as a "master motive," but these criticisms hardly discount the theory as a whole as long as one assumes that self-preservation is a major instinctual motive (even if all other motives cannot be traced back to it).

In later writings, Landau et al. (2007) provided further defense for TMT as they acknowledged the TMT assumption that concerns about death influence a "substantial proportion of human activity" (p. 481) as opposed to *all* human activity as understood by Muraven and Baumeister (1997) and Pelham (1997). In defending TMT from a evolutionary perspective, Landau et al. (2007) went on to state that they

> have never claimed that survival-enhancing characteristics are the only features of organisms that are selected for; rather, our point is that biological systems and characteristics that promote survival greatly enhance chances for reproduction, and for mammalian species, chances for offspring to successfully pass genes on to future generations as well. (p. 487)

Therefore, criticisms in the form of exceptions to the basic self-preservation tenets of TMT might be unfair because TMT does not seem to claim that all human motivation can be easily explained by avoidance of death. This is especially true given the impressive accumulation of TMT research in support of the assertion that thoughts of death affect a substantial amount of human activity (see Burke et al., 2010; Landau et al., 2007). Thus, although the broad sweeping, meta-theoretical nature of TMT invites critiques based on exceptions, these exceptions need not disqualify the well-documented findings of TMT literature.

TMT defenses. Another critique comes from those who have argued against the TMT emphasis on meaning making and self-esteem development as a defensive reaction against death anxiety (Ryan & Deci, 2004). These authors suggested that considering self-esteem as merely a defense is equivalent to conceptualizing self-esteem as contingent, as opposed to true self-esteem, which is based on competence, autonomy, and relatedness. Furthermore, these authors argued that human striving for existential meaning and significance cannot be captured by defensive processes as TMT might at times suggest, stating that, "People typically engage life – that is, they seek challenges, connections, authentic meaning, and significance – not because they are trying to avoid the scent of death, but because they are healthy and alive" (p. 473). They argued that even though TMT has well documented evidence in support of meaning seeking

reactions to thoughts of death, it is insufficient to explain the more general human propensity toward meaning and growth.

However, Ryan and Deci (2004) commended terror management theorists for their depth stating that:

> TMT is also perhaps the only other theory in current empirical psychology that has been willing to scratch below the surface goals and cultural values to grapple with more ultimate, existential concerns such as death, freedom, isolation, connectedness, and meaning that are at the heart of being human. (p. 474)

Furthermore, they acknowledged that thoughts of death may insight defensive terror management reactions if "one's sacred canopy comes crashing down," such as in the aftermath of serious trauma. Still, the authors criticized TMT's focus on defensive reactions to death instead of acknowledging intrinsic motivations for personal growth. This may suggest that more research is needed which speaks to existential growth from a TMT perspective.

Terror Management Theory and Post-Traumatic Growth

Most TMT research is distinct from post-traumatic growth (PTG) theory and research. Although the literature linking TMT to PTG is limited, there are some indications that a TMT perspective may be useful in understanding some of the processes that contribute to PTG. This section discusses some of the conceptual differences of TMT and PTG as well as the research reconciling those differences. Also, this section provides a review of the literature addressing factors that allow for PTG from a TMT perspective and specific terror management mediators through which PTG might occur.

Some TMT literature examines differences between TMT and PTG findings. As discussed by Lykins, Segerstrom, Averill, Evans, and Kemeny (2007), one noteworthy difference

between TMT and PTG findings is the direction of goal shifts following reminders of mortality. These authors noted that PTG suggests that after people have been made aware of their mortality via the experience of traumatic events, they tend to shift their goal orientations in an intrinsic direction. Accordingly, the authors characterized PTG as "a shift toward intrinsic goals, which are oriented toward building meaningful and lasting resources and satisfying essential human needs for autonomy, relatedness, competence, or growth" (p. 1089). In contrast, much of the TMT research suggests that following MS people tend to drift in the direction of extrinsic goal orientations (Lykins et al., 2007).

Findings from Kasser and Sheldon (2000) support the theoretical assumption that MS can increase extrinsic goal orientations. These authors based their research on the TMT prediction that members of capitalistic cultures which tout consumption and wealth as paths to happiness should increase materialistic pursuits following reminders of mortality as a means of bolstering this cultural worldview. They designed studies to test the effects of what they called a "culture of consumption" on participants' financial expectations for the future and greedy behaviors in an experimental setting. Results showed that college student (article did not mention race/ethnicity) participants who had written about their thoughts and feelings concerning their own death expected to make and spend more money than those who had written about music. In a second study, the researchers used a forest management game designed to measure participants' greedy behaviors in a business scenario. Results indicated that participants in the MS condition behaved more greedily than those in the control condition. Both studies suggested that death-based feelings of insecurity led to increased materialism and consumptive behaviors. However, since the writing topic in the control condition was music, it is unclear if the increase in materialism

was due specifically to death related anxiety or general feelings of insecurity from writing about an unpleasant topic.

In an attempt to reconcile the differences in TMT and PTG research regarding goal orientation shifts, Lykins et al. (2007) examined some of the methodological dissimilarities between these two sets of literature. The authors noted that PTG researchers are generally concerned with naturalistic confrontations with death and frequently occurring reminders of death, whereas TMT research uses experimentally manipulated MS occurring for a brief period of time. In a series of studies testing the effects of these methodological differences, results showed that increased perceived threat of death after a natural disaster correlated with intrinsic goal shifts. The authors also conducted a study which showed that participants were more likely to endorse intrinsic goals 11 weeks after the terrorist attacks on September 11, 2001 than 5 weeks after the attacks, which suggests that longer durations of processing traumatic events may increase intrinsic goal orientations. Furthermore, these authors also demonstrated that participants with low initial intrinsic goal orientation showed marked increases in intrinsic goals after mortality was made salient, which suggests that pre-existing value structures (intrinsic vs. extrinsic goal orientation) play a role in reactions to MS conditions. Although the authors admit that there may be additional differences between TMT and PTG research that account for their conflicting findings and more research is necessary with naturally occurring confrontations with death from a TMT perspective, these results indicate that discrepancies in TMT and PTG findings on goal shifts can at least partially be explained by the nature of the reminders of mortality, duration of these reminders, and pre-existing value structures.

Cozzolino, Staples, Meyers, and Samboceti (2004) described findings similar to those found by Lykins et al. (2007). Based on their review of PTG research after near-death

experiences (e.g., Greyson, 1992; Ring & Elsaesser Valarino, 1998; Tedeschi, Park, & Calhoun, 1998), the authors argued that there are three major components to a near-death experience that are not usually present in experimental manipulations of MS: conceptualizing death as real instead of an abstract concept, a life review in which a person reflects on his or her life up to the near-death experience, and perspective taking of others who would live through his or her death. The researchers used these three elements of near-death experiences to create an experimental manipulation they referred to as "death reflection." Participants included male and female college students of Caucasian (56%), Asian (19%), African American (10%), Latino (6%) or unknown ethnicity. Participants in the death reflection condition read a scenario in which they imagined they were trapped in a burning building and succumbed to the flames. They were then asked to reflect on their final moments and write down a description of their lives up to their imagined death and how their family would react if they had died.

Three studies using a death reflection manipulation suggested that participants in the death reflection condition behaved in a less greedy manner than control participants as measured by the number of communal raffle tickets that the participants took (Cozzolino et al., 2004). Furthermore, one study showed that highly extrinsic participants took more raffle tickets in a standard MS condition, but highly extrinsic participants acted more intrinsically in a death reflection condition. The authors concluded that reflecting on life and death can generate intrinsic thoughts, feelings, and behaviors. Therefore, this study suggests that an awareness of mortality can lead to positive rather than negative reactions depending on the mode in which one processes thoughts of death. Although, these researchers helped to explain some of the discrepancies in the TMT and PTG literature, one might argue that the concept of death reflection is simply a specific type of MS rather than a completely separate construct as the

authors implied. Thus, Cozzolino et al. (2004) may have unnecessarily argued for a new model for understanding death awareness instead of expanding or fitting death reflection into the existing framework offered by TMT and MS.

Another potential negative reaction to MS is the manifestation of worldview defense as derogation of and aggression toward others whose cultural worldviews are different (Routledge & Arndt, 2009). Some (i.e. Salzman, 2001; Wisman & Koole, 2003) might argue that aggression toward people with different social, religious, and political beliefs is a natural byproduct of increased faith in one's own worldviews since these beliefs often suggest that if one set of values is correct then a different set of values must be incorrect. This aversion to others' worldviews is unfortunate since exploring different worldviews and integrating new perspectives have been found to promote existential meaning and growth (Bauer, McAdams, & Sakaeda, 2005).

In response to this potential maladaptive response to awareness of death, Routledge and Arndt (2009) suggested that encouraging creativity may promote cultural exploration instead of deprecation of different worldviews. The authors argued that creativity naturally fosters open-mindedness, and could be a useful terror management strategy that promotes growth. To test the terror management role of creativity, the researchers conducted three studies with male and female undergraduate students (article did not mention race/ethnicity). In the first two studies, participants were randomly divided into either a group which was asked to design a t-shirt (creative task) or a control group. In the third study, participants in the experimental group were primed with an essay which suggested that creativity is a culturally valued trait in America. The results from these three studies showed that participants in the creativity condition were more likely than those in the control condition to express interest in exploring other cultures after being primed with MS. Participants in the creativity condition were also found to be more likely

than those in the control condition to express interests in films that offered different perspectives on nationality and religion specifically. Although TMT posits that death-related cognitions can lead people to dogmatically defend cultural worldviews that provide a larger sense of meaning and self-transcendence, this research suggest that creativity can be used as a worldview to encourage exploration and open-mindedness.

Another positive response to the potential antisocial reactions to thoughts of death was offered by Jonas, Schimel, Greenberg, and Pyszczynski (2002). These authors noted that most of the TMT research at the time had focused on the negative and socially destructive consequences of MS. They based their work on the assumption that most people learn early on that benevolence and compassion are desirable traits in most cultures, and therefore meeting these standards should increase self-esteem and protect against existential terror. They wrote, "To the extent that prosocial behaviors are valued by one's culture and contribute to self-esteem, acting in ways that are helpful, giving, and benevolent should serve a terror management function" (p. 1344).

One study conducted by Jonas et al. (2002) showed that pedestrians who were interviewed in front of a funeral home, which presumably primed for MS, demonstrated more favorable attitudes toward charitable causes than those interviewed a few blocks from the funeral home. In a second study, college student (article did not mention race/ethnicity) participants were randomly assigned either the task of writing about their thoughts regarding their own death or the task of writing about dental pain. After they completed some filler surveys, they were asked if they wanted to donate to an American or international charity. Participants in the MS condition donated significantly more money to the American charity, but MS did not effect donations for the international charity. This study contributes to the existing TMT research

which suggests that people are more likely to act positively toward those affiliated with their own cultural worldviews. One limitation of these studies was the relatively small number of participants and generalizability of the results. The first study included 31 pedestrians who volunteered to participate after the researchers approached them on the street. Since this study involved attitudes toward charities, their volunteering for this study may have indicated an influential bias. The second study only had 22 participants from an introductory college course, and therefore it may be difficult to generalize the results to a broader population. Still, both studies supported the hypothesis that MS can contribute to prosocial attitudes and behaviors, and that terror management strategies have the potential to positively impact human behavior.

Further support for the notion that terror management strategies might be used to quell existential anxiety while promoting post-traumatic growth comes from Amsterdam. Wisman and Koole (2003) suggested that awareness of one's impending death should arouse a strong desire to avoid being isolated from others. They based this assumption in part on the evolutionary principle of safety in numbers. The authors noted that while prior TMT research had gone into great detail describing the role of cultural worldview defense, the role of social affiliation had been largely ignored and no study had compared the terror management strategy of social affiliation with that of worldview defense.

In three separate studies, Wisman and Koole (2003) measured social affiliation of undergraduate students in the Netherlands by recording whether the participants chose to sit alone or in a group. In the first study, worldview defense was pitted against affiliation by informing some of the participants that members of the discussion group they would be joining were very tolerant and informing other participants that the other group members were very intolerant. After some participants were primed with MS, researchers recorded whether the

participants would sit on the same side of the table with others who presumably opposed a valued worldview or sit alone across the table. Although tolerance was selected as the worldview of interest because it was presumably culturally valued by most participants in the study, it may have been a confounding variable because perceived tolerance in others might alter affiliation behaviors due to the social implications of such a trait rather than the desire to defend this worldview. The next two studies measured preferred seating of participants with specific worldviews such as religion, economics, and politics that each individual rated as highly valued. Results from this study showed that after being primed with MS, participants were more likely to sit next to others rather than sit alone, and this was true even if the other group members were assumed to oppose valued cultural worldviews.

These experiments imply that affiliation strivings are so strong under MS conditions that they might override worldview defense as a terror management strategy. However, since social affiliation is likely congruent with many cultures that promote togetherness and the importance of relationships, one might argue that affiliation is itself a worldview defense instead of qualitatively different as argued by the authors. While the authors contend that these two terror management strategies are separate constructs, they do admit that affiliation and cultural worldview defense often operate in tandem, stating, "In real life situations, people's closest in-group members are likely to share their attitudes, ideologies, and religious beliefs. Consequently, affiliation and worldview validation defenses probably work together most of the time to shield people's minds from existential concerns" (p. 524). Regardless of the theoretical subtleties, this research provides additional validation for the concept that death-awareness may increase terror management strategies that foster personal growth. In this case, MS increases strivings for social affiliation, which likely instigates social support.

In sum, much of the limited research linking TMT to PTG provides useful evidence in support of approaching posttraumatic injuries from the existential framework offered by TMT. As described earlier, TMT research has demonstrated that MS can lead to increased intrinsic value orientations (Cozzolino et al., 2004), cultural exploration when thinking creatively (Routledge & Arndt, 2009), prosocial attitudes and behavior (Jonas et al., 2002), and social affiliation (Wisman & Koole, 2003). Still, notable limitations must be considered. First, this research is very sparse in general. Perhaps due to the ample travesties committed by those dogmatically defending their cultural worldviews, the bulk of the TMT research thus far has been devoted to explaining the negative reactions toward others with the effects of MS (Burke et al., 2010). This is why the limited research supporting the potential for PTG from a TMT perspective, as described above, seems to be reconciling theoretical differences between TMT and PTG instead of working from an assumption that the two are interconnected. Although the founders of TMT intended to create a broad framework for understanding a variety of human attitudes and behaviors (Solomon et al., 2004), it seems that the research is biased toward explaining maladaptive reactions to existential anxiety. Not nearly enough attention is afforded to understanding personal growth after reminders of mortality. More research is needed within TMT literature which focuses on how growth occurs after traumatic events make mortality salient. Furthermore, research is needed which tests the clinical implications of the data offered by the TMT literature.

Clinical Implications of Terror Management Theory

The utility of terror management theory (TMT) as a perspective for informing psychotherapy with individuals who have experienced traumatic events has yet to be fully examined. Scant research supports such connections, in part because TMT is a social psychology

theory that is rarely cited in clinical research. This dissertation seeks to bridge these two areas by identifying those elements of the TMT research which may be clinically applicable.

This dissertation posits that there are clinical implications of TMT for trauma work based on the assumption that people have evolved the capacity to dampen the intense fear created by awareness of mortality because of the benefits produced by this capacity. Indeed, the TMT research described earlier suggests that using the terror management strategies of investing in and defending cultural worldviews effectively decreases death related anxiety (Arndt et al., 2004; Pyszczynski et al., 1999; Solomon et al., 2004), and viewing the self as adhering to the values prescribed by cultural worldviews establishes self-esteem (Solomon et al., 2004). Moreover, these terror management strategies might be especially useful in therapy sessions in which trauma is discussed because mortality is likely more salient during such discussions. As Yalom (2008) wrote:

> Certain life situations almost always evoke death anxiety: for example, a serious illness, the death of somebody close, or a major irreversible threat to one's basic security – such as being raped, divorced, fired, or mugged. Reflection on such an event will generally result in the emergence of overt death fears. (p. 22)

Furthermore, the research in the previous section suggests that terror management strategies might be useful in fostering post-traumatic growth (PTG) under certain conditions (Cozzolino et al., 2004; Jonas et al., 2002; Routledge & Arndt, 2009; Wisman & Koole, 2003). The focus of this section, therefore, is to delineate the elements of TMT research that can be useful for clinicians attempting to cultivate personal growth with clients who have experienced traumatic events. It begins with a description of the clinical implications taken from the TMT

and PTG research as described in the previous section and ends with a review of the literature specifically advocating for the use of TMT perspectives in clinical settings.

Implications from TMT and PTG research. The dual process model of TMT, as described earlier, asserts that people react to conscious awareness of death with proximal defenses such as denial and rationalization, and once these thoughts have been removed from conscious awareness distal terror management defenses are used to assuage death anxiety (Arndt et al., 2004; Arndt et al., 2002; Pyszczynski et al., 1999). Arndt et al. (2004) argue that the use of both proximal and distal defenses can be adaptive and beneficial. They provide the example of exercise, which may be used as a defense against negative emotion while simultaneously contributing to physical health. Similarly, Martin-Joy and Vaillant (2010) have argued that adaptive defense mechanisms, also known as coping styles, are associated with mental health in adulthood and successful aging. Thobaben (2005) reminded readers that defense mechanisms serve the important function of protecting the individual by decreasing anxiety and preventing pain. The American Psychiatric Association even acknowledged the adaptive function of defenses by offering a defensive functioning scale, which groups defenses into categories based on their adaptive function (APA, 2000).

From a clinical perspective, therefore, the TMT model could be used to suggest that incorporation of worldview discussions into psychotherapy might be useful in assisting the client to cope with existential anxiety, even if the client is not consciously thinking of death and mortality at the time of these discussions. In fact, much of the TMT research suggests that terror management defenses are actually needed more if there is a delay between conscious priming of MS and the dependent measure (Burke et al., 2010). Therefore, if a client discloses a traumatic experience in which a serious threat to physical integrity reminds the client of his or her

mortality, worldview discussion may be effective in reducing the client's anxiety. The clinician could encourage this discussion throughout the session, not necessarily immediately after the disclosure of the traumatic event.

Yet, since the word "defenses" is used throughout the dual process model research in describing the unconscious methods people utilize when protecting themselves from death related anxiety (Arndt et al., 2004; Arndt et al., 2002; Pyszczynski et al., 1999), not all clinicians may relate to the model. For those who do, one might argue that encouraging the use of unconscious "defenses" seems antithetical to psychotherapeutic goals. Thobaben (2005) argued that the use of defenses may be problematic at times to the extent that they distort reality and interfere with rational problem solving and decision making. From a psychodynamic perspective, understanding and managing immature defense mechanisms are crucial objectives for the psychotherapist (Vaillant, 1992).

However, the word "strategies" is also used to describe these same processes that effectively buffer the client against death related anxiety. The use of "strategies" appears to carry a more positive connotation, and has been indicated as an important mediator predicting well-being among a variety of clinical populations including cancer patients (Kim, Han, Shaw, McTavish, & Gustafson, 2010), clients with mental health disorders, including substance use disorders (Sugarman, Nich, & Carroll, 2010), post-traumatic stress disorder (Cantón-Cortés & Cantón, 2010), bipolar disorder (Lam & Wong, 2005) and psychotic disorders (Phillips, Francey, Edwards, & McMurray, 2009). Accordingly, coping strategies have been considered influential in various models of psychotherapy and clinical and counseling psychology, including cognitive-behavioral therapy (Burns & Nolen-Hoeksema, 1991), positive psychology (Greenglass &

Fiksenbaum, 2009), multicultural psychology (Tweed & Conway, 2006), and humanistic-existential psychology (Mayers, Naples, & Nilsen, 2005).

Haan (1965) differentiated between coping mechanisms and defense mechanisms with the following: "Coping behavior is distinguished from defensive behavior, since the latter by definition is rigid, compelled, reality distorting, and undifferentiated, whereas the former is flexible, purposive, reality oriented, and differentiated" (p. 374). Erikson, Feldman, and Steiner (1997) concurred, stating that unlike coping strategies, defenses are unconscious, implicit, intrapsychically generated, involuntary, trait-determined, instinct-driven, and automatic.

Although unconscious, Vaillant (1992) acknowledged that some defenses are adaptive. From a TMT perspective, Arndt et al. (2004) also argued that both proximal and distal defenses can be beneficial. These authors provided the example of exercise, which may be used as a defense against negative emotions while simultaneously contributing to physical health. Therefore, the clinician might consider promoting the use of terror management defenses that the research has suggested to be adaptive. More details on this research are provided later in this section.

Further implications can be taken from TMT research findings, which suggest that people can be directed toward various terror management reactions to MS cues (Cozzolino et al., 2004; Lykins et al., 2007; Routledge & Arndt, 2009; Routledge, Arndt, & Sheldon, 2004). Routledge et al. (2004) demonstrated that behavioral task engagement, which fostered creativity, conformity, and sharing attitudes, influenced responses to MS conditions. One of the purposes of their study was to determine if engaging in creative tasks increased or decreased the need for worldview defense. One hypothesis was that engaging in creative task might make the participant feel more unique, and thus, separate from belonging to a group, which would increase

the need for worldview defense. The alternative hypothesis is that creativity might make salient ideas of open-mindedness and tolerance, which would decrease the need for worldview defense. To test the effects of behavioral task engagement, male and female college student participants were asked to write about their own death or a control topic (dental pain). The participants were asked to design a t-shirt with the goal of pleasing others (conformity group), with the goal of pleasing both the self and others (shared values group), or with the goal of being as creative as possible (creativity group). The dependent measure was the participants' ratings on anti-American and pro-American essays.

The results of this study demonstrated that the participants in the shared values group exhibited less defensiveness in reaction to the anti-American essay than those in the conformity group after primed with the MS condition (Routledge et al., 2004). Furthermore, those in the creativity group were the least defensive after mortality had been made salient. This suggests that engaging in tasks that reflect shared values and creativity can help to ameliorate terror associated with death and decrease the need to respond negatively toward those with conflicting worldviews. These researchers demonstrated that behavioral tasks can interact with worldview defense to cope with the anxiety created by thoughts of death. However, these findings are difficult to generalize because of the specific population (college students) and lack of cultural demographic information. Participants in different stages of life, such as adults with children or the elderly, might be expected to react differently to MS conditions. Also, it would be advantageous to examine the results based the cultural variability within this study, but since the authors did not provide sufficient demographic information, no such analysis can be made. Still, the results offer critical support for the notion that people can be directed toward various terror management reactions to thoughts of death.

The notion of using behavioral tasks to indirectly counter an individual's distress is certainly not new or unique to TMT research. Behaviorists have long argued for behavioral activation, in which overt behaviors are encouraged in order to initiate contact between the client and reinforcing environmental contingencies that improve thoughts, emotions and overall quality of life (Hopko, Lejuez, Ruggiero, & Eifert, 2003). Moreover, tasks involving creative expression have been used in individual, couple, and family therapy (Carson & Becker, 2003). From a Gestalt perspective, improving creative functioning promotes the integration of the self with the environment, self-awareness, authenticity, and self-efficacy (Brown, 1969). In art therapy, creative expression has been used successfully in treating a range of difficulties from depression and anxiety (Choi, Lee, & Lim, 2008) to chronic pain by fostering secure relational attachment and meaning making (Hass-Cohen & Findlay, 2009). Art therapy has been used as a treatment for trauma-related symptoms by engaging physical senses while symbolically activating autobiographical memories and creating meaningful narratives related to traumatic events (Sarid & Huss, 2010). Therefore, a clinician's use of creative tasks in treatment with clients who have experienced traumatic events is consistent with the findings of TMT research as well as various supported clinical treatment approaches.

This dissertation encourages clinicians to use the available TMT research and related clinical research to inform them on how to best guide their clients toward using those terror management strategies which promote growth after traumatic experiences. Arndt et al. (2002) echo the sentiment that TMT research might influence the way in which clinicians direct their clients toward growth, stating that their own research is

> broadly consistent with Yalom's (1980) contention that reminders of death can be used as a catalyst to identify the pursuits in which individuals invest themselves to make life

> seem meaningful. Moreover, by applying therapies that encourage the application of particular belief and value structures, it may be possible to help individuals adopt more healthy and productive responses to such existential concerns. (p. 322)

Indeed, a common thread in existential psychotherapies is the reflection on life and death and finding meaning in one's mortality (Barnett, 2009). The existential philosophy informing these therapies is compatible with TMT, which provides a blueprint for those aspects of culture which foster adaptive meaning making in the face of death (Arndt et al., 2002). Many aspects of TMT are also compatible with other therapeutic approaches such as logotherapy and acceptance and commitment therapy (ACT), which both emphasize meaning and personal values (Sharp, Schulenberg, Wilson, & Murrell, 2004).

Furthermore, Solomon et al. (2004) suggests that clinicians should treat clients who are having difficulties functioning by examining the ways in which their worldviews and strivings for self-worth are failing them and work with the client to construct more "compelling and attainable versions of these psychological resources" (p. 28). Some clinical approaches that would be consistent with such advice might include examining one's conceptualization of his or her culturally prescribed standards and values, bolstering self-esteem by focusing on ways in which the client meets or exceeds those standards, and co-constructing more realistic, attainable understanding of the client's cultural standards. These approaches are akin to cognitive-behavioral treatments which target rigid, unrealistic expectations that contribute to clients' distress and treatment resistance (Flett & Hewitt, 2007).

Particularly relevant to this dissertation, the research linking TMT and PTG offers insight on specific interventions that could potentially facilitate the use of such resources. As discussed earlier, one method for encouraging PTG is by promoting intrinsic goals and value systems

(Cozzolino et al., 2004; Lykins et al., 2007). In reconciling the methodological differences that have led to conflicting findings in the TMT and PTG research, Lykins et al. (2007) showed that more naturalistic processing of traumatic events is associated with increased value of intrinsic goals when compared to the laboratory manipulations of MS common in the TMT research. These authors suggest that the shift toward valuing intrinsic goals is psychologically advantageous and this strategy might be utilized in an intervention framework. They argue that continued processing of naturally occurring confrontations with death may lead to beneficial goal shifts, and "encouraging individuals with more extrinsic goals to process their theory of what happens following death as well as current life goals may help promote PTG over time through intrinsic goal shifts" (p. 1097). Cozzolino et al. (2004) echo the sentiment that the way in which people process life and death can lead to intrinsic thoughts, feelings, and behavior. These authors demonstrated that encouraging the following might increase intrinsic cognitions and behaviors: reflecting on mortality in a way in which death seems real rather than an abstract concept, incorporating a life review component, and taking perspectives of surviving others. This type of processing appears similar to what would occur in therapy with clients who are struggling in the aftermath of trauma.

The majority of the research on the treatment of trauma disorders indicates that the most effective interventions are those which focus on the traumatic event and the individual's thought processes about the event (Benish, Imel, & Wampold, 2008; Ehlers et al., 2010). Based on their meta-analysis, Benish et al. (2008) argued that no single "bona fide" theoretical treatment approach was significantly better than others in treating clients suffering from the effects of traumatic experiences. However, Foa, Rothbaum, and Furr (2003) contend that Prolonged Exposure (PE), which consists of having clients repeatedly confront their traumatic experiences

in order to allow them to re-experience these memories without the use of maladaptive coping strategies, is more effective than standard treatment methods. By allowing the client to confront feared objects, memories, situations, and images, this approach provides corrective experiences in which the client learns to discriminate between distress and safety signals and view the traumatic events as distinct from everyday life. This process systematically decreases levels of arousal associated with exposure and decreases avoidance as a means for coping. Their review of the literature suggested that while other interventions have been shown to be effective, their effectiveness may be best explained by the exposure-based treatment methods underlying those therapies. Furthermore, the research seems to suggest that disclosure of traumatic experiences in a way in which focus is placed on the thoughts and feelings associated with the traumatic events increases feelings of self-control and self-regulation (Hemenover, 2003), and promotes meaning making, self-esteem, and identity development (Pennebaker, 1997).

Therefore, the research on the effective treatment of trauma survivors seems consistent with many of the insights offered by TMT and PTG investigators. Specifically, prolonged exposure to the traumatic event and processing the event in a meaningful, naturalistic manner may cultivate personal growth (Cozzolino et al., 2004; Lykins et al., 2007). Some would even argue that exposure treatments which focus on behavioral avoidance alone could be sufficient in improving PTSD symptoms (Şalcioğlu, Başoğlu, & Livanou, 2007). Specifically, a decrease in avoidance was shown to foster improvements in nightmares, intrusive thoughts, subjective distress, cognitive avoidance, hypervigilance, memory and concentration difficulties, and the sense of a foreshortened future. Thus, treatments which target behavioral avoidance have been empirically supported, and imaginary or in-vivo exposure appears to be one medium for

decreasing such avoidance. However, some might argue that exposure through conscious processing of the traumatic experience may not be the sole means of achieving PTG.

Routledge and Arndt (2009) suggested that directing clients toward adaptive terror management strategies may be clinically useful when prolonged exposure seems contraindicated, such as when the client has not consciously associated a traumatic event with mortality or the client is not yet emotionally ready for prolonged exposure. In response to Cozzolino et al.'s (2004) contention that positive responses to MS may be facilitated by having clients confront the thoughts of death more openly, Routledge and Arndt (2009) wrote:

> Considering that people tend to prefer a more avoidant response to thinking about death, and death is often made salient in subtle ways that would not promote deeper consideration, it is important to entertain strategies that would promote socially positive terror management when thoughts of death are not being deeply processed. (p. 502)

This assertion that terror management strategies might be useful when the client is not ready for exposure and deep processing is consistent with treatment approaches that aim to work with clients' resistance in a non-threatening manner. For example, motivational interviewing seeks to increase the client's motivation for change by providing empathy and supporting his or her self-efficacy while simultaneously seeking and discussing information that is incompatible with any resistance the client may be experiencing (Miller & Rollnick, 1991). This treatment approach has been shown to reduce client dropout and resistance to treatment among clients who abuse alcohol (Sobell & Sobell, 2003). Although motivational interviewing was developed for the treatment of clients with substance use disorders (Driessen & Hollon, 2011), it has been integrated into treatments for people with other conditions and disorders, such as PTSD (Murphy, Thompson, Murray, Rainey, & Uddo, 2009). Still, more research is needed addressing

avoidance, resistance, and ambivalence to change among clients who have experienced trauma and do not feel ready for exposure treatment.

Routledge and Arndt (2009) demonstrated that individuals can be directed toward creativity, which encourages cultural exploration and meaning making. Clinicians therefore should consider focusing on those aspects of their clients' worldviews that promote creativity and open-mindedness. Further, behavioral tasks that require creativity, such as learning about other cultures, might also be incorporated into the treatment of clients dealing with these existential concerns in order to assist the clients in making meaning in their lives. These authors suggested that by directing people toward creativity and open-mindedness while they are engaging in terror management defenses, the clinician can promote socially positive reactions to death anxiety. Thus, it appears that practitioners can guide their clients toward utilizing adaptive defenses by focusing on specific aspects of the clients' cultural worldviews which cultivate personal growth. Since the research indicates that one can direct a client toward the use of particular terror management strategies (Routledge et al., 2004), clinicians might consider directing them toward those strategies with evidence suggesting their potential for promoting PTG. This could include emphasizing culture worldviews which support intrinsic goal orientation (Cozzolino et al., 2004; Lykins et al., 2007), prosocial behaviors (Jonas et al., 2002), and creativity and open-mindedness (Routledge & Arndt, 2009).

Clinicians could also use cultural worldview discussion as a means of eliciting support from others who share some of the client's cultural worldviews. Indeed, Routledge et al. (2004) reminded the reader that

> from a terror management perspective, social connections serve to weave one into an existentially meaningful world by providing the social validation needed to maintain the

> integrity of that worldview and thus play a critical role in the defense mounted against the awareness of mortality. (p. 478)

Thus, investment in cultural worldviews may bolster connections with people who provide social validation and support.

This assertion that clinicians might draw upon clients' worldviews because of their function in providing social validation compliments existing social support research, which indicates that eliciting such support can be beneficial to clients. For example, recent social support literature suggested that positive social support experiences contribute to overall well-being as indicated by psychological health characteristics such as stability, increased positive affective experiences, and greater feelings of self-worth (Cohen, Gottlieb, & Underwood, 2000; Cohen & Wills, 1985). Because of the benefits of social support, especially after a traumatic experience (Prati & Pietrantoni, 2009), researchers have called upon clinicians to make efforts to increase their clients' social support (Prati & Pietrantoni, 2009), improve their perceptions of social support (Besser & Priel, 2010), and advocate for help-seeking from loved ones (Jospeh, Yule, Williams, & Hodgkinson, 1994). In sum, whether the clinician emphasizes those aspects of the client's worldviews which promote social connectivity, creativity, or intrinsic goals, the research discussed earlier indicates that terror management strategies can help to alleviate anxiety associated with death and foster PTG.

Proposed treatments from a TMT perspective. The scientific literature advocating for the use of treatments informed by a TMT perspective is markedly scant. Most of the clinical implications that one may draw from the TMT research come from untested assumptions and brief statements in the concluding sections of the research described above. To date, very few researchers have written of specific treatment strategies derived from a TMT perspective.

Hovland (1995) proposed that contributions from TMT and rational emotive behavior therapy (REBT; see Ellis, 1993) could be combined to effectively inform a clinician's conceptualization and treatment of anxiety disorders. This author argued that people with anxiety disorders are especially vulnerable to a variety of threats because of the "absolute and restrictive character of the standards they apply to establish a continually meaningful existence" (p. 164). Therefore, the author used TMT to conceptualize how people find meaning through cultural standards and worldviews. Specifically, he based much of his arguments on the TMT position that humans achieve self-esteem by living up to culturally validated standards and values, and by meeting these standards they are buffered against the anxiety created by awareness of mortality. Furthermore, since TMT argues that self-awareness is the mechanism which allows humans the terror inducing knowledge of the certainty of death (Solomon et al., 2004), the author suggested that self-awareness is also a concomitant of anxiety.

To test the applicability of these theoretical contributions, Hovland (1995) recruited members of self-help clubs for anxiety problems to participate in studies measuring irrational standards and self-awareness as related to anxiety. All of the participants were Caucasians living in Norway. Based on the TMT assumptions that viewing the self as meeting valued cultural standards increases self-esteem and provides a buffer against anxiety, and self-awareness is what enables humans to experience the terror associated with death, irrational standards and self-awareness were identified as key variables. In one study, some of the participants received assertiveness training based on a REBT approach which specifically targeted irrational standards, coping incapability, and level of self-awareness. Anxiety was expected to decrease even though it was not a direct target of treatment.

The results showed that measured levels of self-awareness and irrational standards were related to participants' experiences of anxiety. Furthermore, as these concomitants decreased during therapeutic intervention, anxiety itself also decreased. The author concluded that the results of his studies support the notion that combining constructs from TMT and REBT provides a therapeutic advantage for understanding anxiety. The results also demonstrated that tailoring treatment from a TMT can be useful. Specifically, clinicians might find it useful to incorporate discussions of those standards of important cultural worldviews which the client feels he or she is meeting, and address those which the client does not.

However, since all of the participants were Caucasians from Norway, the external validity of this study is limited. Moreover, one might argue that the irrational standards these participants exhibited were not necessarily related to major cultural worldviews which provide existential meaning as TMT would suggest. Thus, it could be argued that the results of this study could be accounted for by REBT alone, and the contributions of TMT were exaggerated. More research is needed to better identify which terror management strategies are used by clients throughout the course of therapy.

Another argument for applying a TMT perspective in mental health treatment was offered by Salzman (2001). This author analyzed the existential consequences of traumatic events that caused entire cultural groups terror or hopelessness from a TMT perspective. He used theoretical assumptions contending that culture serves the function of providing anxiety reducing meaning, and that various cultures address the certainty of death in different ways. The author argued that cultural trauma that is severe enough to create significant doubt in the validity of important worldviews decreases the ability for those worldviews to effectively manage existential terror. This decrease in faith toward cultural worldviews helps to explain the increase

in maladaptive behaviors to boost self-esteem and manage the terror associated with death, such as substance abuse. Thus, the author proposed that when an entire culture suffers traumatic loss and the meaning provided cultural worldviews dissolves in the aftermath of this trauma, maladaptive coping behaviors should be expected.

Salzman (2001) applied these theoretical assumptions to three cultural groups who have suffered tremendous loss as the result of European occupation of their homelands: Native Alaskan, Hawaiian, and Navajo populations. For example, the author postulated that after Native Alaskans were exposed to Europeans who brought with them diseases that killed an estimated 60% of the Eskimo people (Fortuine, 1989), their faith in their cultural worldviews was shattered. This perspective helps to understand the heavy use of substances that would offer temporary relief from anxiety and depression. Informed by TMT, the author proposed treatment for such populations that rebuild faith in cultural worldviews by encouraging the restoration of traditional practices and values. The clinical implications offered included the construction and maintenance of worldviews that offer meaning and achievable values that can bolster self-esteem. The author called upon mental health professionals within these communities to become advocates of social justice which might remove barriers, such as racial discrimination, that impede the oppressed from living up to cultural standards of value.

Similarly, Serna (2006) wrote of the implications of TMT for native Hawaiian youth. This author asserted that the marginalization of native Hawaiian youth has taken a toll on this population, and stated that they "have no faith in any cultural worldviews, cannot achieve any cultural standards, and are unable to achieve anxiety-buffering self-esteem, all leading to maladaptive anxiety-buffering actions" (p. 141). She attributed this loss of faith in traditional worldviews to the Westernization of Hawaii and the subsequent shattering of worldviews

deemed inferior to Western ways. The author argued that to help this population, it is imperative to help them identify native standards and values that they might live up to in order to strengthen anxiety-buffering self-esteem.

Although Salzman (2001) offered insightful theoretical underpinnings for the treatment of victims/survivors of cultural trauma, an obvious limitation is that the practical implications of these theories have yet to be empirically tested. One strength of this article is that the cultural adaptations offered by the author are consistent with other culturally adapted trauma treatments (Collins & Arthur, 2010; McCabe, 2007). For example, McCabe (2007) has argued that mainstream psychological treatments have failed to incorporate much needed cultural modifications to the treatment of native and aboriginal trauma survivors in North America. This author's qualitative analyses from interviews with native tribes of the United States and Canada suggested that indigenous people are increasingly turning toward traditional healing because mainstream treatments are not incorporating valued traditional worldviews in treatment, such as deep connections with the spirit world and sacred teachings. Like Salzman's (2001), these results suggest that sensitivity to traditional worldviews is advantageous when working with survivors of cultural trauma. More research identifying the means in which clinicians and clients integrate cultural worldviews into the treatment of trauma survivors as well as the effects of such integration is needed.

Another limitation is that Salzman (2001) did not provide alternative explanations for the phenomena he analyzed from a TMT perspective. Some might argue that the reactions of cultural groups which have endured serious traumatic events might also be explained by different, perhaps competing frameworks. Still, Salzman's (2001) contention that clinicians working with those who have experienced cultural trauma should consider assisting their clients

to reconstruct shattered cultural worldviews, which serve essential meaning making functions, is imperative. Based on terror management assumptions, the author stated that "the role of the mental health professionals may be in support of the collective and individual construction of meaning that sustains adaptive action" (p. 187). This concept may be considered central to all the clinical implications previously discussed in this section.

Although clinical implications can be extracted from the research described above, they were based on findings from laboratory research instead of naturalistic or clinical settings. Most of the direction provided to clinicians from the TMT literature has not been qualitatively analyzed or quantitatively tested for effectiveness. This suggests that much more research is needed which bridges the gap between the laboratory findings of TMT research and the practical implications of these findings in clinical settings.

Summary and Purpose of Study

This literature review included a review of trauma, including definitions and trajectories, and terror management theory (TMT) and its clinical implications for posttraumatic growth (PTG). It is the aim of this dissertation to employ the insights offered by TMT research for developing a richer understanding of how people might grow in response to trauma.

More specifically, the literature review noted that researchers have argued for definitions of trauma that include both the objective traumatic event and the subjective experience of intense emotion associated with that event. Although some argue that the less restrictive definition of trauma offered by the *DSM-IV-TR* has been useful for ensuring that people affected by negative events have access to treatment, this dissertation will employ a more restrictive definition. An event or series of events will be considered traumatic if the victim directly witnessed or

experienced serious threat of death or physical injury and experienced intense fear, helplessness, or horror as a result.

Although many people suffer from considerable distress in the aftermath of a traumatic event, others remain resilient or even experience positive psychological gains as the result of their struggles (also known as PTG). This review cited research demonstrating that some people experience growth following trauma in the form of reorganized perceptions of the self and the world in general, changes in interpersonal relationships, openness to new possibilities in life, and spiritual growth. These changes are made possible through the process of ruminations about the trauma, followed by cognitive processing of the trauma, disclosure to others, turning to social support networks, and restructuring beliefs and schemas regarding the trauma.

Also discussed in detail were the basic pillars of TMT. The theoretical postulations provided by TMT suggest that anxiety-laden thoughts of mortality are mitigated through investment in cultural worldviews and self-esteem. According to the theory, people cope with the anxiety caused by awareness of their mortality by turning to those cultural worldviews which provide meaning and purpose that will outlast their earthly existence. Additionally, they establish self-esteem by living in accordance with the standards and values prescribed by those worldviews. These terror management defenses are thought to occur outside of conscious awareness, and are employed after proximal defenses such as denial push thoughts of death into the unconscious.

Research providing support for TMT was discussed and critiqued. The bulk of this research has used mortality salience (MS) priming to demonstrate that after participants are reminded of their mortality, they will defend and put more faith in their cultural worldviews than will controls. Other research that measures the accessibility of thoughts of death has shown that

these thoughts become more available to the conscious mind under certain conditions, such as after participants have been unconsciously primed with thoughts of mortality or related constructs. These studies have also shown that manipulating terror management defenses, such as worldview defense, can affect the accessibility of death-related thoughts, and those who have strong worldview defenses in naturalistic settings tend to have lower levels of death-thought accessibility.

The review of the literature linking TMT and PTG provided earlier suggests that although most of the research in these two areas is distinct, there is evidence in support of understanding PTG from a TMT perspective. In reconciling the differences between TMT and PTG findings, research has indicated that positive reactions to confrontations with death are more likely when certain factors, such as naturalistic processing of real encounters with death and creative task engagement, encourage intrinsic value orientations, cultural exploration, and social affiliation, all of which have been related to well-being and personal growth. The implications of this collection of research are that clinicians and their clients might benefit from incorporating discussions of cultural worldviews into post-trauma treatment in a manner consistent with the findings of this research, and the existential framework provided by TMT has the potential to make valuable contributions to the existing PTG literature.

Although TMT research and its implications are virtually absent in the clinical literature, useful insights from TMT could provide clinicians with a valuable perspective for working with those who have experienced trauma involving serious threat to physical integrity. For example, clients who have experienced trauma that poses threats to their physical integrity and causes subjective feelings of terror is assumed to make thoughts of death more accessible in their minds during and shortly after cognitive processing of that trauma. In a sense, the traumatic events

prime for MS in a more naturalistic manner than the laboratory MS manipulations common in prior TMT research. If discussions of traumatic events in psychotherapy further increase death-thought accessibility, TMT leads one to expect these clients to turn to their cultural worldviews to manage their death-related anxiety. Furthermore, it may be clinically indicated that therapists actively encourage or incorporate cultural worldviews into therapy sessions in which trauma is processed because of their anxiety reducing function.

Despite the literature which suggests that cultural worldviews mitigate the anxiety created by thoughts of death by providing existential meaning and purpose as well as affiliation with others, it is not clear whether or how clients and therapists integrate worldviews into psychotherapy while processing trauma. The purpose of this dissertation, therefore, is to apply the insights from TMT as a framework for the qualitative analysis of psychotherapy sessions with clients who have experienced trauma by exploring naturalistic worldview integration during sessions that include discussions of the trauma. The primary research question of this study is: In what ways do clients who have experienced trauma incorporate cultural worldview discussions throughout those psychotherapy sessions in which the trauma is addressed.

Chapter II

Methods

This chapter focuses on the methods employed for this study, a qualitative investigation of how clients who have experienced trauma incorporate their cultural worldviews into discussions of that trauma during psychotherapy. It first provides a basic description of and rationale for the research design of this study. It then describes the participants, the instrumentation, and the procedures for collecting the data. Lastly, this chapter concludes with a discussion of the procedures used for analyzing that data, which includes a summary of inter-rater reliability between coders.

Research Design

This dissertation sought to employ established qualitative research methods that were thought to be the best fit for the primary research question that concluded the previous chapter. Specifically, qualitative research is appropriate for answering "How?" and "What?" research questions as opposed to the "Why?" questions answered by quantitative approaches (Mertens, 2009; Morrow, 2007). Qualitative methodologies are used when the researcher seeks to better understand participants' experiences and wants to present a thorough description of that experience (Morrow, 2007). Using this type of methodology, this study sought to gain a rich understanding of a limited number of therapy cases with clients who had experienced trauma; therefore, it did not include cases for comparative study (e.g., clients who had not experienced trauma). This approach was thought to be particularly appropriate for this study because qualitative research is also used when the researcher seeks to explain variables that are not easily identifiable, such as cultural worldviews (Morrow, 2007).

Since this study was conducted from a terror management theory (TMT) perspective, a directed content analysis was used. In general, content analysis is used to capture the participants' experiences through the analysis of written, visual, or verbal communication (Elo & Kyngäs, 2008). Directed content analysis is a qualitative approach used when an existing theory informs the research question and provides direction regarding the variables of interest and procedures for coding those variables (Hsieh & Shannon, 2005). Because directed content analysis allows an existing theoretical framework to shape the interests of the study, this approach is considered largely deductive (Hsieh & Shannon, 2005). Deductive forms of analysis differ from inductive forms in that the former is used when the structure of the content analysis is derived from previous knowledge of a phenomenon, and the latter is used when the knowledge of that phenomenon is limited or nonexistent (Elo & Kyngäs, 2008). In this study, a preexisting theory (TMT) was used as a guide for creating codes and analyzing the content of therapy sessions. Still, a degree of inductive analysis was used as the researcher allowed for themes that were not captured by predetermined codes to emerge from the transcriptions of the therapy sessions.

The study also employed a comprehensive strategy for developing a research design to conduct the content analysis, which was outlined by Stiles, Honos-Webb, and Knobloch (1999) specifically for the analysis of the therapeutic treatment process. This approach has been used to name, classify, describe, and count the behaviors of both the therapist and the client; in this study, only the client's verbalizations were coded. These authors reduced the key elements of their approach to analyzing psychotherapy to the following categories: (a) the scoring unit (e.g. single words or phrases, topic discussions, timed intervals within sessions, whole sessions, the entire length of treatment); (b) point of view or perspective of the client/therapist; (c) format of

data and collection strategy (e.g. session notes, transcripts, video/audiotapes); (d) format of measurement (e.g. coding into nominal categories, ratings, or Q-sort); (e) level of inference (only coding observable behavior vs. inferring thoughts, feelings, motivations, etc. based on behavior); (f) theoretical orientation; (g) modality of treatment (e.g. individual, group, adult, child); (h) target subject of measurement (e.g. client, therapist, group, family, couple); (i) channel of communication (e.g. verbal, kinesthetic, paralinguistic); and (j) dimension of coding measures. This final category, dimension of coding measures, includes *content categories* (semantic meaning of verbalizations), *speech act categories* (how the speech was conveyed, such as via questions, reflections, self-disclosure, etc.), and *paralinguistic measures* (nonverbal actions paired with speech, such as hesitations or tonal qualities).

The researcher bases decisions regarding each of the above categories on the primary research question or topic under investigation (Stiles et al., 1999). Although the researcher can report findings from brief segments of treatment or case studies based on the above categories of analysis, Stiles and colleagues (1999) suggested that it is more typical for researchers to aggregate data from a more extensive treatment period or grouping of sessions. As such, an analysis of each of these categories may be applied to multiple therapy sessions individually, or the researcher may report averages from across the entire treatment or group of sessions. A detailed description of how this method of analysis was applied to this particular study is woven into the Coding and Data Analysis sections of this chapter.

Participants

Client participants. In keeping with the recommended structure of this type of qualitative research design (Creswell, 2009; Denzin & Lincoln, 1998; Mertens, 2009), this study employed purposeful sampling to select five psychotherapy cases containing sufficient data from

an archival database based in three separate community counseling centers associated with a California university. Prior to accessing the database for the purposes of this study, the researcher gained approval by his university's Institutional Review Board (IRB). Before receiving psychotherapeutic services, each of the client participants in this study provided written informed consent to allow written, audio, and/or video records to be included in the archival database. Likewise, written informed consent, which allowed written, audio, and/or video records to be included in the database, was obtained from each of their therapists. The therapists were all doctoral and master's level psychology students and interns in training practicum rotations at the community clinics. Whenever possible, identifying information was removed from records prior to being included in the database; for example, the names of the clients and their therapists were removed and replaced with a research code created for the database.

When selecting appropriate participants for this study, specific inclusion and exclusion criteria was used. In order to be included, each client participant must have been an adult (i.e. at least 18 years of age), must have been fluent in English, and must have provided written consent to allow his or her written as well as video records to be included in the research database (Appendix A). Written consent allowing for the use of written and video records was also required from the therapist on each of the selected cases (Appendix B). Additionally, only those cases which yielded sufficient data were considered for inclusion in this study. This means that data obtained through video recordings of therapy sessions and the Telephone Intake Summary, the Client Information Adult Form, the Intake Evaluation Summary, and the Treatment Summary (see Procedure section) must have indicated that the client has experienced trauma as defined in

the previous chapter, and they must have discussed this trauma during the course of their therapy.

Individuals who received therapeutic services at one of the community clinics in a couples, family, or child/adolescent format were excluded from participation in this study. In an effort to minimize researcher bias as well as protect confidentiality of the participants, cases in which the researchers knew either the therapist or the client personally were not eligible for inclusion. Therefore, the therapists in the selected cases did not include people who the researchers had contact with outside of those professionally sanctioned activities required by the clinical psychology doctoral program. Additionally, any potential client participants who had personal contact with the researchers were excluded from participation in this study.

Five client participants were selected for this study. The first client participant identified as an African American, Christian female. She was 28 years old at the time of therapy, and she was self-referred because of difficulties adjusting to a new living environment after moving to a new city and difficulties with communicating and regulating her emotions. She reported a history of struggles with death and loss, sexual abuse, substance abuse, financial instability, and a family history of discrimination. Clinical records revealed that the sexual abuse she reported was in the form of molestation and rape perpetrated by her paternal uncle when she was in the third grade.

Client Participant #2 was a single, Caucasian female originally from England. At the time of her therapy, she was 47 years old and unemployed because of her disability status. She presented to therapy because of scratching behaviors brought on by stress, which she attributed to multiple medical health concerns including diabetes and a stroke which caused her to lose much of her eyesight. She was identified as a participant for this study based on medical trauma

causing serious threat to physical integrity. In recorded sessions, the client participant discussed her traumatic health issues at length, and the medical complications that resulted from her traumatic health issues appeared to be the focus of much of her work in therapy.

The third client participant was a Hispanic, married female who identified as Christian. She was 21 years old at the onset of therapy, had a high school education, and lived in El Salvador until the age of 19. She was referred to therapy by her husband and complained of feelings of depression, anger, hopelessness, and guilt as well as occasional suicidal ideations. The client reported a history of significant physical, sexual, and emotional abuse. Specifically, she reported that her mother and grandmother would use physical violence against her, and her mother threatened her with a knife on multiple occasions. She also reported being sexually abused by her cousin and uncle,

Client Participant #4 was a 39-year-old, mixed race (identified as African American/American Indian/Caucasian), married female. At the time of intake, she was living with her husband and two of her four daughters (her other two daughters were living away from home while attending college). One of her daughters was her step-daughter. She presented to therapy because of feelings of guilt/shame, anger, betrayal, and depression, which she attributed to learning that her father sexually abused her step-daughter. She reported that her reaction to this knowledge was exacerbated by her own history of sexual abuse in the form of molestation by her paternal grandfather when she was approximately six or seven years old.

Lastly, the fifth client participant, a female who was 28 years old at the time of intake, described herself as Caucasian, Protestant, and a mother of two children. She was separated from her husband at the time of intake. She presented to therapy with complaints of feeling exhausted, overwhelmed, confused, and scared. The client participant reported that she has been

struggling with these feelings since approximately four years of age, but stated that they had increased in intensity in the year prior to starting therapy because of her separation from her husband. From the ages of four to eight years old, she reportedly was sexually abused by her neighbor. She stated that when she was 14 years old, her father attempted to convince the client to have sex with him, and she reported that she was unsure if she ever engaged in sexual activities with her father. She also reported being physically abused by her father at age 16 and by her husband starting at age 21. The client participant stated that she made one suicide attempt when she was 13 years old, and considered ending her life from ages eight to 18 years old.

Researcher participants. Multiple researchers and a research auditor participated in this study in order to provide a variety of perspectives and opinions, minimize the individual biases of each researcher, and help to adequately capture the rich, complex data being examined (Hill, Thompson, & Williams, 1997). In this section, background information on each of the researchers, and their potential biases will be openly disclosed. Similarly, this section will provide background and potential biases regarding the research auditor who is supervising this study.

The primary researcher and dissertation author is a 28 year-old Caucasian male doctoral student in clinical psychology. He, his parents, and his grandparents were all born in the United States. He was raised in a middle class home in a southwestern state where he lived for 20 years before moving to California for graduate school. In general, the primary researcher conceptualizes clients and clinical cases from humanistic/existential as well as cognitive-behavioral perspectives. He conceptualizes a client as someone generally driven toward personal growth while navigating core, existential dilemmas. He strongly believes in the human potential for growth beyond that of simple symptom reduction and is encouraged by therapies and

theoretical frameworks that foster such growth through illuminating meaning in the human condition.

In his academic pursuits, clinical training, and clinical experience, the primary researcher has developed an appreciation for deep existential concerns that are often looming underneath more superficial problems. Among these existential concerns, fear of death has been particularly interesting to him in that it seems to be the root of both debilitating terror as well as motivation for growth. As an undergraduate at the University of Arizona, home of Jeff Greenberg (one of the creators of TMT), he was introduced to TMT and was very intrigued. In his graduate studies, he was profoundly influenced by a professor, David Elkins, who taught his students the value of exploring existential concerns and understanding their ties to beauty and art. The primary researcher further developed his interests in mortality concerns as he read powerful works from authors such as Irvin Yalom, Victor Frankl, and Fyodor Dostoevsky. As he gained a deeper appreciation of cultural issues throughout his graduate studies, TMT became more and more appealing as a possible dissertation topic. Since he was interested more in the clinical applicability of this theory rather than the more typical social psychology findings, the primary researcher wanted to use this theory as a framework for understanding therapy with people who experience naturalistic mortality threats in their experience of trauma. Thus, he expected that his longstanding interests in existential theory might have biased him toward over-reporting such themes in the process of data collection and analysis.

The second researcher is a 29 year-old female studying as a doctoral student in clinical psychology. Typically, she conceptualizes clients in psychotherapy from a cognitive-behavioral perspective and treats them accordingly. More specifically, she believes that a client's thoughts, emotions, and behaviors are interconnected, and maladaptive or dysfunctional thoughts strongly

contribute to his or her interpretations of and subsequent reactions to various situations. Moreover, she believes that early and/or impactful life experiences contribute to the development of certain thoughts and beliefs over time. While she tends to focus in session on the identification and modification of clients' maladaptive thoughts and beliefs, she also believes that a strong therapeutic relationship and authentic care for clients are necessary components of effective treatment. She is particularly interested in humor as a means of bolstering the therapeutic relationship and helping clients cope with their distress. As it pertains to this dissertation, she believes that deep, existential concerns can profoundly shape an individual's thoughts and behaviors, whether they lie relatively dormant or are activated by specific life events. In particular, she is interested in how these issues arise and shape the therapeutic process with clients who have faced severe adversity.

Another researcher participant is a 31 year-old married female from a working class family in the northeastern United States. She is also a doctoral student in clinical psychology, and she is a registered art therapist who completed her Masters degree in art therapy. In general, she ascribes to dynamically-oriented therapy in her clinical work, but she also incorporates strength-based approaches and mindfulness when working with clients. Based largely on her training in dynamically-oriented treatments, such as self-psychology, this researcher is particularly interested in the role of interpersonal relationships. She believes that the relationship between the client and the therapist, as well as social relationships outside of therapy can be incredibly influential in terms of the client's reaction to trauma. She is especially interested in how sociocultural factors might mitigate existential concerns brought on by reflecting on traumatic events.

The dissertation chair for this study will also serve as the auditor. She is a European-American married Christian female with a doctoral degree in psychology as well as a law degree. She is currently teaching in a clinical psychology program as a tenured associate professor, and she has clinical and research interests in forensic and positive psychology. Her conceptualization of clients stems primarily from cognitive-behavioral theory, and she incorporates systems and strength-based perspectives into her treatment approach. With regard to the present study, the auditor is also familiar with TMT from her graduate work at the University of Arizona and is similarly intrigued by its clinical implications with clients who have experienced trauma. She was interested in the process of client-participants in this study being given the opportunity to reflect on their cultural worldviews during therapy, particularly in the context of discussions about trauma, as well as topics of meaning and connection occurring during such discussions.

Instrumentation

To examine client reactions to trauma involving cultural worldviews from a TMT perspective, the researcher created a directed coding system for the content analysis of cultural worldviews based on the worldviews commonly assessed in the TMT literature. Based on the TMT literature reviewed in the previous chapter, the researcher identified the following four worldviews as the most commonly studied in TMT research: (a) religion, (b) ethnicity, (c) political affiliation, and (d) nationality. These four types of cultural worldviews served as the initial categories for coding (see coding manual in Appendix C for detailed coding procedures). Additionally, two coding categories, which will be referred to as (e) other (explicit) and (f) other (implicit), were used to capture discussions of cultural worldviews that are consistent with the purposes of this study yet did not fit within any of the other worldview categories. Any qualitative data that was determined to fall within these categories was recorded in multiple

Microsoft Word documents as well as shared *Google* documents used to track coding frequencies, rationale for coding decisions, and researcher biases. The specific codes in each of these coding categories are discussed next.

Religion codes. This set of codes was used when clients referred to religion during the course of a therapeutic session in which they also discussed trauma. Such codes were intended to be assigned when the client referred to his or her religious identification (R1; e.g., "As a Christian, I feel that giving to charity is important"); discussed events or practices in which he or she engages for religious purposes (R2; e.g., ""I am fasting because it's Ramadan"); used a generic term or phrase when referring to his or her religion (R3; e.g., "I am thankful for my faith because I feel like it has helped me get through this hard time"); discussed others' religion in a neutral or positive manner (R4; e.g., "My friend and his family believe in reincarnation"); or spoke negatively about others' religion (R5; e.g., "I think people who believe in God are just unintelligent and easily manipulated"). A final code was used when the client discussed religion in a way that was not captured by any of the aforementioned religion codes (R6; e.g., "Lately, I have found myself intrigued by various religions").

This study was particularly interested in religious discussion rather than discussion of spiritual ideas or practices that fall outside of religion. Religion is commonly understood to refer to more structured, organized beliefs and practices that are largely shared among members of a religious community; spirituality on the other hand, is a more broad, abstract term referring to a general appreciation for the mystical universe and that which is considered much bigger than one's self (Hill et al., 2000). In keeping with the vast TMT research that suggests that religion provides a sense of both literal and symbolic immortality by allowing followers to join a culture that will outlast the physical self (Vail et al., 2010), this study focused on discussions assumed to

be connected with religious ideas and practices. However, as Hill and colleagues (2000) argued, it is important to recognize the significant overlap between religion and spirituality. For example, prayer is considered by many an intensely spiritual experience, and it is also considered a vital part of many organized religions. It was therefore determined that client statements that seemed to convey a belief or practice that is both religious and spiritual were to be coded with the appropriate religious code. If a client discussed a spiritual experience that did not seem to be associated with religious ideas or practices (e.g., "I've been spending a lot of time in nature lately, and I have really found it fulfilling"), it was not coded in this category.

Ethnicity codes. Discussions of ethnicity were also to be coded in sessions in which trauma was discussed. Ethnicity is considered a demographic variable that describes groups of people who share a belief in their common descent based on markers such as physical features or shared language (Zagefka, 2009). These codes were to be assigned when the client referred to his or her ethnicity (E1; e.g., "Since I am an African American, I feel like I have had to work hard to overcome certain stereotypes"); discussed an event or practice that he or she engages in as a member of an ethnic group (E2; e.g., "I am excited to visit my family for our annual Chinese New Year celebration"); used a generic term when referring to his or her ethnic group (E3; e.g., "My people have been through so many struggles that continue to affect our behaviors"); discussed other ethnic groups in a neutral or positive manner (E4; e.g., "I visited my friend, and she is Native American and makes really good traditional fry bread"); or spoke negatively about other ethnic groups (E5; e.g., "Those people are responsible for most of the crime in this country"). A final code in this category was intended to be used when the client discussed ethnicity in a manner that was not captured by any of the previously mentioned ethnicity codes (E6; e.g., "I wish people could see past the color of a person's skin").

Political affiliation codes. It was determined that researcher participants in this study would code any political discussions that occurred within therapy sessions in which the client has also discussed trauma. Such codes were to be used when the client discussed his or her political party or affiliation (P1; e.g., "As a libertarian, I think the government should be limited"); discussed an event or practice in which the client engages for political purposes (P2; e.g., "I am planning to attend the governor's rally this weekend"); used a generic term or phrase when referring to his or her political affiliation (P3; e.g., "All of us on the left are upset over the plan to decrease spending on education"); discussed other political groups in a positive or neutral manner (P4; e.g., "My dad is an independent so he doesn't really tend to have extreme political views"); or spoke negatively about other political groups (P5; e.g., "If it wasn't for the democrats trying to corrupt the values that we grew up with, this country would be in a better place"). Lastly, a final code was intended to be assigned when the client engaged in political discussion in a manner that was not captured by any of the aforementioned political affiliation codes (P6; e.g., "I have been arguing with my wife a lot because I am very pro-life and she is pro-choice").

Nationality codes. Another coding category was used for client discussions of nationality. The researcher participants were to use these codes each time the client referenced his or her nationality (N1; e.g., "I am proud to be an American and to have certain freedoms that people in other countries might not have"); discussed events or practices in which her or she engages because of affiliation with a country (N2; e.g., "I will visit my family in Mexico to celebrate Cinco De Mayo"); used a vague term or phrase when referencing his or her nationality (N3; e.g., "It will be nice to go home and spend time with some other Kiwis"); discussed other nationalities in a neutral or positive manner (N4; e.g., "In general, I found the Canadians to be very polite and friendly"); or spoke negatively about other nationalities (N5; e.g., "After the

terrorist attacks, I don't think we should let anyone from Afghanistan into our country"). As in the other coding categories, a final code was intended to be used when the client discussed nationality in a manner that was not captured by any of the other codes in this category (N6; e.g., "I love watching the Olympics and seeing the world's countries come together in sport").

Other cultural worldview codes. Because cultural worldview is a very broad construct, it was expected that additional themes of worldviews would emerge throughout the data collection process. Allowing for additional themes to emerge from the data is common when using a directed content analysis approach (Hsieh & Shannon, 2005). In keeping with a TMT perspective, the following definition for a cultural worldview offered by Pyszczynski et al. (1999) was to be used to guide the researchers in identifying cultural worldviews that did not seem to fit into the aforementioned coding categories, and was used to aid in the creation of the final two coding categories:

> A humanly constructed symbolic conception of reality that imbues life with order, permanence, and stability; a set of standards through which individuals can attain a sense of personal value; and some hope of either literally of symbolically transcending death for those who live up to these standards of value. (p. 835)

First, based on this definition of cultural worldviews, a fifth coding category was created with codes for explicit worldview discussions that might also mitigate the existential anxiety aroused by trauma. These codes included client discussions of demographic variables that might offer meaning and order such as geographic regions within a country (OE1; e.g., "I'm from the South, so I was raised to always hold the door for women"); occupational affiliation (OE2; e.g., "We psychologists always seem to have a hard time avoiding treating our loved ones like clients"); institutional affiliation (OE3; e.g., "All the students at State University are only in

school for the parties"); gender (OE4; e.g., "I was taught from a very early age that men are supposed to be strong and not cry"); and sexual orientation (OE5; e.g., "Since I'm gay, I am expected to be more sensitive and effeminate"). Lastly, a final code was created to be used when the client explicitly referred to any specific cultural characteristic that seemed consistent with the definition of cultural worldview offered by Pyszczynski and colleagues (1999) yet was not captured by any of the previously mentioned codes in any of the coding categories (OE6). If common themes were found within this category, new categories or individual codes were to be created to accommodate these common themes; as is described later in the results chapter, one theme emerged throughout the coding process and it was determined inductively that it warranted an individual code capturing instances in which the client participant referenced age or generation as a cultural characteristic (OE7; e.g. "For 16 years old, he's extremely empathetic").

Second, another (implicit) coding category was created for client verbalizations of worldviews that did not refer to any identifiable cultural affiliation, and thus referred to implicit references to cultural worldviews. As with the previous coding categories, the codes in this final category were developed in keeping with the definition of cultural worldview offered by Pyszczynski et al. (1999). Additionally, the specific codes were based on previous researchers' attempts to operationalize the construct of cultural worldview for research purposes. Two sources were used to create the implicit codes. The first was the Worldview Analysis Scale (WAS; Obasi, Flores, & James-Myers, 2009), which was created in order to establish measurable dimensions of worldviews, including beliefs about spirituality, the universe, communalism, mortality, reality, knowledge of self, and indigenous value systems. Second, Koltko-Rivera (2004) also deconstructed the concept of cultural worldview into manageable dimensions within

his “comprehensive model” of worldview, which included beliefs about human nature, will, cognition, behavior, interpersonal factors, truth, judgment, and world and life.

Thus, a total of 14 original dimensions of cultural worldviews proposed by the two scales were examined, and areas of overlap in the broad themes were condensed into six manageable other (implicit) categories for this study. First, materialistic universe from the WAS (Obasi et al., 2009) and world and life from Koltko-Rivera (2004) were condensed into a physical universe code. The communalism dimension from Obasi et al. (2009) and the interpersonal dimension from Koltko-Rivera (2004) were combined into a communalism code. Next, spiritual immortality from the WAS (Obasi et al., 2009) and parts of world and life from Koltko-Rivera (2004) were condensed into a mortality code. The knowledge of the self dimension from Obasi and colleagues (2009) as well as the human nature, will, cognition, and behavior dimensions from Koltko-Rivera (2004) were then combined into a human nature code. Lastly, indigenous values, tangible realism, and spiritualism from the WAS (Obasi et al., 2009) as well as the truth and world and life dimensions from Koltko-Rivera (2004) were condensed into a meaning of life code.

The final codes for the Other (Implicit) coding category included client discussions of his or her beliefs regarding the physical universe (OI1; e.g. “I was walking outside on a clear night and felt very small as I looked up at the stars and thought about how we all started from the same cosmic event”), communalism (OI2; e.g. “It’s my responsibility to succeed in as much as I can so I can honor my family”), mortality (OI3; e.g. “Even though she passed away, I know my mother is looking down on me from somewhere and she is proud of me”), human nature (OI4; e.g. “People are born good, and they learn evil ways from the world around them”), and the meaning of life (OI5; e.g. “I think life is just a series of random events, and I don’t believe in

destiny"). A final other (implicit) code was created to be used when the client discussed a belief that was consistent with the definition of cultural worldview offered by Pyszczynski and colleagues (1999) without referring to a specific cultural affiliation or group, and the discussion was not appropriately captured by any of the aforementioned codes. The researcher participants agreed that if common themes were found that were coded with this last code, new codes could be created to accommodate these themes; however, no such themes emerged that warranted the creation of new codes within this coding category.

Procedure

Sample selection. Based on the specific research question and general design of this study, purposeful sampling was used to identify targeted participants (Creswell, 2009). Although purposeful sampling will not produce results that are as representative of the entire clinical population as those produced by a random sampling approach (Mertens, 2009), Creswell (1998) has argued that generalizability an important element of the research design, it is not as crucial when conducting qualitative research. Creswell (1998) also recommended that research using this type of sampling approach conduct extensive analysis with four or five individual cases. This study included 5 former psychotherapy clients who met the inclusion and exclusion criteria. Procedures used for identifying and including those clients are presented below.

Step 1: Obtained a list of potential participants. The procedure of selecting an appropriate sample began with the researchers obtaining a full list of research records of those clients who had terminated therapy and whose clinical records had been de-identified and entered into the database.

Step 2: Narrowed the list based on demographic inclusion criteria. This list was then narrowed to include only those clients who were at least 18 years old, English-speaking, and participated in individual therapy.

Step 3: Narrowed the list based on experiences of trauma. The group of potential participants was then limited to include only those who had experienced trauma as indicated on forms in the database. As discussed in detail in the previous chapter, trauma was defined for the purposes of this study as including both an objective component, in which the person experiences or directly witnesses serious threat to physical integrity, and a subjective component, in which the person experiences a sense of horror or helplessness. In keeping with recommendations offered by McNally (2004) and the proposed changes to the PTSD criteria for *DSM-V* (Friedman et al., 2011), this study employed a more restrictive definition of trauma than that offered by the *DSM-IV-TR*. That is, traumatic events were defined as:

> direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or [directly] witnessing an event that involves death, injury, or a threat to the physical integrity of another person. (p. 463)

This portion of the definition from the *DSM-IV-TR* does not include simply learning of or indirectly witnessing (such as on television) a threatening event as a traumatic event. Therefore, only those events that the individual directly experienced or witnessed were considered traumatic, and the person must have had a subjective reaction of fear, hopelessness, or horror as determined by responses to various instruments presented below and video recordings, and agreed upon by all of the researcher participants. As mentioned earlier, the Structured Clinical Interview for DSM-IV Axis I Disorders (First, Spitzer, Gibbon, & Williams, 2002), offered the following as examples of traumatic events: life threatening combat situations, serious accidents

or fire, life threatening major disasters, physical assault or rape, and seeing someone killed or badly hurt.

In order to determine if a potential participant had experienced a traumatic event, this study turned to multiple data instruments. First, the researchers looked under the Family Data section of the Client Information Adult Form (Appendix D). In this section, the client was asked "Which of the following have family members, including yourself, struggled with," and provided with a list of potentially distressing situations. For the client to be included as a participant, the researchers examined this instrument to see if the client marked "Yes – This Happened" in the "Self" column for at least one of the following stressors: discrimination (insults, hate crimes, etc.), death and loss, sexual abuse, physical abuse, rape/sexual assault, debilitating illness, injury, or disability.

Information from the Telephone Intake Form (Appendix E), the Intake Evaluation Summary (Appendix F), and the Treatment Summary (Appendix G) were also used to determine clients' experiences of trauma. Specifically, the Reason for Referral portion of the Telephone Intake Summary provided information regarding the client's initial reasons for seeking therapy, which the researchers examined for indications that the client sought treatment for distress associated with trauma. The researchers inspected multiple sections of the Intake Evaluation Summary for indications of trauma history: Presenting Problem/Current Condition (Section II), History of Presenting Problem and Other Psychological Conditions (Section III), Psychosocial History (Section IV), *DSM-IV-TR* Multiaxial Diagnosis (Section VIII), and Treatment Recommendations (Section X). The Treatment Summary was examined for indications that discussions or processing of trauma took place throughout the course of treatment or a trauma-related diagnosis was considered. If all of the researcher participants agreed that at least one of

the forms discussed in this step indicated that the client experienced trauma, that case proceeded to the next step.

Step 4: Narrowed selection based on discussions of trauma. Only those cases in which the clients openly discussed their traumatic experiences with the therapist in at least one recorded session were included in this study. The researchers reviewed each of the video recordings of the potential participants' therapy sessions to determine whether traumatic experiences were discussed in therapy. Later, those sessions in which clients discussed trauma would be subject to coding. The researchers considered both the objective experience of the trauma as well as the subjective appraisal when identifying discussion of trauma. The researchers did not differentiate between portions of the session in which trauma was discussed and portions in which there was no trauma discussion. Instead, the researchers examined the entire session as a whole; therefore, the codes applied during these sessions were not specific to trauma discussions and no comparisons regarding different portions of the sessions were made. This choice of procedure is discussed further in the limitations section. Additional information regarding client discussions of trauma is provided in the Coding Manual (Appendix C).

Step 5: Selected specific sessions. When there were multiple recorded sessions in which one of the client participants discussed trauma, only one of his or her therapy sessions were to be selected for transcription and analysis. That session was selected based on the amount of time spent discussing the trauma within the session. For each case, only the session in which the client discussed the trauma for the longest amount of time (relative to other sessions in which the client participant discussed trauma) was selected. This step in the selection process was utilized for client participants 1, 2, 3, and 4, as there were multiple sessions in which trauma was discussed in each of these cases. No comparisons regarding cultural worldview expressions were

made within sessions; that is, worldview expressions were coded across the session and not separated out (i.e., trauma discussion versus no trauma discussion). This limitation is discussed further in the limitations section later.

Step 6: Narrowed selection based on cultural diversity. Prior to the onset of this study, it was proposed that the sample selection be narrowed based on cultural diversity based on age, gender, race, ethnicity, and nationality. However, after completing the first five steps of the sample selection procedure, the researchers identified only 5 eligible participants. Thus, narrowing the sample selection based on cultural diversity was never done. To assist the researchers throughout the entire sample selection process, an Excel spreadsheet was used to track relevant information on the clinic forms for each of these six selection steps (Appendix H).

Transcription. Transcription of the selected therapy sessions was completed by four master's-level graduate students in psychology. These students were recruited on a volunteer basis and received training on the transcription process prior to working with the data. They were instructed to transcribe the sessions verbatim based on a transcription method adapted from Baylor University's Institute for Oral History. Detailed instructions on the transcription process are provided in the Coding Manual (Appendix C).

Coding. Three doctoral-level graduate students in clinical psychology (the core researchers for this study) served as the coders. Their research supervisor and dissertation chair served as an auditor for this study. The coders and auditor practiced coding with two cases that were not eligible for inclusion in this study prior to coding actual cases from this study. During the process of coding the two practice assignments, the definition of one code, Communalism (OI2), was adjusted to clarify that this code could be used to capture both positive and negative beliefs about the impact of communities and families. This code and all of the other individual

codes were unchanged throughout the remainder of the coding process. Prior to the onset of this study the researchers agreed to continue to code practice cases if they had not reached a 75 percent agreement (three of four in agreement) after coding the two practice sessions, which was not necessary as the researchers reached at least a 75 percent agreement on both practice sessions. Although Miles and Huberman (1994) recommended an 80 percent agreement for this type of study, a 75 percent agreement was used because this was the highest possible non-unanimous rate of agreement. Each of the coders was trained on the coding processes used for this study, including relevant terms, concepts, and issues for identifying discussions of trauma and coding cultural worldviews within the recorded sessions (Ryan & Bernard, 2003; Yin, 2006). Specific instructions that were used for training the coders are provided in the Coding Manual (Appendix C).

Human subjects/ethical considerations. This study was committed to protecting the rights and confidentiality of its participants and maintaining high ethical standards for the treatment of those participants. A variety of precautions were used to ensure the ethical treatment of each of the potential research participants of this study. First, each therapist at the community clinics reviewed the limits of confidentiality for therapy and similar confidentiality issues for the research database with each of their clients as part of providing informed consent. Each of the participants in this study provided written consent for their clinical records (i.e. written, audio, and video material) to be included in the research database prior to starting therapy (Appendix A). Similarly, the therapists whose records were also included in this study also provided written consent for the use of those records (Appendix B). After therapy had terminated, research assistants created a research file for each potential participant and redacted all identifying information from the client's and the therapist's written documents. This was

done to ensure that the client's and therapist's confidentiality was preserved as their information was transferred into the database. Each of the clients and therapists included in the research database were assigned a research identification number in order to keep track of the cases without using identifying information (Mertens, 2009). Additionally, every individual who participated in transferring clinical data into the research database completed an online Institutional Review Board (IRB) certification course.

In addition to protecting the rights of participants as part of the research data preparation, the researchers were committed to ensuring that the participants' de-identified data was handled in an ethical manner and confidentiality continued to be preserved. Each of the researchers/coders and transcribers complete an IRB certification course as well as a certification course on the Health Insurance Portability & Accountability Act of 1996 (HIPAA) to promote the adherence to established ethical standards of research involving human participants and confidential health information. Confidentiality was also protected by excluding any cases in which one or more of the researchers knew the client or therapist personally. Lastly, this study used a content analysis approach in which the data was taken from an archival database. One advantage of this type of research methodology is that it is non-invasive and does not involve the researchers directly engaging the participants (Denzin & Lincoln, 1998).

Data Analysis

Since the design of this study was a naturalistic, directed content analysis, deductive analysis was used to validate or confirm the tenets of a predetermined theoretical framework (Hsiu-Fang & Shannon, 2005). In this case TMT served to guide the data analysis procedures by providing a theoretical basis for variables to be analyzed. Six coding categories, which are

operationally defined in the Instrumentation section as well as the coding manual (Appendix C), were used to identify discussions of cultural worldviews based on the TMT literature.

Furthermore, the steps below outline the specific elements of analysis as suggested by Stiles et al. (1999) and discussed in the Research Design section. Specifically, this study analyzed clients' [target of measurement] verbal communications [channel of communication] of worldviews in single, individual [modality of treatment] psychotherapy sessions [scoring unit] by examining transcriptions [format of data collection] of video recordings and creating nominal coding categories [format of measurement]. This study primarily analyzed the semantic meaning of the clients' verbalizations rather than paralinguistic gestures or tones [dimension of coding measures]. In order to analyze the qualitative data used in this study based on these coding categories, the researchers used the following steps in adherence with the guidelines outlined by Hsieh and Shannon (2005) for directed content analysis.

Step 1: Transcription. Research assistants composed written transcriptions of the recorded sessions that had been selected for analysis (see Procedure section for selection criteria).

Step 2: Highlighting. The researcher participants then read through the session transcripts and highlighted all text that, based on the researchers' first impressions, appeared to indicate client discussions of cultural worldviews.

Step 3: Coding selected text. The researchers each reviewed the highlighted portions of the transcripts and assigned relevant, predetermined codes where it was deemed applicable (codes are described in detail in the Instrumentation section). These codes were recorded on individual *Microsoft Word* documents along with notes, questions for the group, and coding rationale. All of the text that had been highlighted and appeared to represent client discussions

of cultural worldviews based on this study's definition, yet did not fit into any of the predetermined coding categories, were coded with a not otherwise specified code from either the other (explicit) category (OE6) or the other (implicit) coding category (OI6). The researchers made efforts to identify and analyze any prominent themes that existed within these categories to determine if any additional coding categories or subcategories were warranted to capture such themes (Hsieh & Shannon, 2005), and after deliberation, an age/generation code was added to the other (explicit) category (OE7).

All three of the coders individually analyzed and coded each of the session transcripts prior to meeting as a group to discuss the coding results. While meeting to discuss coding decisions, each of the raters presented his or her rationale for decisions made. On 56 occasions, at least one of the coders changed his or her coding impressions based on these discussions. Typically, this was because one or more of the coders noticed a worldview expression that was missed by the others or one of the coders interpreted a client's statement as a worldview expression, perhaps because of individual biases or misunderstanding of the code, and discussion between coders led to a consensus that no code was warranted. This process naturally led to increased inter-rater reliability. However, the intent of these meetings was not to reach perfect agreement on all coding decisions but to assist each individual coder in making the decision he or she deemed most accurate. Hill and colleagues (1997) argued that using multiple researchers in this way can be beneficial in that it allows for diverse perspectives and opinions, better captures the complexity of the data, and minimizes individual biases. However, this method also creates the risk of group biases in the coding procedures or consensual observer drift, which occurs when researchers alter or modify their ratings in order to be consistent with other researchers' ratings (Harris & Lahey, 1982). In order to minimize these potential biases, the

coders maintained copies of their original coding results, which were derived independently, as well as the codes reached in consensus. If there was inter-rater disagreement while meeting as a group, the coders documented the disagreement as well as the rationale for the final decision in order for the auditor to understand the coders' judgment process (Orwin, 1994). During the group discussions, the coders also were encouraged to discuss any potential individual biases that may have influenced their coding.

Inter-rater reliability among the researcher participants both before meeting as a team to discuss initial coding impressions as well as following the discussion of initial codes was calculated using Fleiss' Kappa coefficient (K; Fleiss, 1971). The Fleiss' Kappa coefficient was developed in order to assess whether the agreement reached by raters exceeded that which would be expected if the researchers assigned ratings at random (Gwet, 2010). This coefficient is employed when assessing reliability for a fixed number of raters and nominal-scale ratings, and unlike Cohen's Kappa, this method has the advantage of being able to assess reliability among greater than two raters as in the present study (Fleiss, Cohen, & Everitt, 1969).

Table 1 and Table 2 provide summaries of the K scores, observed agreement, and expected agreement for each individual code as well as averages for the codes across researcher participants. Although no universally agreed upon measure of significance for K values exists, Landis and Koch (1977) provided the following guidelines for interpreting K values: $0.81 < K < 1.00$ is considered almost perfect agreement; $0.61 < K < 0.80$ is considered substantial agreement; $0.41 < K < 0.60$ is considered moderate agreement; $0.21 < K < 0.40$ is considered fair agreement; $0.01 < K < 0.20$ is considered slight agreement; and $K < 0$ is considered poor agreement. A negative K value indicates that the level of agreement reached by raters was found to be worse than chance.

As depicted in Table 1 below, the average Fleiss' Kappa score for each of the codes applied in this study prior to meeting as a research team to discuss initial coding impressions ranged from perfect (1) to no better than chance (-0.002). Kappa scores indicated that perfect agreement across sessions was reached for one code (R4). Based on the Fleiss' Kappa interpretation guidelines put forth by Landis and Koch (1977), average agreement across sessions was found to be almost perfect for four codes (R2, N1, OE4, and OE7), substantial for two codes (N5 and OE5), moderate for four codes (R1, E6, N3, and OE2), fair for six codes (R5, OE1, OI2, OI4, OI5, and OI6), slight for two codes (N6 and OE6), and poor for one code (E1). Average observed agreement across individual codes, which represents the percentage of talk turns in which the raters reached agreement either by assigning a code or assigning no code, was very high, ranging from perfect agreement (1) to 99.5 percent agreement (0.995). Table 1 below provides a graphic summary of the average rates of agreement for each of the codes prior to meeting as a research team to discuss initial coding impressions:

Table 1

Pre-discussion inter-rater reliability

	Session 1	**Session 2**	**Session 3**	**Session 4**	**Session 5**	**Average**
R1						
Fleiss' Kappa	-0.001	N/A	N/A	1	N/A	0.5
Observed Agreement	0.998	1	1	1	1	1
Expected Agreement	0.998	1	1	0.989	1	0.997
R2						
Fleiss' Kappa	1	N/A	1	0.498	N/A	0.833
Observed Agreement	1	1	1	0.996	1	0.999
Expected Agreement	0.995	1	0.995	0.993	1	0.997
R4						
Fleiss' Kappa	N/A	N/A	N/A	1	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	1	1	1	0.989	1	0.998

(Continued)

	Session 1	Session 2	Session 3	Session 4	Session 5	Average
R5						
Fleiss' Kappa	N/A	N/A	N/A	0.395	N/A	0.395
Observed Agreement	1	1	1	0.989	1	0.998
Expected Agreement	1	1	1	0.982	1	0.996
E1						
Fleiss' Kappa	-0.001	N/A	N/A	-0.002	N/A	-0.002
Observed Agreement	0.998	1	1	0.996	1	0.999
Expected Agreement	0.998	1	1	0.996	1	0.999
E6						
Fleiss' Kappa	0.499	N/A	N/A	0.498	N/A	0.499
Observed Agreement	0.998	1	1	0.996	1	0.999
Expected Agreement	0.997	1	1	0.993	1	0.998
N1						
Fleiss' Kappa	N/A	1	0.856	N/A	N/A	0.928
Observed Agreement	1	1	0.998	1	1	1
Expected Agreement	1	0.979	0.983	1	1	0.992
N3						
Fleiss' Kappa	N/A	N/A	0.499	N/A	N/A	0.499
Observed Agreement	1	1	0.998	1	1	1
Expected Agreement	1	1	0.995	1	1	0.999
N5						
Fleiss' Kappa	0.725	N/A	N/A	N/A	N/A	0.725
Observed Agreement	0.995	1	1	1	1	0.999
Expected Agreement	0.983	1	1	1	1	0.997
N6						
Fleiss' Kappa	-0.001	-0.004	0.499	N/A	N/A	0.165
Observed Agreement	0.998	0.993	0.998	1	1	0.998
Expected Agreement	0.998	0.993	0.995	1	1	0.997
OE1						
Fleiss' Kappa	0.579	N/A	N/A	N/A	-0.001	0.289
Observed Agreement	0.992	1	1	1	0.998	0.998
Expected Agreement	0.981	1	1	1	0.998	0.996
OE2						
Fleiss' Kappa	N/A	N/A	N/A	N/A	0.499	0.499
Observed Agreement	1	1	1	1	0.998	1
Expected Agreement	1	1	1	1	0.996	0.999
OE4						
Fleiss' Kappa	0.837	N/A	N/A	1	N/A	0.919
Observed Agreement	0.994	1	1	1	1	0.999
Expected Agreement	0.961	1	1	0.978	1	0.988

(Continued)

	Session 1	Session 2	Session 3	Session 4	Session 5	Average
OE5						
Fleiss' Kappa	0.749	N/A	N/A	N/A	N/A	0.749
Observed Agreement	0.998	1	1	1	1	1
Expected Agreement	0.994	1	1	1	1	0.999
OE6						
Fleiss' Kappa	0.663	-0.002	-0.002	-0.004	N/A	0.164
Observed Agreement	0.994	0.996	0.995	0.993	1	0.996
Expected Agreement	0.981	0.996	0.995	0.993	1	0.993
OE7						
Fleiss' Kappa	1	0.748	N/A	0.711	1	0.865
Observed Agreement	1	0.996	1	0.993	1	0.999
Expected Agreement	0.995	0.986	1	0.975	0.993	0.99
OI2						
Fleiss' Kappa	0.197	0.245	0.195	N/A	N/A	0.212
Observed Agreement	0.994	0.989	0.99	1	1	0.995
Expected Agreement	0.992	0.986	0.988	1	1	0.993
OI4						
Fleiss' Kappa	0.425	-0.004	N/A	-0.002	0.749	0.292
Observed Agreement	0.994	0.993	1	0.996	0.998	0.996
Expected Agreement	0.989	0.993	1	0.996	0.991	0.994
OI5						
Fleiss' Kappa	0.332	0.33	N/A	N/A	0.499	0.387
Observed Agreement	0.997	0.993	1	1	0.998	0.998
Expected Agreement	0.995	0.989	1	1	0.996	0.996
OI6						
Fleiss' Kappa	-0.001	-0.004	0.568	N/A	0.397	0.24
Observed Agreement	0.998	0.993	0.993	1	0.993	0.995
Expected Agreement	0.998	0.993	0.983	1	0.989	0.993

Note: *Table 1* depicts average inter-rater reliability scores for each of the applied codes across sessions using Fleiss' Kappa, Observed Agreement, and Expected Agreement. N/A is used for Fleiss' Kappa scores for sessions in which the identified code was not applied.

Inter-rater reliability was also calculated for each of the assigned codes after the researcher participants met to discuss their initial impressions. These post-discussion rates of agreement, as depicted in Table 2 below, tended to be higher than inter-rater reliability scores from before meeting to discuss coding impressions because the researcher participants were able to present their rationales for their decisions and collaborate in order to come to their final coding decisions. As shown in Table 2, the average Fleiss' Kappa score for each of the codes applied in

this study ranged from perfect (1) to almost perfect (0.875). Of the 20 codes that were assigned across all the sessions, only four (20%) were found to have an average Fleiss' Kappa score less than perfect. Based on the Fleiss' Kappa interpretation guidelines put forth by Landis and Koch (1977), those four codes (OE4, OE6, OI4, and OI6) reached an average agreement across sessions that were considered to be almost perfect, and the remaining 16 codes (R1, R2, R4, R5, E1, E6, N1, N3, N5, N6, OE1, OE2, OE5, OE7, OI2, and OI5) reached perfect agreement. Average observed agreement across individual codes was very high, ranging from perfect agreement (1) to 99.5 percent agreement (0.995).

Table 2

Post-discussion inter-rater reliability

	Session 1	**Session 2**	**Session 3**	**Session 4**	**Session 5**	**Average**
R1						
Fleiss' Kappa	N/A	N/A	N/A	1	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	1	1	1	0.989	1	0.998
R2						
Fleiss' Kappa	1	N/A	1	1	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	0.995	1	0.993	0.989	1	0.995
R4						
Fleiss' Kappa	N/A	N/A	N/A	1	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	1	1	1	0.989	1	0.998
R5						
Fleiss' Kappa	N/A	N/A	N/A	1	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	1	1	1	0.968	1	0.994
E1						
Fleiss' Kappa	1	N/A	N/A	1	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	0.995	1	1	0.989	1	0.997
E6						
Fleiss' Kappa	1	N/A	N/A	1	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	0.995	1	1	0.989	1	0.997

(Continued)

	Session 1	Session 2	Session 3	Session 4	Session 5	Average
N1						
Fleiss' Kappa	N/A	1	1	N/A	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	1	0.979	0.986	1	1	0.993
N3						
Fleiss' Kappa	N/A	N/A	1	N/A	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	1	1	0.993	1	1	0.999
N5						
Fleiss' Kappa	1	N/A	N/A	N/A	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	0.981	1	1	1	1	0.996
N6						
Fleiss' Kappa	1	1	1	N/A	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	0.995	0.979	0.993	1	1	0.993
OE1						
Fleiss' Kappa	1	N/A	N/A	N/A	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	0.986	1	1	1	1	0.997
OE2						
Fleiss' Kappa	N/A	N/A	N/A	N/A	1	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	1	1	1	1	0.993	0.999
OE4						
Fleiss' Kappa	0.965	N/A	N/A	1	N/A	0.983
Observed Agreement	0.998	1	1	1	1	1
Expected Agreement	0.955	1	1	0.978	1	0.995
OE5						
Fleiss' Kappa	1	N/A	N/A	N/A	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	0.995	1	1	1	1	0.999
OE6						
Fleiss' Kappa	1	N/A	0.799	1	N/A	0.933
Observed Agreement	1	1	0.998	1	1	1
Expected Agreement	0.976	1	0.988	0.978	1	0.988
OE7						
Fleiss' Kappa	1	1	N/A	1	1	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	0.995	0.979	1	0.968	0.993	0.987

(Continued)

	Session 1	Session 2	Session 3	Session 4	Session 5	Average
OI2						
Fleiss' Kappa	1	N/A	1	N/A	N/A	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	0.981	1	0.993	1	1	0.995
OI4						
Fleiss' Kappa	1	0.498	N/A	1	1	0.875
Observed Agreement	1	0.996	1	1	1	0.999
Expected Agreement	0.986	0.993	1	0.989	0.987	0.991
OI5						
Fleiss' Kappa	1	1	N/A	N/A	1	1
Observed Agreement	1	1	1	1	1	1
Expected Agreement	0.99	0.989	1	1	0.993	0.994
OI6						
Fleiss' Kappa	N/A	N/A	1	N/A	0.874	0.937
Observed Agreement	1	1	1	1	0.998	1
Expected Agreement	1	1	0.986	1	0.982	0.994

Note: *Table 2* depicts average inter-rater reliability scores for each of the applied codes across sessions using Fleiss' Kappa, Observed Agreement, and Expected Agreement. N/A is used for Fleiss' Kappa scores for sessions in which the identified code was not applied.

Step 4: Submission of codes to the auditor. Once the coders had reached a consensus on the final codes, these codes were submitted to the auditor of this study. In order for the auditor to most effectively appraise the analysis up to that point, the researchers provided a detailed account of the analysis process so that the auditor could best assess the reliability of the study (Lincoln & Guba, 1985). This meticulous description of the research process, or audit trail, included accounts of the decision processes regarding the research design and data collection procedures as well as the actions taken when analyzing and reporting the data. The following information was included in the audit trail as recommended by Halpern (1983; as cited in Lincoln & Guba, 1985): raw data, products of data reduction and analysis (e.g. notes and qualitative summaries), data synthesis and reconstruction notes (e.g. definitions and themes of emerging categories), reports on literature supporting decisions, process notes (e.g. methodological notes and rationale), and trustworthiness notes.

Each of the researchers also recorded their personal expectations and potential biases using a technique for qualitative research known as bracketing. Bracketing is used to minimize the influence of personal assumptions on the data collection and analysis processes by reflecting and recording potential foreseen biases (Ahern, 1999). As part of the bracketing process, the researchers kept reflective journals which were intended to provide a space for the researchers to reflect upon the following: (a) potential assumptions regarding demographic variables such as race, gender, age, and socioeconomic status; (b) his or her personal values that are thought to potentially interfere with objectivity; (c) issues regarding potential role conflict; (d) his or her interests in the data and the extent to which these interests may dispose him or her to interpret findings favorably; and (e) personal feelings that may suggest a lack of neutrality (Ahern, 1999). Thus, the researchers in this study bracketed potential biases in reflective journals and discussed them in group discussions throughout the coding process. For example, the primary researcher in this study noticed at one point that he seemed to put more effort into searching for worldview expressions in the transcriptions of sessions that seemed to have less worldview expressions than other sessions. This sense of urgency to assign codes as if a quota was required was bracketed in a reflective journal to minimize bias toward over-coding in sessions with few worldview expressions and under-coding in sessions with many.

Step 5: Reaching consensus on final codes. Once the codes had been submitted to the auditor, who checked and provided feedback on the research team's decisions and judgments up to that point, the coders and auditor discussed the final codes. If the auditor provided insight for continued discussion of codes that led to reconsidering prior coding decisions, the coders would again discuss any these codes until consensus was reached on the final codes to be analyzed. The inter-rater reliability of the final codes is included in Table 2 above.

Step 6: Evaluation of the coded data. The primary researcher then reviewed the data in order to analyze any emerging patterns within this data. This process began with the researcher calculating frequencies for each code within each session and tracking these frequencies using *Microsoft Excel* spreadsheets. Each session was then reviewed and the researcher noted the context of the coded worldview discussions in order to make any inferences regarding the terror management value of such discussions based on the TMT literature outlined in the previous chapter. The researcher searched for patterns by evaluating variables such as type of traumatic event, the client's demographic / cultural background, specific discussions of cultural worldviews, and discussions that fall into the Cultural Affiliation Not Otherwise Specified (Oth6) or Implicit Cultural Worldview Not Otherwise Specified (OI6) categories.

Step 7: Presentation of findings. In the two chapters below, findings from this study are presented with regard to frequencies of the coded data and the context in which these codes were assigned. The frequencies of the specific types of worldview discussions elucidate how often the client participants spoke about cultural worldviews within the context of therapy sessions that include discussions of trauma. The chapters below present sample quotations to provide a richer understanding of the manner in which clients might turn to their worldviews in therapy after talking about trauma. Additionally, this study presents discussions regarding the theoretical value of worldview expressions as they took place during therapy.

Chapter III

Results

The broad intent of this study was to examine psychotherapy with those who have experienced trauma through the lens of terror management theory. Specifically, this study investigated the ways in which 5 client participants incorporated cultural worldview discussions into therapy sessions in which their traumatic experiences were addressed. This chapter provides a discussion of the results yielded from the directed content analysis employed to examine cultural worldview discussions in five transcribed psychotherapy sessions.

The chapter begins with a review of the findings from the directed content analysis of these sessions based on the cultural worldview coding system described in the coding manual (Appendix C). Results across the transcribed sessions are then discussed in detail in regard to data obtained within the six broad or parent coding categories and their individual codes. After a thorough description of findings across the selected sessions, this chapter focuses on coded results as well as relevant contextual observations and themes within each of the sessions individually. As part of the directed content analysis, coding frequencies within and across the participants are provided in order to categorize and organize coded data within the context of the selected sessions rather than justify the results or suggest relative importance based on numerical frequency. Throughout the chapter, examples from the transcribed sessions are provided to illustrate these findings, an approach that is consistent with a qualitative method for content analysis (Hsieh & Shannon, 2005). For the results presented in this chapter, ellipses (i.e., …) indicate that non-crucial material from the transcribed session was omitted from example quotations because this material was deemed irrelevant and unnecessary for illustrating essential concepts.

Content Analysis

As described in the Methods chapter, the coding manual used for capturing the client participants' cultural worldview discussions included the following six broad / parent coding categories: (a) religion, (b) ethnicity, (c) political affiliation, (d) nationality, (e) other (explicit), and (f) other (implicit). Each of these coding categories contained six individual codes. With exception to last two coding categories, other (explicit) and other (implicit), the six individual codes within each of the coding categories were used to capture explicit references to cultural affiliation, references to cultural practices, vague references to cultural affiliation, references to others' cultural affiliation, derogatory references to others' affiliation, and a not otherwise specified reference to cultural worldview. The other (explicit) coding category was comprised of six codes intended to capture client participant explicit references to cultural, demographic groups or affiliation such as geographic region, gender, and sexual orientation. The final coding category, other (implicit), consisted of six codes that were applied when client participants referred to cultural worldviews or beliefs without mentioning any specific cultural groups or affiliations. These codes included beliefs about the physical universe, communalism, mortality, human nature, and the meaning of life as well as a not otherwise specified code.

Although these codes were based on relevant research and clinical literature, not all of the codes were applied while coding the five transcribed sessions. In regards to the six broad coding categories, no political affiliation codes were applied to any of the sessions. Between two and six codes from each of the other five coding categories were used throughout the coding process, but 17 of the individual codes across coding categories were never applied (as explained in more detail throughout the remainder of this chapter).

As presented in Table 3 below, the directed content analysis of client expressions of cultural worldviews yielded a total of 77 codes from the 1,369 possible client talk turns across the five transcribed sessions. The number of coded expressions of cultural worldviews ranged from seven to 36, with a mean of 15.4 codes per session (SD=12.03). The number of client talk turns recorded by the transcribers within each session ranged from 184 to 418, with a mean of 273.8 client talk turns per session (SD=95.86). As presented in Figure 1 below, these 77 codes agreed upon by the researcher participants (coders) were applied from five parent / broad categories: (a) other (explicit) (n=32; 41.56%), (b) other (implicit) (n=20; 25.97%), (c) nationality (n=13; 16.88%), (d) religion (n=8; 10.39%), and (e) ethnicity (n=4; 5.19%). It should be noted that although these codes are presented in order of frequency, this is done primarily for organization purposes rather than to imply that more frequently occurring codes were more important or served more of a terror management role than others.

Table 3

Coding and talk turn frequencies across sessions

	Session 1	**Session2**	**Session3**	**Session4**	**Session 5**	**Total**
Total Codes	36	7	10	16	8	77
# Talk Turns	418	189	278	184	300	1,369

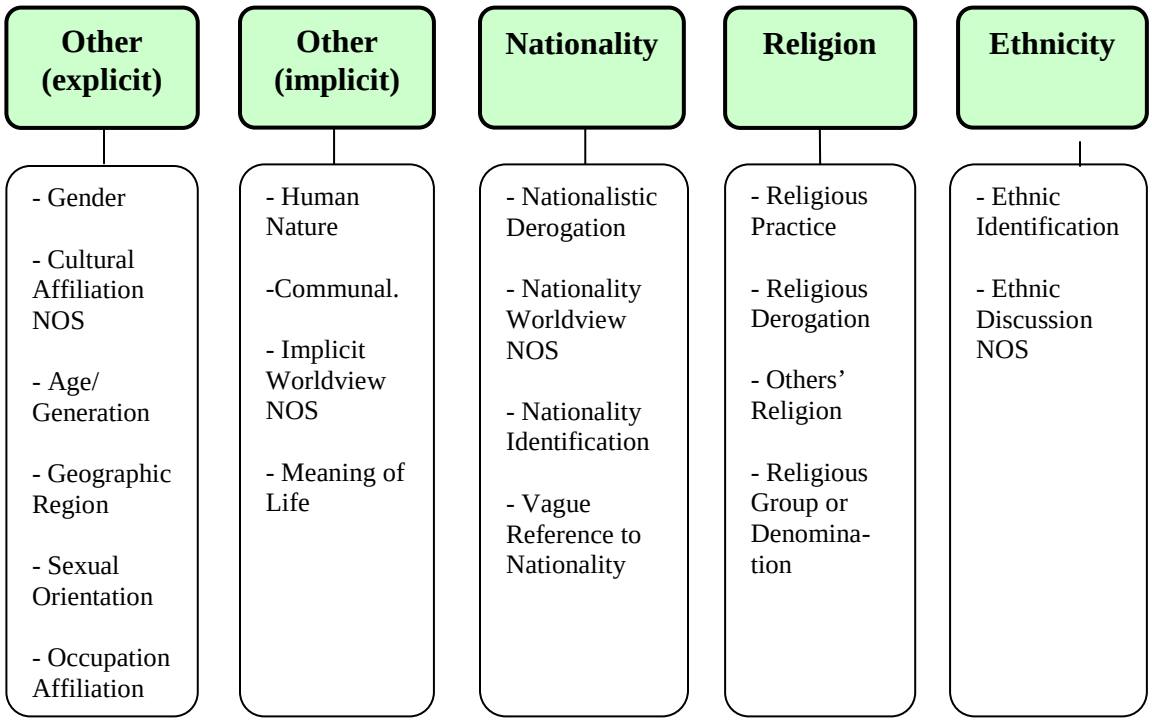
Captured in the other (explicit) category, which was created for coding explicit references to cultural affiliations other than religion, political affiliation, nationality, and ethnicity, six individual codes were applied to 32 worldview expressions (41.56%): gender (OE4; n=12), cultural affiliation not otherwise specified (OE6; n=8), age/generation (OE7; n=7), geographic region (OE1; n=3), occupational affiliation (OE2; n=1), and sexual orientation (OE5; n=1). The age/generation code was not in the original set of codes, but it emerged as a distinct theme and was added to the codes within the other (explicit) category. Within the other (implicit) parent

category, which was created for capturing implicit worldview expressions that did not reference any cultural affiliation or group, the following individual codes were applied a total of 20 times (25.97%): human nature (OI4; n=6), communalism (OI2; n=5), implicit cultural worldview not otherwise specified (OI6, n=5), and meaning of life (OI5; n=4). Four individual codes within the original nationality coding category were agreed upon on 13 occasions (16.88%) across sessions, including nationality identification (N1, n=4), nationalistic derogation (N5; n=4), nationality worldview not otherwise specified (N6; n=4), and vague reference to nationality (N3; n=1). A total of eight worldview expressions (10.39%) were captured in the religion category, and four individual codes were found: religious practice (R2; n=3), religious derogation (R5; n=3), religious group or denomination (R1, n=1), and others' religion (R4; n=1). Lastly, two individual codes were applied from within the ethnicity coding category a total of four times (5.19%): ethnic identification (E1; n=2) and ethnic discussion not otherwise specified (E6; n=2).

The broad categories and their individual codes are presented in order of frequency in Figure 1 below, followed by Table 4, which provides a graphic depiction of coding frequencies within and across sessions. The figure below depicts only those coding categories from which individual codes were applied during the coding process. Therefore, the political affiliation coding category is not represented in this figure. Similarly, many of the individual codes within each of the coding categories were not used in the coding process; these codes are not included in the figure below. The coding categories are ordered from left to right in order with the most frequently utilized coding category listed first. Within each of the columns of the figure below, the individual codes are listed vertically with the most frequently applied codes on top and the less frequently applied codes beneath those.

Figure 1.

Codes applied during coding process



Note: Applied individual codes are organized by parent categories. Parent categories are listed from left to right in order of frequency starting with those coded most frequently across sessions. Individual codes are listed under each of their corresponding parent categories in order of frequency with those coded most frequently listed first.

Table 4

Individual code frequencies across sessions

	Session 1	**Session 2**	**Session 3**	**Session 4**	**Session 5**	**Total**
Other (explicit)	19	2	2	7	2	32
OE4	*10*	*0*	*0*	*2*	*0*	*12*
OE6	*4*	*0*	*2*	*2*	*0*	*8*
OE7	*1*	*2*	*0*	*3*	*1*	*7*
OE1	*3*	*0*	*0*	*0*	*0*	*3*
OE2	*0*	*0*	*0*	*0*	*1*	*1*
OE5	*1*	*0*	*0*	*0*	*0*	*1*
Other (implicit)	9	1	3	1	6	20
OI4	*3*	*0*	*0*	*1*	*2*	*6*
OI2	*4*	*0*	*1*	*0*	*0*	*5*
OI6	*0*	*0*	*2*	*0*	*3*	*5*
OI5	*2*	*1*	*0*	*0*	*1*	*4*

(Continued)

	Session 1	Session 2	Session 3	Session 4	Session 5	Total
Nationality	5	4	4	0	0	13
N1	*0*	*2*	*2*	*0*	*0*	*4*
N5	*4*	*0*	*0*	*0*	*0*	*4*
N6	*1*	*2*	*1*	*0*	*0*	*4*
N3	*0*	*0*	*1*	*0*	*0*	*1*
Religion	1	0	1	6	0	8
R2	*1*	*0*	*1*	*1*	*0*	*3*
R5	*0*	*0*	*0*	*3*	*0*	*3*
R1	*0*	*0*	*0*	*1*	*0*	*1*
R4	*0*	*0*	*0*	*1*	*0*	*1*
Ethnicity	2	0	0	2	0	4
E1	*1*	*0*	*0*	*1*	*0*	*2*
E6	*1*	*0*	*0*	*1*	*0*	*2*
TOTAL	36	7	10	16	8	77

Findings Across Sessions

In this section, qualitative descriptions of cultural worldview expressions and codes as well as quantitative frequency data are presented. Findings will be organized based on the parent coding categories described earlier and presented in order of the frequency of coding.

Other (explicit). Across all the transcribed therapy sessions, codes from the other (explicit) category were applied more frequently than any other codes. The coders agreed on a total of 32 codes (41.56%) within this coding category. The most common individual code that was agreed upon by the coders within any of the coding categories, which was coded 12 times, was the discussion of gender as a cultural worldview or affiliation, such as, “it just seems like, women are deceitful like that, you know what I’m saying?... like they like to seduce men, and then get them in trouble.”

Cultural affiliation not otherwise specified codes were the second most commonly applied codes, employed a total of eight times. Expressions given this code included client

discussions of a range of demographic variables that were mentioned as cultural characteristic that implied some sort of shared cultural experience including socioeconomic status (n=2), pedophilia (n=2), physical region other than geographic region (n=1), substance abuse population (n=1), motherhood (n=1) and marital status (n=1).

The next most common individual code that emerged was age/generation. At the onset of the coding process, an age/generation code had not been established, but since references to this cultural demographic emerged seven times, which was more than almost all of the other individual codes, an inductive approach was employed to establish the new code. Examples of client statements that received this code included, "for 16 years... he's extremely empathetic," and an instance in which the client participant was discussing her parents' marraige brought on by a pregnancy and stating, "That was the appropriate thing to do in the sixties."

Client references to geographic region as a cultural worldview occurred a total of three times. An example of such a statement that received a geographic region code was an instance in which Client Participant #1 described a coworker as "snappy and short, kind of like if you was [sic] in New York." Client participants referring to sexual orientation and occupational affiliation as cultural characteristics were each coded once.

Other (implicit). The other (implicit) category refers to client participant expressions of cultural beliefs or worldviews that were not explicitly in reference to specific affiliate groups or demographic characteristics. Codes from within this category were applied 20 times (25.97%) throughout the five sessions. The individual code that most frequently applied from within this category was one concerning beliefs about human nature, such as, "Everybody has at least somebody that doesn't like them." This code was agreed upon six times across the transcribed sessions.

The communalism code, which was applied for beliefs about the roles of individuals and their communities or families in influencing each other's welfare or that of society at large, was assigned five times. For example, Client Participant #1 was discussing her relationship with her uncle, who was expected to help raise her yet he sexually abused the client, and she stated that she no longer "respect[s] all adults because they don't deserve it. Like you will listen, and you will do what you are supposed to do, but you won't just be blind and be like, ok well, they're an adult." This statement was coded with a communalism code because the client participant stated a belief about child-caretaker roles and relationships.

Individual expressions of cultural worldviews that were consistent with the individual cultural worldview not otherwise specified code were coded on five occasions across sessions. This code was employed when the client participant voiced a cultural belief that did not reference any cultural or demographic group or affiliation and was not better captured by any of the other codes within this coding category. An example of such an implicit expression of a cultural worldview was an instance in which Client Participant #5 expressed a belief about morality, which was assumed to be influenced by her cultural background, stating, "I do not believe I can apply a rule to someone else unless I apply it to me." Like other worldview expressions captured by this code, this statement received the cultural worldview not otherwise specified code because it referred to a belief about the world that could not be captured by any of the other codes, yet did not reference any specific cultural group or affiliation (which would be given the cultural affiliation not otherwise specified code from the other (explicit) coding category). Themes that were inductively gathered within this code included beliefs about morality (n=2), fairness (n=1), romantic relationships (n=1), and hypocrisy (n=1). Because these five coded worldview expressions were not coded enough times and did not seem to represent

unique constructs, they did not appear to warrant the creation of a distinct code separate from the cultural worldview not otherwise specified code.

Lastly, the cultural worldview belief about the meaning of life, which was reserved for client participant expressions of beliefs about life's purpose or explanations of the nature of the world, was coded four times. An example of this theme taken from one of the transcribed sessions is, "There's nowhere in this world that's safe."

Nationality. Along with the religion and ethnicity coding categories, the nationality category consisted of codes based on worldviews commonly studied in the existing TMT literature as described in the methods chapter. Researcher participants agreed on a total of 13 codes (16.88%) from within the nationality category. One of the three most frequently applied individual codes from within the nationality category was client participants' derogation of others' nationalities. For example, one client participant was complaining about her German coworker and stated, "I work with a German guy. You kind of know how they are… snappy and short." Nationality derogation was coded four times across the transcribed sessions.

Also coded four times were nationality worldview expressions that could not be captured by any of the other nationality codes, referred to as nationality discussion not otherwise specified. For example, Client Participant #2, who was originally from England, made two references to America, but the coders were unaware of the extent to which this client identified her nationality as American so a nationality discussion not otherwise specified code was given. Other instances in which the nationality discussion not otherwise specified code was applied included a case in which it was unclear if Client Participant #1 was referring to the nationality of another in a derogatory manner and once when Client Participant #3 seemed to be making a derogatory statement about her own nationality.

The next two individual nationality codes upon which the coders agreed were references to the client participants' nationalities. When there was an explicit reference to the client participant's nationality (e.g., "In England, it is socialized medicine," and "In El Salvador [when] I was in high school…"), a nationality identification code was applied. The coders reached an agreement on nationality identification codes four times. In one instance, Client Participant #3 made a vague reference to her nationality by using a generic term rather than stating her nationality explicitly (viz., "In my country, you see people get married…"). In this case, the vague reference to nationality code was applied.

Religion. Throughout the five transcribed therapy sessions, codes from the religion coding category were assigned a total of eight times (10.39%). The most commonly coded expressions of religion worldviews were client participant references to religious practices and the derogation of others' religion. Each of these codes was applied on three occasions. Of particular interest to this study, Client Participant #1 referenced religious practice when the topic of death was approached in therapy. In this instance, the therapist read an exercise prompt aloud which asked, "What would you do if you were told you were going to die soon?" Part of the client participant's response was, "I would pray my ass off." An example of an instance in which the religious practice code was applied was an instance in which Client Participant #4 referred to the religion of another as a "mini-cult" and later as "weird."

The other two individual religious codes that were used involved others' religion and religious group or denomination identification. Both of these codes were applied once throughout all of the sessions. Others' religion was coded when the client referred to the religion of another in a neutral or positive manner (viz., "…he's using God… talking to God"). The code for religious group or denomination was reserved for cases in which the client explicitly referred

to his or her religious identification. The one time this occurred, Client Participant #4 stated that "childhood issues sent [her] in a nondenominational direction."

Ethnicity. Researcher participants coded expressions of cultural worldviews within the ethnicity coding category on four occasions (5.19%). The only individual codes that were applied across sessions were references to the client participant's ethnic identification and ethnic discussions not otherwise specified. Each of these themes was coded twice. In one instance, both of these codes were applied when Client Participant #4 described her ethnicity, stating, "I'm a mutt. I have black… I have Indian in me. I have German in me. I'm a mutt. I have a little bit of everything." In this case, there was a clear reference to the client participant's ethnic background, but the coders also applied the ethnic discussion not otherwise specified code because of the potential derogation of her own ethnicity by using the term "mutt."

Findings Within Sessions

This section provides a discussion of each of the five coded therapy sessions used in this study. For each session, a brief description of each client participant associated with that session is provided. The discussion themes of each session, as well as the relevant trauma history for each client participant, are addressed in order to provide a context for understanding the coded expressions of cultural worldviews. The results are presented using frequencies of the codes agreed upon by the researcher participants as well as examples of the coded cultural worldview expressions.

Client Participant #1. Client Participant #1 identified as an African American, Christian, female. She was 28 years old at the time of this transcribed session, and she was self-referred because of difficulties adjusting to a new living environment after moving to a new city and difficulties with communicating and regulating her emotions. She reported a history of

struggles with death and loss, sexual abuse, substance abuse, financial instability, and a family history of discrimination. In this session, the therapist suggested that the two play a "feeling game," in which the client and therapist took turns drawing game cards that were intended to elicit therapeutic conversation. During this session, the client participant appeared to be engaged in the game and responded to the prompts by discussing difficulties with previous relationships and coworkers. After a game card prompted her to "talk about something you will never forget," the client participant addressed her history of sexual abuse. Although the client participant discussed her reactions to the trauma more than details of the traumatic event(s) itself, clinical records revealed that the sexual abuse she discussed was in the form of molestation and rape perpetrated by her paternal uncle when she was in the third grade.

In this transcribed session, the client participant first addressed her trauma in her 48th talk turn. Prior to this discussion, no expressions of cultural worldviews were coded. During the discussion of the client participant's trauma and how it affected her, which lasted nine minutes and 20 seconds, the coders agreed on 13 expressions of cultural worldviews. In total for this session, expressions of cultural worldviews were coded 36 times. Codes from the other (explicit) coding categories were assigned more than codes from any other coding category (n=19). Codes from the other (implicit) category were the next most frequently applied codes, used nine times. Codes from the nationality (n=5), ethnicity (n=2), and religion (n=1) categories were also employed in this session. The following individual codes were agreed upon by the coders (frequencies in parentheses): gender (n=10), communalism (n=4), nationalistic derogation (n=4), cultural affiliation not otherwise specified (n=4), human nature (n=3), geographic region (n=3), meaning of life (n=2), nationality discussion not otherwise specified (n=1), ethnic identification

(n=1), ethnic discussion not otherwise specified (n=1), sexual orientation (n=1), religious practice (n=1), and age/generation (n=1).

During the discussion of the client participant's traumatic experiences, she expressed worldviews pertaining to demographics associated with her perpetrator. She described him as a "crack head" and made statements about his character based on his being a substance user such as, "He ain't got nothing to do, he's a crack head." This description was coded as cultural affiliation not otherwise specified because she expressed a belief that was based on her identification of her uncle as a substance user. The client participant also expressed worldviews about other cultural affiliations, such as men and adults, which she attributed to her trauma. For example, she stated that after experiencing sexual abuse, she learned that she should not "respect all adults, cause they don't deserve it… you will listen, and you will do what you are supposed to do, but you won't just be blind and be like, ok well, they're an adult." The coders agreed upon coding this statement as both cultural affiliation not otherwise specified because of her worldview about "adults" as well as communalism (under the other (implicit) category) because this statement represented a belief about communalism responsibilities of a child-adult interaction. During the discussion of her trauma, the client participant also made several statements that were coded with codes from the other (implicit) category, such as the following worldview about human nature: "Anybody who's offering help wants something."

After the initial discussion of the client participant's trauma, references to the traumatic events occurred a few times throughout the session, but she and the therapist continued to engage in the board game and discuss other difficulties, such as problems with coworkers and the client's boyfriend. The individual code that was applied most frequently in this session was the code for expressions of gender worldviews, which were coded ten times. For example, the client

participant said the following when discussing her interactions with her boyfriend: “I’m trying to like lower my personality now so that I won’t just run over him ‘cause no man wants to be run over… you know, I mean they have an ego… We do too, but it’s ok to abuse ours… But theirs is like oh shit, they can’t recover.”

Toward the end of the session, one of the game cards posed the question, “What would you do if you were told you were going to die soon?” Part of the client’s response was, “I would pray my ass off,” which was coded as a reference to a religious practice and considered of particular interest to this study because this worldview expression was in direct response to a question about death. After the client discussed her reactions to the question about her death, much of the rest of the session focuses on her problems at work, which are largely attributed to her relationship with a coworker from Germany. As part of this discussion, nationalistic derogation was coded four times. When describing her coworker, the client participant made statements such as, “I have to remind myself, he’s German, he’s a control freak and he likes to be in control,” and “They’re not good at giving compliments.”

Client Participant #2. The second client participant was a single, Caucasian female originally from England. At the time of her therapy, she was 47 years old and unemployed because of her disability status. She presented to therapy because of scratching behaviors brought on by stress, which she attributed to multiple medical health concerns including diabetes and a stroke which caused her to lose much of her eyesight. In this session, the client participant discussed her traumatic health issues at length. The session began with a discussion of her loss of eyesight and an upcoming eye surgery. She then spoke with her therapist about her living situation and the help she receives from caretakers. The therapist and client discussed the client’s scratching behaviors in response to stress. The client participant revealed additional

medical complications that resulted from her stroke, which were the focus of the bulk of this session.

In this session, the client participant talked about her traumatic medical conditions almost immediately and continued to do so for most of the remainder of the session. Individual expressions of cultural worldviews were coded a total of seven times. The most frequently applied codes, which were agreed upon by the coders four times, belonged to the nationality coding category. The only other coding categories from which individual codes were applied in this session were the other (explicit) and other (implicit) categories, coded twice and once respectively. The following individual codes were applied (frequencies in parentheses): nationality identification (n=2), nationality discussion not otherwise specified (n=2), age/generation (n=2), and meaning of life (n=1).

In the beginning of this session, the client participant complained to her therapist about having to wait longer than she would have liked for one of her eye surgeries and she stated that "unfortunately that is the way of not having insurance in this country." This was coded as a nationality discussion not otherwise specified because she referenced a nationality (i.e. "this country"), but it was unclear how much she identified as an American or if this was a reference to others' nationality. She went on to say that "in England, it is socialized medicine and the waiting list is 3 years to have it done…," which was coded as nationality identification because her file indicates that she identifies as English. Also toward the beginning of the session, she reported that she was having difficulty deciding if she should move to England or continue to receive care in America, and she said that, given her declining health, she needed to find a place to live "until the end of [her] days, however long that is." This was not coded as a mortality worldview (OI3) because she did not express a belief about mortality, but it was noted because a

reference to mortality amidst a discussion of trauma is consistent with TMT and some of the assumptions of this study. During this discussion of her living situation, two more nationality references were coded.

The client participant spoke of her social support system and living situation while she was struggling with serious health complications. Part of her support system was a 16-year-old male, who lived with his mother and the client participant, and for whom the client had previously provided professional care. She expressed cultural beliefs about this person's age (coded as age/generation) on two occasions, first stating that as a 16-year-old "he doesn't need a babysitter," and later that "for 16 years… he's… extremely empathetic." The client participant continued to talk about her support system throughout the transcribed session, and toward the end of the session, she expressed gratitude for the people who had helped her while she struggled with her medical ailments. During this discussion, the client explained her understanding of the help she had received, stating, "Over the years, I have helped a lot of people and you know, the karma? What goes around comes around, and I've always been the first one there to help anybody so I had a lot of that come back at me." This was the last cultural worldview that was coded in this session, and it was coded as a meaning of life expression because it was an explanation of the nature of the world. A religious worldview code was also considered for this statement; but since the client did not reference any religious group or affiliation or a religious practice, no such code was assigned.

Client Participant #3. The Client Participant #3 was a Hispanic, married female who identified as Christian. She was 21 years old at the onset of therapy, had a high school education, and lived in El Salvador until the age of 19. She was referred to therapy by her husband and complained of feelings of depression, anger, hopelessness, and guilt as well as

occasional suicidal ideations. The client reported a history of significant physical, sexual, and emotional abuse. Specifically, she reported that her mother and grandmother would use physical violence against her, and her mother threatened her with a knife on multiple occasions. The therapist noted that the client reported being "sexually assaulted" by her cousin and "sexually harassed" by her uncle, who would watch her shower on occasion when she was a teenager. In this session, the client participant shared her concerns about the safety and welfare of her sisters who were living in El Salvador with her parents and grandmother (who had previously abused the client participant) at the time of this session. Most of the remainder of the session is focused on the client participant's relationship with her family and her memories of physical acts of violence from her mother.

Individual cultural worldviews were coded a total of ten times in this session. The coding category from which the most individual codes were assigned was the nationality category, which was coded four times. Codes from three other categories were applied in this session: other (implicit) (n=3), other (explicit) (n=2), and religion (n=1). The following individual codes were applied throughout this session (frequencies in parentheses): nationality identification (n=2), cultural affiliation not otherwise specified (n=2), implicit cultural worldview not otherwise specified (n=2), nationality discussion not otherwise specified (n=1), vague reference to nationality (n=1), communalism (n=1), and religious practice (n=1).

For most of the first half of the session, the therapist and the client discussed therapy fees, filled out a questionnaire about the client's symptoms, and discussed the client's concerns about her sisters that are still living with her family in El Salvador. The client participant then talked about her history of physical abuse perpetrated by her mother. During this discussion, she explicitly referenced El Salvador twice, which was coded as nationality identification. She also

expressed her beliefs about her mother's violent behavior and stated, "She don't hit you like a mom, she go like this [holds up closed fist] and just slap you anywhere." This was coded as cultural affiliation not otherwise specified because the client expressed a belief about punishment based on cultural demographic of motherhood. She continued to express her beliefs about child punishment, stating, "They think it's okay… you can hit this child because this is your child, you can do whatever the heck you want… I don't feel that way. I think they're stupid, they're crazy," which was coded as a belief about communalism.

She then expressed a belief about morality or right and wrong, which was coded as an implicit cultural worldview not otherwise specified. In this instance she was describing her reaction to her abuse, which was to avoid retaliating physically against her abuser, and she said,

> I mean, you're a good person you try to not fight… somebody is just hitting you already and trying to hit you more and if you can't just give them back what they're you know trying to do you and you just don't do it I think that's good, you know.

The client participant shared with her therapist how her trauma had effected her and her perception of abusive relationships. She related her understanding of abusive relationships to her cultural background, stating that in El Salvador, "you see people get married, like you see this one with their big eye, you see them purple all over sometime, they say 'no I just fell'…" This statement was coded as nationality discussion not otherwise specified. She continued to talk about her history influencing her beliefs about marriage. A religious practice code was given for her saying she got married in a church, and a cultural affiliation not otherwise specified code for the following belief about married couples: "I think its stupid that people is married and they say bad words to each other and they think its fine, I don't think so." She also stated her belief about how romantic couples should interact with each other, stating that "if you love someone you

won't [speak unkindly of that person]," which was coded as an implicit cultural worldview not otherwise specified. The session concluded shortly after this discussion.

Client Participant #4. The fourth client participant was a 39-year-old, mixed race (identified as African American/American Indian/Caucasian), married female. At the time of intake, she was living with her husband and two of her four daughters (her other two daughters were living away from home while attending college). One of her daughters was her step-daughter. She presented to therapy because of feelings of guilt/shame, anger, betrayal, and depression, which she attributed to learning that her father sexually abused her step-daughter. She reported that her reaction to this knowledge was exacerbated by her own history of sexual abuse in the form of molestation by her paternal grandfather when she was approximately six or seven years old. The transcribed session used for this study was an intake session in which the primary objective of the session appeared to be to gather initial biopsychosocial information and a history of the presenting problems. The bulk of the session was dedicated to discussing the trauma experienced by her step-daughter and the trauma the client experienced when she was 14 years old.

A total of 16 individual codes were applied in this session. The most commonly coded cultural worldview expressions fell within the other (explicit) category, and these codes were applied seven times. Cultural worldview expressions within the religion category were captured on six occasions. Codes from two other coding categories, ethnicity (n=2) and other (implicit) (n=1), were assigned in this session. The following ten individual codes were agreed upon by the coders for this session (frequencies in parentheses): age/generation (n=3), religious derogation (n=3), gender (n=2), cultural affiliation not otherwise specified (n=2), others' religion

(n=1), ethnic identification (n=1), ethnic discussion not otherwise specified (n=1), religious group or denomination (n=1), religious practice (n=1), and human nature (n=1).

After the therapist talked with the client participant about some logistical issues regarding her participation in psychotherapy, such as bill payment and goals for the intake session, the therapist asked the client to describe her reasons for seeking therapy. The client participant revealed that she had a history of sexual abuse, and while explaining her family dynamic that led up to the abuse, she expressed a cultural worldview that was coded as age/generation. In this instance, she explained that her parents married after her mother became pregnant because, "that was the appropriate thing to do in the sixties." She then discussed the sexual abuse endured by her step-daughter, and described her father, the abuser, and his reaction to others discovering this abuse. The client said that her father wrote a letter stating that "he's using God… talking to God… trying to find a way to forgive [him]self." This statement was coded as others' religion. She also expressed anger toward her grandmother for her apparent indifference when learning of her son's abuse of the client's step-daughter. She reasoned that her grandmother's reaction may be the result of generational cultural influence, stating that "it feels like maybe that mentality from that era, you know, its shhh move on, you know, like it never happened," which was coded as age/generation.

Additionally, the client participant discussed her husband's reaction, and said, "He's angry… like any man would be," which was assigned a gender code. After a brief period in the session spent gathering general intake information, the client returned to the topic of sexual abuse and discussed her beliefs about childhood sexual abuse. In speaking to these beliefs, she expressed the belief that "pedophiles prey on the weak." She continued, "Pedophiles don't mess with people that might say something. They wait they wait it out and they wait until they are

sure that it's safe." These statements were coded as expressions of beliefs about the "pedophile" affiliation or group, which were captured with cultural affiliation not otherwise specified codes. Toward the end of the discussion about sexual trauma, the client participant discussed her step-daughter's reaction, which seemed to the client to be surprisingly minimal, and reasoned that children are "resilient," which was coded as age/generation.

As mentioned earlier, much of this session was dedicated to general intake information gathering. In the course of this process, the client participant self-identified with multiple cultural affiliations. When describing her ethnic background, the client stated, "I'm a mutt. I have black… I have Indian in me. I have German in me. I'm a mutt. I have a little bit of everything." For this statement, the coders agreed on both an ethnic identification code for her description of her ethnicity and an ethnic discussion not otherwise specified code for her reference to herself as a "mutt," which might be considered a derogatory reference to her own ethnicity. When describing her religious affiliation, she identified as belonging to a non-denominational church, which was coded as religious group or denomination. She explained that previous life experiences, in which she attended the church of a man her mother was dating, led to her switching to a non-denominational church. She described the church of that man as a "mini cult," and said that it was "just so weird." These statements were coded as religious derogation. The session concluded with the client participant addressing her communication difficulties with her husband, which she reasoned were due to "men and women [being] different," and "opposites attract," which were assigned gender and human nature codes respectively.

Client Participant #5. The fifth and final transcribed psychotherapy session concerned a female client who was 28 years old at the time of intake. She described herself as Caucasian,

Protestant, and a mother of two children who was separated from her husband at the time of intake. She presented to therapy with complaints of feeling exhausted, overwhelmed, confused, and scared. The client participant reported that she has been struggling with these feelings since approximately four years of age, but stated that they have increased in intensity in the year prior to starting therapy because of her separation from her husband. From the ages of four to eight years old, she reportedly was sexually abused by her neighbor. She stated that when she was 14 years old, her father attempted to convince the client to have sex with him, and she reported that she was unsure if she ever engaged in sexual activities with her father. She also reported being physically abused by her father at age 16 and by her husband starting at age 21. The client participant stated that she made one suicide attempt when she was 13 years old, and considered ending her life from ages eight to 18 years old.

In this session, the client participant spoke with her therapist about her discord with her husband, her history of interpersonal struggles with others, and her history of physical, sexual, and emotional abuse. Throughout this session, the coders agreed on eight individual codes. All of these codes fell within two coding categories, other (explicit) and other (implicit). Codes from the other (implicit) category were applied most frequently, a total of six times, and the remaining two codes were from the other (explicit) coding category. The coders agreed on the following individual codes (frequencies in parentheses): implicit cultural worldview not otherwise specified (n=3), human nature (n=2), occupational affiliation (n=1), age/generation (n=1), and meaning of life (n=1).

Toward the beginning of this session, as the client participant addressed her concerns about her husband's financial contributions to her family, she related her concerns to her parents' financial history. She reported that her mother worked in the medical field, while her father

received his degree in computer engineering, which she said required "too many brain cells for [her] to think about." This statement was coded with an occupational affiliation code because she expressed her belief about her father based on his occupation. She went on to describe her history of difficulties with interpersonal functioning and provided her therapist with an example, stating that she has to consciously remind herself to greet people she knows when she comes into contact with them because this interpersonal skill does not come naturally. She stated that she reminds herself that "normal people say hi," which was assigned a human nature code. Still, she reported that she could not identify any people that did not like her, which she said was "odd" because "everybody has at least somebody that doesn't like them." This statement was also assigned a human nature code.

She spent most of the remainder of the session talking about her dysfunctional family environment of her childhood. She suggested that she "drove people nuts" and manipulated them for her amusement to cope with her childhood. However, she said that she would not do this to people she liked because "that wouldn't be fair." Later, she said that "it is not fair to play with brains that you love." These statements of her beliefs about fairness and morality or right and wrong were assigned implicit cultural worldview not otherwise specified codes. The client went on to describe her mother's abusive parenting, which included neglect and withholding needed food from her children, and she said, "I didn't know that it was normal for kids to have snacks until my son started school…," which was assigned an age/generation code. Toward the end of the session, another implicit cultural worldview not otherwise specified code was assigned when the client summarized that her mother seemed to believe that "the rules that apply to everyone else do not apply to her," and stated, "that's not ok because I do not believe I can apply a rule to someone else unless I apply it to me," which was considered another cultural belief

about morality. Sadly, the client participant concluded that “there’s nowhere in this world that that’s safe.” This was given a meaning of life code.

Chapter IV

Discussion

Although terror management theory (TMT) has been extensively researched in laboratory settings and scientifically supported by hundreds of studies in the field of social psychology (Burke et al., 2010), clinical literature addressing the implications of TMT in a therapeutic setting is virtually nonexistent. This meta-theory, which seeks to capture the complexities of human motivation and behavior with one broad existential theory, provided a framework for this study. Specifically, cultural worldviews were examined because TMT posits that investment in and alignment with cultural worldviews allows individuals to cope with existential anxiety by construing the self as part of a culture that will outlast one's mortal existence, and thus, provide relief when mortality is salient in the mind of the individual (Arndt et al., 2002; Burke et al., 2010; Pyszczynski et al., 1999; Vail et al., 2010). Worldview expressions were studied in the context of therapy that included discussions of trauma based on the assumption that trauma discussions would increase mortality salience in the minds of the clients, an assumption drawn from TMT research that suggests that thinking about topics associated with death such as serious illness (Arndt, Cook, Goldenberg, & Cox, 2007; Goldenberg et al., 2008), and terrorism, war, or violent conflicts (Landau et al., 2004) increases the accessibility of thoughts of death (Hayes et al., 2010). Using TMT principles as well as the proposed connection between those principles and posttraumatic growth (PTG) to create a lens for understanding trauma treatment, the purpose of this study was to examine client expressions of cultural worldviews during psychotherapy sessions in which clients addressed their traumas.

This study provided a unique glimpse at how clients actually express their cultural worldviews in naturalistic settings in which mortality salience is assumed to occur. The findings

yielded from the content analysis revealed that psychotherapy clients who experienced traumatic stressors involving serious threats to physical integrity referred to their cultural worldviews and affiliations during sessions in which they discussed their traumatic experiences (77 out of 1,369 talk turns). It is difficult to know whether this number should be considered low or infrequent because no other research has been conducted like the present study. If TMT researchers consider the numbers low, differences in methodology could account for the rates as most TMT studies prompt the participants with opportunities to defend their worldviews (Burke et al., 2010) rather than examining worldview expressions as they occur naturally as in this study. Additionally, the frequency of worldview expressions across sessions may have been influenced by numerous factors, including the therapists' style and willingness to engage their clients in discussions of culture. As discussed later in this chapter, only one of the five therapists in this study initiated any discussion regarding the cultural background of the client, a finding considered consistent with previous research that has suggested a general need in clinical psychology for better incorporation of cultural discussions of variables such as race or ethnicity (Maxie, Arnold, & Stephenson, 2006) and religion (Post & Wade, 2009) into psychotherapy.

As TMT researchers might have expected, many (57 out of 77 total) of the client participants' expressions of cultural worldviews were in the form of discussions of explicit groups, affiliations, or practices, such as those captured with religion, nationality, and ethnicity codes as well as codes from the other (explicit) category. A minority (20 out of 77) of cultural worldview expressions were found to be more implicit statements about the client participants' beliefs or explanations of the world, such as statements captured by the other (implicit) codes (e.g., "There's nowhere in this world that's safe"). Such implicit and explicit cultural worldview expressions in the context of therapy addressing trauma are considered consistent with the

general TMT principle that people respond to existential anxiety through alignment with and adherence to cultural worldviews. The frequencies and types of worldview codes varied greatly across the transcribed sessions, and the factors that may have contributed to this variance, such as the relevance of particular worldviews, the content and context of the session, and variance among the therapists, are discussed in detail below.

In this chapter, a thorough discussion of the findings of this study as they relate to the existing TMT and PTG literature is provided. The chapter begins with an examination of patterns suggested by results from across sessions, including a discussion of differences and similarities of coding patterns. Although the findings from this study are discussed as they relate to trauma and reactions to trauma, this study did not include therapy sessions with clients who did not have trauma history, nor did it examine the differences between worldview expressions made during trauma discussions and during other parts of the therapy session with trauma survivors; thus, conclusions regarding whether the results are specific to trauma could not be definitively made. Also, it was not feasible to code for the degree to which each client felt she was meeting the standards and values prescribed by her worldviews because the researcher did not want to assume client's understanding of the worldview as well as her beliefs about meeting them. After addressing the limitations of this study, its clinical and empirical implications are discussed. The chapter concludes with considerations for potential directions for future research.

Examination of Results from a TMT Perspective

This section addresses the findings of this study using TMT as a framework for conceptualizing some of the patterns that emerged. First, this section discusses worldview expressions captured by codes from the four main coding categories (religion, nationality, political affiliation, and ethnicity) relative to those captured by codes from the other (explicit)

coding category. Then, the rationale for the other (implicit) coding category is revisited and potential factors influencing client expressions captured by codes from within this category are addressed. Lastly, this section discusses broad patterns across the five sessions and speaks to theoretical explanations for differences among the sessions in regard to coding frequencies.

Well established worldviews and other (explicit) worldviews. Research on TMT has thoroughly demonstrated that the tenets of this theory can be applied to a broad range of explicit worldviews about cultural affiliations ranging from one's university to favorite sports teams (Burke et al., 2010). The creators of TMT defined the construct of cultural worldview broadly (Pyszczynski et al., 1999), which was employed as a guiding definition of this study:

> A humanly constructed symbolic conception of reality that imbues life with order, permanence, and stability; a set of standards through which individuals can attain a sense of personal value; and some hope of either literally of symbolically transcending death for those who live up to these standards of value. (p. 835)

Thus, the codes created for and used in this study specifically examined the following explicit worldviews: religion, ethnicity, political affiliation, nationality, geographic region, occupational affiliation, institutional affiliation, gender, and sexual orientation. A cultural affiliation not otherwise specified code was also created to capture explicit references to cultural groups or affiliations that were not better captured by any of the other explicit codes. Results showed that explicit cultural worldview expressions occurred 57 times across the five sessions; representing a majority of 77 total cultural worldview codes.

Although the definition above, as well as the meta-theory classification of the theory, seems to suggest that any cultural affiliation that serves as a symbolic mechanism for transcending mortality can be studied from a TMT perspective, the vast bulk of TMT research

has focused on a few specific worldviews. Specifically, most of this research has been dedicated to the examination of participants' investment in religion, political affiliation, nationality, and ethnicity (Burke et al., 2010). It was for this reason that the first four coding categories of this study were intended to capture the expression of these four cultural worldviews, as discussed in the methods chapter. Approximately one-third of the codes that were assigned to worldview expressions were from the religion, nationality, and ethnicity codes (n=25). No codes from within the political affiliation coding category were applied during the coding process of this study. The finding that approximately two thirds of the codes were from other coding categories was slightly unexpected. These results suggest that TMT research might be focused too narrowly on a few cultural affiliations. As mentioned earlier, the TMT research has indeed examined the role of terror management processes with a wide range of specific worldviews, and the intention is not to suggest that they have not done so. However, the extent to which worldviews other than the main four cited above have been examined may be lacking.

From within these categories, codes from the nationality category were applied most frequently (n=13) followed by religion (n=8) and ethnicity (n=4); these three categories will be discussed next. Of these four commonly studied cultural worldviews, it has been argued that religion is particularly well-suited for managing anxiety after mortality has been made salient because religions are all encompassing, rely on concepts that are not easily disconfirmed, and usually promise literal immortality (Vail et al., 2010). In the present study, codes from the religion category were assigned a total of eight times in references by 3 of the 5 client participants. This religion code accounted for 10.39 percent of the codes across sessions, approximately half of the average frequency among coding categories, which was considered unexpectedly low given the aforementioned literature suggesting religion is particularly useful

for terror management purposes. These findings might suggest that religion as a cultural worldview is no more suited for terror management purposes than other worldviews as argued in preexisting literature. However, a lower than average amount of this code could have been influenced by numerous factors including but not limited to the therapists' willingness to discuss religion, the context of discussion in the sessions, the role of religion in each of the individual participants' lives. As will be discussed later, the nature of this research compared to typical TMT studies may have contributed to differences in findings. Also, it was decided prior to coding that references to spirituality would not be coded with religious codes unless the client also referenced an organized religious affiliation or practice. As described in the methods chapter, this decision was based on the TMT tenet that religion provides a sense of both literal and symbolic immortality by allowing followers to join a culture that will outlast the physical self (Vail et al., 2010), and if spiritual beliefs were referenced alone, these beliefs would be captured by a code from the other (implicit) category.

An example of a religious worldview expression, which was of particular interest to this study, was an instance in which Client Participant #1 responded to a question posed by the therapist who asked what she would do if she were told she were soon going to die by stating, "I would pray my ass off." This statement is consistent with the TMT principle that people turn to their cultural worldviews that provide meaning and affiliation with a cultural group when they are reminded of their mortality (Pyszczynski et al., 1999), and that religion can serve terror management functions well (Vail et al., 2010). Client Participant #3 also referenced a religious practice when she was describing her relationship difficulties and she recounted that she was married in a church. From a TMT perspective, this religious practice reference may have served as a means of aligning herself with a meaningful part of her culture in order to calm any

existential anxiety resulting from her recounting of her previous trauma and subsequent difficulties in her marriage and other relationships.

Also, six religious worldview expressions were coded for Client Participant #4, more than any other client. This result might be explained in part by the finding that the therapist in this session was the only therapist to directly ask the client about religious identification. The finding that only one of the five therapists asked about religion mirrors previous literature that has argued that although therapists tend to view spirituality and religion as valuable to many of their clients, they are hesitant to facilitate such discussions (Cornish, Wade, & Post, 2012) and are less motivated to discuss religion than their clients (Post & Wade, 2009). In this session, the client first referenced religion when she described her childhood sexual abuse and she noted that her abuser was praying to God for forgiveness. Later, when the therapist asked about her religious identification, she explained that she identified as "non-denominational," and explained that this identification was the result of experiences she had attending church as a child that she did not like. She openly criticized this church, referring to it as "weird" and a "mini-cult," which was coded as religious derogation. This derogatory reaction to the religious views of another might echo a common finding in the TMT literature (i.e. Salzman, 2001; Wisman, & Koole, 2003) that suggests that people are more likely to oppose and act aggressively toward those with other cultural beliefs as a byproduct of increased faith in one's cultural worldviews. It is possible that this reaction might also be explained in part by the client's inability to find comfort in previously held religious beliefs after her abuse. A meta-analysis by Walker, Reid, O'Neill, and Brown (2009) found mixed results regarding changes in religious faith following childhood trauma with some studies showing increased religious faith and spirituality and others showing decreased religiousness following such trauma. Their review indicated that some childhood

trauma victims turn to their religious beliefs for solace and meaning as a means of coping while others lost faith in their religious beliefs following trauma, particularly if their previously held religious beliefs led them to view God as punitive, wrathful, untrustworthy, and distant.

Although all of the four main worldviews used in this study have been measured in previous TMT research (Burke et al., 2010), there is a lack of literature comparing the terror management functions of each individual cultural worldview. The exception to this is the aforementioned argument that religion serves these functions particularly well. Therefore, the relative frequencies of codes from the other three main coding categories neither support nor contradict previous TMT literature. Instead, these results provide insight into the manner in which clients identify with worldviews that are relevant to them during therapy sessions. Therefore, this study's approach to examining cultural worldviews from a TMT perspective was unique not only because it employed the tenets of TMT in clinical psychology research, but also because it measured identification with multiple cultural worldviews simultaneously in an open-ended manner.

Regarding nationality, it was referenced by 3 of the participants a total of 13 times, and coded more than those from any of the other three main categories. Client Participant #1 referenced nationality five times, each of which was part of a discussion about her difficulties with a coworker who was of German descent. In these five occasions, she referred to the nationality of others in a derogatory manner, such as "I have to remind myself, he's German, he's a control freak and he likes to be in control," and "They're not good at giving compliments." Each of the other 2 clients who referenced nationality (Client Participants #2 and #3) were originally from countries other than the United States. Client Participant #2, originally from England, referenced nationality on four occasions in the context of discussing her serious

medical issues. She discussed differences in medical care between England and America, and at one point she discussed her declining health and her difficulties deciding in which country she wanted to live "until the end of [her] days, however long that is." This statement seems to suggest that mortality was salient in her mind when she was referring to her nationality. Client Participant #3, originally from El Salvador, referenced nationality four times. She referenced El Salvador when describing the childhood abuse she suffered while living there, and at one point she related her understanding of abusive relationships to her cultural background, stating that in El Salvador, "you see people get married, like you see this one with their big eye, you see them purple all over sometime, they say 'no I just fell'…"

Ethnicity worldviews were referenced by 2 participants (Client Participants #1 and #4) a total of four times, each referencing ethnicity twice. Both of these client participants were ethnic minorities (as was Client Participant #3). Client Participant #1 referred to her own ethnicity when describing her current struggles in relationships, which she attributed to the abuse she experienced as a child. For example, she discussed her difficulties navigating her role in relationships and stated that she did not want to be "a begging black woman." Being more aware of her minority status, this client may have been more likely to make a statement such as this referring to a negative stereotype, which is consistent with research that suggests that people are more likely to selectively attend to certain negative stereotypes such as the threat of certain minorities (Trawalter, Todd, Baird, & Richeson, 2008). However, other research suggests that racial minorities may at times act in ways which bolster perceived negative stereotypes in order to avoid a harmful backlash that may incur as the result of them violating these stereotypes (Dickter & Gyurovski, 2012). In this case, Client Participant #1 seemed to have identified a

negative stereotype concerning African American women being lazy or not resourceful, a harmful stereotype referred to in the literature as the "welfare queen" (Littlefield, 2008).

The therapist in the session with Client Participant #4 prompted discussion of the client's ethnicity by asking her about her racial background as part of the intake process, which is consistent with clinical recommendations that therapists inquire about the cultural background of clients during intake (Dadlani, Overtree, & Perry-Jenkins, 2012). The client replied by describing her ethnicity, stating, "I'm a mutt. I have black… I have Indian in me. I have German in me. I'm a mutt. I have a little bit of everything." Although this instance of the therapist explicitly discussing ethnicity with the client may have been influenced by the fact that this was an intake session, other factors such as the therapist's comfort level discussing cultural factors and the therapist's ethnic background could have also played a role. Since the therapist's ethnic background is unknown, conjectures about the match or mismatch of the therapist's and client's race could not be made.

Although the four main categories were prioritized when creating the codes for this study because these worldviews are best supported in the literature, the majority of expressions of cultural worldviews involved codes from the other (explicit) and other (implicit) coding categories. Of the 77 total coded worldview expressions, 52 codes were from these two categories (67.53%): 32 explicit and 20 implicit. These results suggest that psychotherapy clients identify with a wide array of cultural variables not typically addressed in the TMT literature.

In addition, the methodological structure of this study underscores the finding that the participants referenced a variety of cultural worldviews not typically studied in the TMT literature. Since the four main coding categories (religion, political affiliation, nationality, and

ethnicity) were created based on commonly studied cultural worldviews in the TMT literature, the requirements for assigning these codes were less stringent than those for assigning codes from the other (explicit) category. In order for the coders to assign a code from the other (explicit) coding category, the client participant had to reference a specific cultural demographic or affiliation as a cultural characteristic rather than simply mentioning a demographic variable without an implication of a shared cultural experience. Conversely, for codes within the religion, nationality, political affiliation, and ethnicity coding categories, the client participants merely had to reference the given worldview even vaguely. For example, one client participant said of her father that he had been "talking to God," which was assigned an others' religion code for a neutral reference to another's religion or religious practice. This client participant did not discuss religion specifically as a cultural demographic or affiliation that implies a shared experience as is required with the other (explicit) codes. Thus, the 25 codes from the main coding categories included references to cultural affiliations that implied a shared cultural experience as well as simple mentions of demographic variable in general. In contrast, simply mentioning a cultural variable was not sufficient for coding from the other (explicit) category and did not account for any of the 32 assigned codes. In sum, the finding that more codes were assigned from the other (explicit) category than from the main four categories combined was especially surprising because the requirements for coding worldview expressions captured in the other (explicit) category were more stringent.

One explanation for this finding is that a cultural affiliation not otherwise specified code could have been used to capture any instance in which the client referred to a cultural group that could not be captured by any other codes, and this code was taken from the other (explicit) category. Theoretically, the cultural affiliation not otherwise specified code could have been

applied to an infinite amount of cultural worldview expressions that referenced a specific group. Therefore, if a client referenced a belief about amateur magicians, surfers, brunettes, or any other group of people, this code could have been assigned. The ability of other (explicit) codes to capture a seemingly infinite amount of cultural worldview discussions (other than those captured by one of the four main categories) may help to explain their frequency of use. In contrast, the main four coding categories were limited to capturing religion, nationality, ethnicity, and political affiliation worldviews alone. Thus, even though the requirements for applying a code from the other (explicit) category were more stringent than those for applying codes from the four main categories, codes from the other (explicit) category could have been applied to references to many more cultural groups or affiliation, which may have contributed to more of these codes being applied than those from any other coding category.

Certain cultural affiliations within the other (explicit) category were coded more frequently than any of the individual worldview expressions from the major four coding categories. These individual codes included gender (n=12), cultural affiliation not otherwise specified (n=8), and age/generation (n=7). It appeared that these worldview expressions were at least partly contingent upon the content themes of the session, as well as the nature of the trauma experienced by the client participants. For example, Client Participant #1, who had a history of childhood sexual abuse and was struggling in her romantic relationship with her boyfriend, made more references to gender (n=10) than any other cultural demographic. When describing arguments with her boyfriend, she stated that "no man wants to be run over." This client's difficulties in romantic relationships might be considered relevant given the clinical research that suggests that childhood trauma increases the likelihood of romantic relationship difficulties in adulthood (Busby, Walker, & Holman, 2011).

Furthermore, it is possible that some of the other (explicit) codes were assigned more frequently than codes from the main four categories in part due to the themes of the session (e.g., relationship difficulties; sexual abuse from someone of a particular gender; interactions with people from different generations; abuse from parents) and the nature of the traumas discussed; this notion is consistent with the TMT assumption that worldviews serve a meaning-making function and those worldviews most relevant to a person likely serve such functions best (Arndt et al., 2002; Pyszczynski et al., 1999; Routledge & Arndt, 2009). Specifically, TMT expects people to identify with those worldviews that prescribe standards and values that the individual sees him or herself meeting; therefore, the participants in this study may have expressed some worldviews more than others based on their ability to meet the standards of those worldviews. However, this study was not able to measure whether or not the client participants actually believed themselves to be upholding the standards of their valued worldviews; such assumptions would be difficult to make and purely speculative given that the researchers did not know if the clients considered themselves to be meeting cultural standards, since none of the clients explicitly made statements to that effect.

As will be discussed in more detail later in this chapter, references to gender and race could have also been influenced by the match or mismatch of these cultural variables between the client and therapist. For example, a female client may have been more likely to reference gender when meeting with a female therapist. Although inconsistent, some research indicates that therapy clients might perceive the therapeutic relationship as stronger when there is a match between the client's and the therapist's genders than when gender is not matched (Johnson & Caldwell, 2011), which might increase client engagement in therapy sessions.

In contrast to this study's approach to measuring cultural worldview expressions, the vast majority of TMT research involves testing the mortality salience (MS) hypothesis by manipulating MS and measuring the effects quantitatively on a pre-identified worldview assumed to be relevant to the participants (Burke et al., 2010). One common way in which the effects of priming for MS are measured is by measuring participants' evaluations of or behaviors toward those who affirm or threaten their worldviews (e.g. Pyszczynski et al., 1999). One example of many is a study by McGregor and colleagues (1998) in which some of the participants had been primed to make mortality more salient and the researchers measured how much hot sauce the participants added to the water of a confederate who held different political views than the participants. In this example, the researchers measured aggression toward those who threatened the participants' worldviews, rather than the expression of the worldviews themselves as in the present study. In this dissertation, there were no instances in which a therapist directly threatened a client's cultural worldview, nor did the clients report any instances in which others threatened or derogated any of the clients' cultural affiliations. Therefore, the clients were not necessarily prompted to defend their worldviews. Furthermore, a single cultural affiliation or worldview (political affiliation/beliefs) was identified prior to the onset of the McGregor et al. (1998) experiment, as opposed to the open-ended approach for examining multiple cultural worldview expressions that was used in this dissertation.

One rare exception to the typical TMT research approach of measuring the effects of MS on one identified worldview is a study from Baka, Derbis, and Maxfield (2012). These researchers measured identification with multiple worldviews among male and female participants (ages 17 to 21) who had been incarcerated and were living in juvenile reformatories in Poland. After priming some of the participants for MS, this study asked the participants to

rate the degree to which they agreed with various statements on a survey intended to include items from mainstream culture (e.g. “I return borrowed things even if the person who lent them to me does not ask me to do this”) and items assumed to correspond with subcultural values from the participants’ criminal culture (e.g. “I do not cooperate with the police even if I am a crime witness”). The researchers found that the participants endorsed mainstream values more than subcultural worldviews in response to increased awareness of their mortality. Therefore, Baka and colleagues (2012) provided support to the notion that certain worldviews (in the case of their study, mainstream worldviews) may be better for managing death related anxiety and potentially contributing to PTG (in this case by endorsing prosocial values that may decrease criminal activity) than others (subcultural worldviews). Thus, although the results of this dissertation showed that client participants turned to some worldviews more than others and are unique in many respects, they appear to be consistent with one other study that suggested that particular cultural worldviews are more apt to mitigate existential anxiety if participants in this dissertation did in fact turn to some worldviews more than others because of the ability of those particular worldviews to manage anxiety (which was not explicitly tested and was beyond the scope of this dissertation).

Implicit worldview expressions. The other (implicit) coding category was inspired from models outside of the TMT literature with the rationale that naturalistic expressions of cultural worldviews might be missed if only those beliefs that referenced their cultural origins were coded. The following definition of a worldview from Koltko-Rivera (2004) was employed to guide the creation of the other (implicit) codes:

> A worldview (or “world view”) is a set of assumptions about physical and social reality that may have powerful effects on cognition and behavior… Worldviews are sets of

> beliefs and assumptions that describe reality. A given worldview encompasses assumptions about a heterogeneous variety of topics, including human nature, the meaning of life, and the composition of the universe itself, to name but a few issues. (p. 3)

It was assumed prior to beginning this content analysis that client participants would not preference such beliefs by referring to a cultural demographic. For example, instead of saying, "As a republican, I think people need to stop looking to the government for handouts," (an explicit political affiliation worldview), a client might implicitly refer to political affiliations by saying, "I think people need to stop looking to the government for handouts," which could serve the same terror management purposes. Thus, it was decided that an other (implicit) category was needed to capture instances in which client participants expressed worldviews without reference to a specific cultural group or affiliation. The codes in this category included beliefs about the physical universe, communalism, mortality, human nature, and meaning of life as well as an implicit cultural worldview not otherwise specified code.

Of the 77 coded expressions of cultural worldviews, 20 (25.97%) received codes from within the other (implicit) category. The results of this study confirmed that many naturalistic expressions of cultural worldviews would not have been captured by coding only those beliefs that referenced specific affiliations. The finding that approximately 25 percent of coded cultural worldview expressions belonged to the other (implicit) category might suggest that survivors of traumatic events engage their beliefs to help them find meaning in the wake of suffering as has been argued by many theorists, such as Victor Frankl (Frankl & Lasch, 1992). Krauss (2005) argued that meaning making is "the most fundamental aspect of a human social setting" (p. 762) used to organize phenomenological reality and subjective experiences, and qualitative data

analysis is particularly adept at facilitating participants' meaning making processes through seeking to infer and interpret their meaning attributions. This drive for meaning making may fall outside the realm of mitigating death anxiety by clinging to a shared idea that will outlast one's lifetime. In other words, one's search for meaning after a trauma may be a separate phenomenon from terror management defenses but still a core component in the PTG process (Tedeschi & Calhoun, 2004). Although finding meaning in one's cultural beliefs may be a significant part of managing death anxiety (Pyszczynski et al., 1999), the findings of this study may reflect the client participants' need to make sense out of difficult situations, rather than to keep death anxiety regulated. This meaning making drive may help to explain why so many of the coded worldview expressions were captured with codes from the other (implicit) category.

From these results, one begs to question whether the motivation behind such implicit expressions of cultural worldviews was to manage terror associated with death, simply find meaning in the aftermath of trauma, or both. One could certainly argue that while expressing beliefs about the world serves a meaning making function, these beliefs are likely born from cultural upbringings and affiliations, and therefore also serve the function of aligning oneself with cultures for terror management purposes (Pyszczynski et al., 1999). However, as mentioned in the first chapter of this dissertation, some have criticized TMT for asserting that people seek meaning in order to "avoid the scent of death" rather than engaging in life with a propensity toward growth (Ryan & Deci, 2004). For these authors, the simplest explanation of the client participants' expressions of beliefs assigned other (implicit) codes might be that they were seeking personal growth and meaning. This notion that people are motivated toward finding meaning in the aftermath of devastating events would be supported by PTG literature that suggests that meaning making following traumatic events promotes coping and growth (e.g.

Steger & Park, 2012; Tedeschi & Calhoun, 2004). The organismic valuing process championed in the PTG literature might consider such efforts to find meaning in the wake of trauma a product of human beings' intrinsic motivation toward personal growth and actualization (Joseph et al., 2005). It was beyond the scope of this study to assess the motivation behind expressions of cultural worldviews and the degree to which these expressions serve a terror management function, but future studies that address these questions may be useful in delineating human motivation and behavior.

Although it seems possible that worldview expressions that were given codes from the other (implicit) category may have at times represented client strivings for meaning making in the aftermath of devastating situations rather than for terror management purposes, it is impossible to determine the functions of such expressions based on the coded data alone. For example, Client Participant #5, who reported a history of physical and emotional abuse perpetrated by both of her parents, described the way her mother treated others worse than she expected to be treated as wrong, stating, "That's not ok because I do not believe I can apply a rule to someone else unless I apply it to me." In this case, one might reason that the client participant expressed her worldview about morality because of her drive to assert her beliefs that provide meaning while reflecting on her abuse, but it could also be argued that she was motivated to affirm her worldviews in order to imbue herself as part of a meaningful culture as a means of managing existential anxiety caused by mortality being salient in her mind. Moreover, the study did not compare worldview discussions that occurred during conversations about threats to physical integrity versus other parts of the session. Therefore, this study cannot speak definitively regarding the function that implicit worldview expression served the client

participants, but focuses instead on the finding that approximately 25 percent of coded worldview expressions across sessions did not reference specific cultural groups or affiliations.

Although these worldview expressions did not reference specific cultural groups, one cannot definitively say that these stated beliefs did not serve the function of aligning with social groups. As stated earlier, the client may have expressed worldviews in order to align with those who share similar beliefs. In this sense, one might consider this as a means of turning to social support, one of the major components of the PTG process (Tedeschi & Calhoun, 2004) also associated with decreased likelihood of developing PTSD (Brewin et al., 2000). Although some have argued that social affiliation may be more influential on one's behavior than an underlying fear of death as proposed by TMT (Navarrete & Fessler, 2005; Navarrete et al., 2004), others such as Wisman and Koole (2003) have contended that alignment with others is part of the terror management process and that social affiliation and worldview validation typically work in tandem because one's in-group members often share attitudes, ideologies, and beliefs. From a TMT perspective, Routledge et al. (2004) suggested that clinicians might utilize worldview discussions as a means of eliciting social support. These authors argued that social connections "weave one into an existentially meaningful world" (p. 478) by providing validation of one's worldviews.

Furthermore, the design of this study made it difficult to infer more definitively the terror management or PTG function of worldview expressions because there was no control group with which to compare results. Since each of the client participants in this study were identified as having experienced trauma and addressed that trauma in therapy, it was impossible to examine how those clients' cultural worldview expressions might differ from those of clients who participated in therapy for non-trauma related difficulties. Based on this study's assumption that

client discussions of trauma that threatened physical integrity promotes the use of cultural worldview expressions, one might hypothesize that clients discussing their traumatic experiences would refer to their cultural worldviews more frequently than clients without trauma histories. However, the structure of this study's design did not allow for testing this hypothesis.

Additionally, the researchers determined that comparing different points in the session to examine the use of worldview expressions when talking about trauma and when discussing unrelated issues was not indicated based on previous TMT research. Specifically, a meta-analysis by Burke et al. (2010) demonstrated that investment in cultural worldviews does not decrease when the idea of mortality is removed from consciousness, but may even increase. Therefore, in a session in which trauma is discussed, one might assume that trauma and therefore human frailty would be hyper-accessible in the mind of the client, which would promote investment in cultural worldviews throughout the entire session rather than only while discussing the trauma itself. However, since TMT research has not yet been conducted in the context of psychotherapy, future research should test this assumption.

Coding frequency variance. Although each of the transcribed sessions in this study contained coded expressions of cultural worldviews, the amount and type of these worldview expressions varied among the client participants. The number of coded expressions of cultural worldviews within each client participant's session ranged from seven to 36 with a mean of 15.4 per session (SD=12.03). Differences in coding across sessions were likely the result of many variables interacting, such as the relevance of particular worldviews to each of the clients and therapists, the cultural backgrounds of the clients and therapists, the nature of the trauma disclosed in the session and other difficulties shared in the session, the therapist's level of engagement, style, theoretical orientation, and goals for the session, the content and length of the

session, and the timing of the session. Each of these factors will be discussed in turn below. Since the intent of this study was to examine the manners in which clients express their cultural worldviews in therapy rather than to study the causes of those expressions, the discussions in this section regarding variables that may have influenced frequency differences are speculative.

Although it is impossible to know how much each of the client participants shared what was genuinely on their minds at the time of their therapy sessions, it seems reasonable to assert that the client's individual expressions of cultural worldviews are at least partly suggestive of the salience of the worldviews for each of the client participants. Thus, one would expect a client for whom the idea of religion was more salient to make more references to religious worldviews than others. What made certain worldviews more available in the mind of a client participant might be indicative of the client's cultural background. For example, Client Participant # 4 made more religious references than any other client participant (n=6), and the finding that she referenced the religious practices of family members might suggest that religion is a valued part of her cultural background to which she is likely to turn in the wake of trauma (although this finding might also be due to the nature of that session as will be discussed below). Research suggests that worldviews most likely to be accessible to a person's conscious mind are culturally influenced (Arndt et al., 2002), and TMT as a whole is built on the premise that people have adapted to the constant threat of annihilation by attending to the worldviews that are relevant within individual cultures and prescribe standards and values to which the individual can aspire (Pyszczynski et al., 1999; Solomon et al., 2004). Further, PTG literature suggests that people often experience a shift toward intrinsic values following trauma (Lykins et al., 2007), which suggests that worldviews consistent with those values might have been more relevant and salient for some of the client participants. Therefore, one might argue that the findings of this study

partly represent individual expressions of cultural worldview that are most salient for the client participant as well as most relevant to his or her cultural background.

One finding that suggests that cultural background may have influenced the coded results was the finding that all expressions that were coded with ethnicity codes occurred during sessions with racial minority client participants. Three of the 5 client participants identified as African American, Hispanic, or mixed race (African American/American Indian/Caucasian), and of those 3, 2 clients referenced ethnicity worldviews. In contrast, neither of the 2 Caucasian clients mentioned ethnicity. This finding may also have been influenced by the match (or mismatch) of the racial background of both the client and therapist. Unfortunately, information regarding the therapists' ethnicities was unavailable in the research database so conclusions regarding the interaction between client and therapist based on both parties' racial status can not be made. Additionally, both of the client participants who were raised outside of the United States expressed worldviews that were assigned nationality codes while only one of the remaining 3 clients referenced nationality. These findings suggest that some of the cultural worldviews were more salient to certain client participants because of their minority status in regard to certain cultural demographics. In other words, these clients may have been more aware of their belonging to less dominant cultural groups than those clients who belonged to more dominant cultural groups. This reasoning is consistent with research that has shown that people from dominant, or privileged cultural groups are less aware of their group identity than those from subordinate, less privileged groups (Pratto & Stewart, 2012). The suggestion that match or mismatch of client race or ethnicity may have played a role is somewhat consistent with a meta-analysis conducted by Cabral and Smith (2011), which showed that the research is fairly heterogeneous yet overall suggests that clients tend to view their therapists more positively if

there is an ethnic match. Thus, clients in this study may have been more comfortable to discuss cultural variables when a racial match was present.

Cultural factors may have influenced frequency findings more indirectly as well. For example, Client Participant #1 seemed very talkative and playful, which led to her session containing many more talk turns than any other session (n=418). One might hypothesize that cultural variables could have contributed to her outspoken demeanor in this session. She described her occupation as a performer, which may have accounted for her gregarious, boisterous interactions with her therapist. The nature of the session, which included playing a board game, could also have contributed to the client's demeanor in session. Additionally, she may have been raised in a community in which an outspoken, talkative nature was culturally valued or even promoted. This is consistent with research that suggests that personality traits such as extraversion are culturally influenced and vary depending on geographical region (e.g. Olsen K., 2007). These cultural variables are by no means an exhaustive list of demographic or sociocultural factors that may have contributed to the findings of this study. Since this dissertation is essentially based on a theory that emphasizes the role of culture in helping people make meaning in their lives, future research should continue to appreciate the potential impact of a variety of cultural factors on the results of TMT and psychotherapy studies.

Another factor potentially influencing the variance in frequencies of certain codes across sessions is the nature of the trauma being discussed by each client participant. Regarding natural worldview expressions that appeared to reflect the nature of the trauma, certain cultural worldviews may be better suited to mitigate the death anxiety caused by reflections on specific traumatic experiences. In other words, if one assumes, in keeping with TMT principles, that a traumatic threat to physical integrity induces a degree of mortality salience that spurs the defense

of cultural worldviews that might provide a sense of meaning and connectedness, it seems logical to posit that trauma victims might be inclined to defend those worldviews that best help them make meaning out of the traumatic situation. Thus, a combat veteran who experiences moral injury after accidentally shooting a civilian might defend his religious, political, or nationalistic worldviews that might help him to make sense of this tragedy more ardently than he would be expected to defend his beliefs about his favorite sports teams.

In this study, more references to specific cultural variables may represent the types of trauma endured by the client participants; although, again, this study did not parse out codes that occurred before, during and after specific trauma discussions. For example, Client Participant #4 who experienced childhood sexual abuse expressed worldviews related to age/generation (n=3) such as a reference to children as "resilient." This worldview expression might be considered congruent with trauma she experienced in that it seems reasonable that this belief might help with meaning making in the aftermath of such a trauma. Similarly, the Client Participant #1, who was sexually abused as a child, expressed an age/generation worldview when she stated that she learned to not "respect all adults, cause they don't deserve it… you will listen, and you will do what you are supposed to do, but you won't just be blind and be like, ok well, they're an adult." Client Participant #3, who was physically abused by her mother, made communalism statements regarding her belief about punishing children, stating "They think it's okay… you can hit this child because this is your child, you can do whatever the heck you want… I don't feel that way. I think they're stupid, they're crazy." Again, these worldview expressions might be considered congruent to the trauma the clients experienced in that they could help them make sense of terrible situations, which might be part of the client's meaning making process, considered a core component of PTG (Tedeschi & Calhoun, 2004). This finding that suggests

that trauma survivors may turn to specific worldviews that are well suited to serve meaning making functions because of their relation to the traumatic events is not supported nor contradicted in any known TMT literature and may be considered a finding unique to this study; future research should extend this research by specifically examining cultural worldviews that are expressed during trauma discussions.

Other potential reasons for the differing amounts of expressions of cultural worldviews among each of the client participants were factors related to therapist variables (e.g., therapist cultural worldviews), the nature of the therapist-client relationship (e.g., match-mismatch), and the involvement of the therapists in the transcribed sessions. Some examples of therapist factors were seen in session #3, in which the therapist seemed to do most of the talking and asked mostly closed-ended questions. This approach may not have provided the client with the space to integrate discussions of her cultural worldviews, which may have partly accounted for the fewer than average (mean=15.4) number of cultural worldview expressions in that session (n=10). In contrast, most of client participant 1's session was spent playing a game with the therapist, which was seemingly intended to engage the client by having her respond to many thought-provoking questions. For example, one question asked of Client Participant #1 was, "What would you do if you were told you were going to die soon?"; part of the client's response included, "I would pray my ass off." This statement about a religious practice may not have ever been made had the therapist not asked that specific question; therefore, the cultural worldview expression must be considered to have been influenced by the context of the session, the therapist's approach and other therapist-client factors.

Although the purpose of this study was not to code or analyze therapist verbalizations, there appeared to be a marked lack of facilitating cultural discussion on the part of the therapists.

Of the five therapists involved in this study, only one (session #4) asked a client participant any cultural identity questions, and this was seemingly done solely for intake information gathering purposes rather than integrating cultural worldviews into the client's understanding of her difficulties. This data suggests that one contextual factor impacting coding frequencies may have been the lack of therapist facilitation of worldview discussions, which may have contributed to the low number of worldview expressions across sessions relative to the number of talk turns. This finding might be considered concerning because TMT research suggests that facilitating investment in cultural worldviews promotes a decrease in existential anxiety and the need for distal defenses (Jonas & Fischer, 2006). It also suggests a discrepancy between literature promoting cultural competency in therapy and training (e.g., Sehgal et al., 2011) and the lack of inclusion of cultural discussions in actual practice. Mirroring this sentiment, Sehgal and colleagues (2011) found that although multicultural competence is considered a vital skill for psychologists and touted in graduate training programs, there are significant differences between the endorsement of multiculturally appropriate strategies and the actual use of those strategies in therapy. Yet despite psychotherapists' advocacy for increased cultural competency in training and practice, prior research suggests a general deficiency of therapists who actually incorporate cultural discussions into therapy (Cornish et al., 2012; Maxie et al., 2006).

Another potential explanation accounting for the discrepancy in coding frequencies among each of the transcribed sessions may be that the amount of coded worldviews was partly due to the amount of time each of the client participants talked during the course of her sessions. Client Participant #1's session that contained the most coded worldview expressions (36) also had the greatest number of client talk turns (418); and Client Participant #2's session with the least worldview expressions (7) had one of the least number of talk turns (189). However, the

number of talk turns alone did not account for the variance in number. Client Participant #4's session had the least talk turns and was coded more than three of the other four sessions, and the number of codes applied for this session (16) was greater than the mean. Furthermore, although the number of talk turns can be considered an indicator of how much the client participant talked, this number may be slightly misleading because a talk turn merely represented an instance in which the client said something before and after the therapist spoke. A talk turn could have captured a lengthy monologue or a one word retort.

A related contextual variable appears to have been the timing of the session. As previously noted, codes for Client Participant #4 occurred in the initial session in which she and the therapist met, and the context of that session appeared distinct from all the other non-intake sessions. There were 16 codes applied for the session with Client Participant #4 despite having the lowest number of talk turns (184). As is recommended at intake (Dadlani et al., 2012), the therapist from this session asked the client questions about the cultural demographics of the client's ethnicity and religion, and many of the client's responses were coded as worldview expressions within these coding categories. This therapist was the only one who asked the client about her cultural affiliations or background. Although this session was known to be the only intake session included in this study, the timing of the other sessions in regards to the course of therapy was unknown. Thus few conclusions can be drawn about worldview expressions based on the point in the course of treatment.

Additionally, the therapist in this session directed Client Participant #4 to disclose the difficulties in her life that led her to seek treatment, and the client responded by explaining the nature of her trauma and its relation to her difficulties coping with the sexual abuse of her daughter for most of the session. One might assume that because the client participant was

disclosing her trauma to her therapist for the first time in this session, there may have been a greater emphasis on explaining her understanding of the meaning of her traumatic experience. This assumption was supported by instances in which the client expressed worldviews related to her understanding of her trauma such as when she expressed her beliefs about pedophiles multiple times, stating, "Pedophiles prey on the weak" and, "Pedophiles don't mess with people that might say something. They wait, they wait it out, and they wait until they are sure that it's safe." This finding is consistent with PTG literature that suggests that those who experience trauma have a propensity to find meaning in that trauma in order to achieve personal growth (Steger & Park, 2012; Tedeschi & Calhoun, 2004), although assessing growth was beyond the scope of the present study.

Limitations

Although certain steps were taken to minimize methodological shortcomings, some methodological limitations and challenges are inherent when conducting a qualitative study using a directed content analysis approach. First, personal biases may have influenced the creation of the research codes. Although these codes were created based on the abundant TMT literature described in the first chapter, the researcher needed to make certain assumptions regarding which specific worldviews might be captured under the TMT umbrella. Additionally, efforts that were made to create a coding system that mirrored the TMT literature, which may itself have created a biased set of codes because the existing literature may not represent how clients express cultural worldviews naturalistically in therapy sessions. For this reason, the other (explicit) and other (implicit) categories were created to capture those worldviews not coded elsewhere. This notion is supported by the finding that the majority of the coded worldview expressions were captured with codes from outside the four main coding categories.

However, as mentioned in the results and in this chapter, requirements for coding a worldview expression with a code from the other (explicit) category were more stringent than the requirements for applying a code from one of the four main categories; therefore, there was a bias in the creation of the codes used for this study. For example, at one point, Client Participant #5 said that she had lived in "Minnesota, Mississippi, Louisiana and Wisconsin." In this case, the coders all agreed that this statement could not be captured with a geographic region (OE1) code because she did not refer to these locations as indicative of a shared cultural experience or cultural affiliation. Conversely, if she had mentioned that she had lived in four specific countries, this would have been coded with a nationality code as these codes simply require that the client refers to the demographic variable rather than making inferences based on that demographic. Another example is an instance in which the client participant referred to her struggles with blindness as "a huge disability," which was not coded because she did not discuss blindness or disability as a cultural demographic. Thus, the nature of the codes created for this study influenced the coding frequencies, and many potential cultural worldview expressions may have gone un-coded because of the strict coding requirements for the codes included in the other (explicit) category. Moreover, the content of clients' statements were not inductively coded, as the study focused more on the salience of the dimensions of worldviews (i.e., frequency of deductive codes).

Also, since the codes for this study were created based on the tenets of an existing theory, they were subject to biases based on those theoretical assumptions. Most notably, this study was designed to measure cultural worldview expressions under the assumption that discussing trauma in which physical integrity was threatened would naturally make mortality more salient in the minds of the client participants. This assumption was based on previous TMT literature such as

studies that have shown that when people are asked to think about certain topics such as medical illness (Arndt et al., 2007) and violent conflicts (Arndt et al., 2007; Landau et al., 2004) thoughts of death become hyper-accessible. However, the present study did not actually measure the accessibility of death related thoughts of the client participants (mortality salience), compare investment in cultural worldviews with clients who did not discuss traumas, or compare statements or sessions within our traumatized client sample (e.g., compare worldview expressions during sessions in which trauma was discussed with those in which no such discussion took place); in order to assess the degree to which trauma discussions actually increased mortality salience. Thus, the untested assumption that discussion of traumatic experiences leads to increased awareness of mortality as well as an increased drive to invest in cultural worldviews could be considered a limitation of this study.

A second limitation concerns the inability of the researchers to remain neutral when analyzing the data from the perspective of a pre-existing theory. As noted by Hsieh and Shannon (2005), "an overemphasis on the theory can blind researchers to the contextual aspects of the phenomenon" (p. 1283). Thus, the researchers may have been biased in the way they interpreted the data because they might have inadvertently favored information that seemed to support the guiding theory and the predetermined coding categories. In order to minimize biases such as this, it has been recommended that studies of this nature include an audit process in which the auditor closely monitors the operational definitions for the coding categories and the coding process itself to increase accuracy (Hsieh & Shannon, 2005). As discussed in more detail in the methods chapter, the researchers adhered to this recommendation and maintained a detailed audit trail reviewed by their auditor, which included rationale for coding decisions, descriptions of group discussions, and bracketing of researcher biases. Reflective journals were also used to

bracket researcher bias, such as one instance in which the primary researcher noticed that he was making more efforts to locate worldview expressions and potentially interpreting coding definitions broadly in sessions in which less worldview expressions were made.

Researcher bias could have also affected which client participants were included in this study based on their understanding of the clients' subjective experiences of traumatic events. Since an event is only considered traumatic if it leads to subjective feelings of fear, hopelessness, or horror, the researchers were encouraged to reach agreement regarding the client's subjective experience of the trauma before including him or her in the study. Determinations regarding the clients' subjective distress were based on the clients' responses in various questionnaires as well as indications of such subjective experiences in video recordings of the therapy sessions. Still, the clients' subjective reactions to trauma are difficult to determine and a degree of personal judgment was used by the researchers. Because the researchers could have been biased in their perceptions of subjective distress, this study required that all of the researchers reached an agreement on this matter before any potential participant was included.

The subjectivity of researcher interpretations of the qualitative data also could have impacted the results. Because researcher bias is inherent in the coding process, the coders' initial impressions when coding the transcriptions were assumed to be influenced by human factors. The researcher participants occasionally interpreted statements made by the client participants differently and assigned codes differently. For example, Client Participant #1 referenced living in Compton, California in an ambiguous manner that suggested that she may have been implying a negative attribute associated with living in this area. One of the coders initially did not code this statement, stating that it was unclear if the client expressed an explicit belief about people living in this area, but admitted that she may have resisted coding the client's statement because

of her own discomfort labeling people living in this neighborhood. During discussion between researcher participants, the other two coders noted that they may have originally coded this same client statement because of their assumptions about what it means to live in this area.

Often, inter-rater disagreement resolved when the coders met to discuss their initial coding impressions. However, there were times when the coders did not reach a consensus after meeting. For example, in one instance in which the client discussed her medical concerns and stated that "a lot of people don't understand it." Two of the three coders agreed to apply a human nature code for this client's statement, which was considered a reference to the ability of people to understand this type of difficult situation. However, the remaining coder argued that this statement simply reflected the client's specific belief about people in her life rather than a belief about the nature of people in general, and did not assign it a code. As the auditor also did not code this statement, the researchers only reached an agreement of two out of four, which was not enough to officially assign a code for the final results of this study. Although the requirement that researchers reach at least a 75 percent agreement on each code strengthened the credibility of the results, it is possible that some expressions of cultural worldviews may have been overlooked because of the subjective interpretations of the transcriptions.

It is also possible that the coding system created for capturing expressions of cultural worldviews may have been limited in the way it measured the client participants' investment in cultural worldviews after mortality is made salient due to trauma discussions as would be expected according to TMT. On multiple occasions, client participants expressed personal beliefs that were assumed to likely be reflective of underlying worldviews but were not coded because the worldviews were not stated directly. For example, one of the clients reported ongoing concerns about being judged negatively by others and stated, "That's been my worst

fear all my life that people are looking at me. And it's held me back from God knows what because, you know, people are looking at me." In this case, the researchers were not able to code a stated worldview, but agreed that there was very likely a worldview about human nature that was influencing her fear of others looking at her, such as, "People are judgemental." Additionally, if the client expressed beliefs of a spiritual nature without explicitly referrencing a religious affiliation, this belief would not have been coded because it did not fit with the established coding system, and the client would have to state her spiritual beliefs as a worldview in order to be coded using a code from the other (implicit) category. Perhaps more commonly used methods for assessing investment in cultural worldviews, such as having the participant complete evaluations of essays that affirm or reject the participant's known cultural worldviews (Burke et al., 2010), may have better captured underlying cultural worldviews not stated explicitly in session and perhaps better able to compare the effectiveness of these worldviews in managing existential anxiety and potentially contributing to PTG. Also, an inductive content analysis or other form of open qualitative coding method could have been used to explore the content of beliefs in the psychotherapy context. However, the directed content analysis method was chosen in order to examine how psychotherapy clients express cultural worldview beliefs in a naturalistic manner during therapy rather than measuring responses on standardized questionnaires.

Another limitation of this study is that the client sample was only able to represent a culturally diverse population at a very minimal level. Because of the small sample size of this study, it was impossible to include participants from a large variety of cultural backgrounds. This was understood to be an inherent consequence of the qualitative approach of analyzing a limited selection of data in order to provide a rich, thorough description of that small data set

(Creswell, 2009; Denzin & Lincoln, 1998; Mertens, 2009). If this study had included a more diverse sample in regard to cultural demographics and diagnoses, the results may have been different. For example, all of the client participants in this study were female, which may have contributed significantly to the finding that gender was the most frequently expressed worldview across participants.

In addition, after the researchers had combed through the database selecting cases that fit this study's criteria for eligibility, the sample of potential client participants was to be narrowed based on discussions of trauma. Because the initial search of the database only yielded 5 participants who met the criteria for having experienced and discussing openly previous trauma as defined by this study, there was no need to narrow this sample based on cultural demographics. If it had, cultural demographic information provided in their intake paperwork provided limited descriptions of cultural variables. For example, it did not offer information regarding level of acculturation, which is related to differences in adherence to ethnocultural beliefs, values, and expectations (Schwartz, Unger, Zamboanga, & Szapocanki, 2010). Furthermore, the therapy cases used in this study were all terminated cases kept in an archived database. Therefore, the researchers were not able to interview the clients directly about any of the relevant variables of this study, including cultural worldviews.

Additionally, a lack of information regarding the therapists' cultural backgrounds was considered a limitation of this study. Although the purpose of this study was not to examine the therapists' actions, demographic information about the therapists may have been useful for examining how the cultural backgrounds of both the client and the therapist influenced the interaction between the two. For example, it may have proved interesting to examine sessions in which the client participant and the therapist were of the same racial background and compare

those findings with sessions in which the therapist and client were of different racial backgrounds. Given the lack of information about the therapists' racial identities, such inquiries were not feasible. Limited information regarding other sociocultural variables (e.g., religion/spirituality, gender, acculturation, disability, nationality), and factors of the therapeutic dyad, such as strength of therapeutic relationship and point in the course of therapy (i.e. intake, beginning stages, middle, nearing termination, or termination session), also made conclusions about the influence of such factors difficult to make. For example, one of the five sessions was an intake session, which may have influenced how the client participant interacted with her therapist (and vice versa) as this was the first time the two had met. If all of the sessions had been intake sessions, one might be able to offer more grounded hypotheses regarding the manner in which clients express worldviews in intake sessions.

Potential Contributions and Clinical Implications

While researchers in social psychology have collected an impressive amount of TMT research (Burke et al., 2010), the literature addressing the clinical implications of such a well supported theory is extremely limited. The intent of this study was to help bridge the gap between the laboratory findings of social psychology research on TMT and the naturalistic applications of the theory in therapy with clients who have experienced trauma. Drawing upon the tenets of such an extensively researched theory seems an important contribution to the clinical literature because of its meta-theoretical approach. TMT has been praised by researchers such as Navarrete and Fessler (2005) because it "unabashedly stakes claim to having identified fundamental aspects of human nature that explain a broad swath of observations about behavior and motivation" (p. 288). This researcher believes that it is appropriate to incorporate the ideas of TMT into clinical practice because of the theory's comprehensive understanding of human

motivation, and one of the major contributions of this study is that it provided a stepping stone toward incorporating a widely studied phenomenon into clinical research and practice through the development of a cultural worldviews coding system.

This study also hoped to contribute to the existing sociocultural literature regarding the clinical treatment of trauma survivors by providing a unique perspective on cultural considerations when treating this clinical population, namely TMT. Based on the TMT literature discussed in the first chapter that suggests that human beings defend against existential anxiety caused by awareness of an inevitable death by turning to their cultural worldviews, client expressions of cultural worldviews were studied in order to infer the manner in which clients express those worldviews in a naturalistic setting in which mortality is assumed to have been made salient - amidst client discussions of their trauma. As discussed earlier in this chapter, the results of this study suggest that psychotherapy clients who have experienced significant threats to physical integrity and discuss their traumatic experiences in therapy incorporate a variety of explicit and implicit cultural worldview expressions into their therapy sessions (i.e., nationality, religion, ethnicity, gender, age/generation, geographic region, sexual orientation, occupational affiliation, human nature, communalism, and meaning of life), and the expression of those worldviews appears to be influenced by multiple factors including the relevance of certain worldviews to the client, the client's cultural background, contextual factors of the session, and the involvement and style of the therapist. This study provided a glimpse into the therapy room in order to elucidate how trauma survivors actually talk about their cultural worldviews in a naturalistic setting without prompting with experimental manipulations.

By examining the coded content of this study and its findings, therapists may be able to better understand the ways in which clients turn to their cultural beliefs and affiliations as well as

what to look for during the session when listening for terror management defenses. For example, the results showed that the client participants would state beliefs about specific cultural groups that were relevant to the difficulties being discussed in the session, as with Client Participant #1 who expressed her beliefs about gender differences among men and women ten times throughout her discussion of difficulties she was having in her relationship. However, the results also showed that clients do not always reference a specific cultural group or affiliation when expressing worldviews, such as when Client Participant #5 expressed a belief about morality, stating, "I do not believe I can apply a rule to someone else unless I apply it to me." Thus, clinicians might benefit from this study through increased understanding that clients might express their worldviews in therapy sessions in both explicit and implicit ways. As asserted throughout this dissertation, this clinical implication is deemed valuable based on the TMT research that suggests that investment in cultural worldviews serves the purpose of managing existential anxiety. Thus, clinicians attempting to foster adaptive investment in worldviews for terror management purposes might find this study useful for identifying how clients discuss their worldviews in therapy, engaging clients in further discussion of those worldviews, inquiring as to which worldviews the client identifies, and seeking ongoing education and training related to engaging clients in such conversations.

In addition to provoking future discussion regarding how therapy clients turn to their worldviews in the aftermath of trauma, this study also has implications for how their therapists facilitate cultural investment. The therapists in this study made few, if any, efforts to incorporate discussions of their clients' cultural backgrounds. If this finding is reflective of therapeutic interactions throughout the field of clinical psychology, an important contribution of this study would be to promote the integration of adaptive worldviews into discussions of trauma in

therapy. From a TMT perspective, those worldviews most likely to be effective in mitigating existential anxiety are those that are relevant and valued within one's culture and prescribe a set of standards that he or she is able to meet (Pyszczynski et al., 1999). As discussed in the limitations section, it appeared that many cultural worldviews may have influenced therapeutic discussion even when they were not directly expressed, which suggests that therapist facilitation of worldview discussion may uncover some of the underlying worldviews not being expressed. Thus, this study could be used to promote future discussion regarding how clinicians assess for which worldviews provide their clients with meaning and allow them the ability to garner self-esteem by adhering to their cultural standards.

One might also argue that this study underscores the importance of incorporating cultural worldview discussions into therapy even when it may be uncomfortable for the therapist to do so because of the sensitive nature of some of these worldviews, such as religion or political affiliation. This argument might be considered especially relevant given the research that suggests that psychotherapists may avoid such topics. For example, a recent review of the literature on incorporating religion into therapy suggested that psychotherapists are less likely to consider themselves religious and less motivated to discuss religion in therapy than their clients are (Post & Wade, 2009). Additional research indicates that therapists are also hesitant to discuss their clients' race/ethnicity (Maxie, Arnold, & Stephenson, 2006). This may be influenced by the match or mismatch of certain demographic variables, such as race, gender, and religion of the client and therapist. These findings also seem to underscore the need for continued education and training on facilitating discussions of culture in therapy (especially when the therapist belongs to a majority or privileged cultural group and may lack awareness of the need to have such conversations).

Additionally, this dissertation extends the available clinical research on those who have experienced traumatic events in the form of threats to physical integrity. By providing a relatively unique clinical perspective for understanding this population, this study hoped to yield practical implications for clinicians treating trauma survivors. Specifically, practitioners may gain valuable insight regarding the importance of cultural affiliation in the aftermath of trauma given the TMT research that suggests that when people are provided the opportunity to bolster self-esteem by relating to and affirming valued cultural worldviews, the accessibility of thoughts of death, existential anxiety, and the need for distal defenses all decrease (Jonas & Fischer, 2006). It therefore stands to reason that clinicians who encourage and affirm alliance with valued, adaptive worldviews might help to facilitate growth in their clients, and bolstering clients' healthy, terror managing beliefs should reduce existential anxiety by strengthening the mechanisms which effectively manage thoughts of death. Thus, this study underscores the value of incorporating cultural discussions in therapy sessions aimed at treating posttraumatic reactions because it highlights the theoretical assertion that people defend against existential anxiety caused by reflecting on threats to physical integrity by investing in cultural worldviews that provide a sense of meaning and belonging.

Based on the tenets of TMT, this study hoped to provide a theoretical framework for understanding the function of those worldview discussions. This insight might influence clinicians' own willingness to draw upon those worldviews which help the client find meaning in his or her existence. Furthermore, clinicians might turn to TMT to better understand the functions served by client alignment with certain cultural affiliations, including those that may be maladaptive in the long run. For example, a client involved in gang activity may derive a sense of belongingness and meaning that buffers death-related anxiety yet is maladaptive overall

because it leads to criminal activity and safety concerns. TMT also acknowledges that people can defend their worldviews in manners that are maladaptive because this defensiveness manifests in derogation of others' worldviews or aggression toward those who do not share the same beliefs (Routledge & Arndt, 2009). Additionally, a client may align with a cultural affiliations that have standards and values that he or she cannot reasonably meet, such as a homosexual client who identifies with a religious denomination that explicitly renounces homosexuality. According to TMT, one derives self-esteem, which assists in buffering death-related anxiety, by living up to the standards and values of cultural worldviews (Solomon et al., 2004), and therefore, such a client could not gain needed anxiety-buffering self-esteem from aligning with this cultural group. Additionally, if one's worldview has been shattered by trauma, as has been suggested following westernization of native populations, the role of the therapist may be to help the client re-identify with those aspects of his or her traditional culture that still serve terror management functions despite the trauma incurred (Salzman, 2001). As suggested by Routledge and Arndt (2009) clinician may gain from the insights offered by TMT and encourage clients to align with those worldviews that are likely to be adaptive. Overall, this researcher hopes that this study can provide a valuable perspective for the clinical treatment of those who have experienced traumatic events, which can contribute to the existing literature on TMT, multiculturalism, and the practice of therapy.

Directions for Future Research

By qualitatively addressing the clinical applications of TMT, this study may have illuminated paths for future research. Such research might include comparative studies that measure worldview expressions among therapy clients addressing both trauma and non-trauma related concerns as well as studies comparing the effectiveness of multiple worldviews at

mitigating anxiety caused by reflecting on topics thought to increase mortality salience. Future research might also focus on measuring the accessibility of death thoughts following trauma treatment as well as the effects of various therapeutic factors on cultural worldview expressions that might mitigate death-related anxiety. These potential directions for future research are all discussed below.

One potential area of future research that this dissertation suggests would be valuable is the further study of naturalistic worldview expressions in therapy with clients who have experienced trauma. Expanding on the results of this dissertation as a means of addressing unanswered questions that emerged throughout this dissertation might prove to be very useful for clinician interested in the offerings of TMT. Specifically, future research could use methods similar to this study but with different populations to help identify if there is an increased need for investment in cultural worldviews in therapy sessions in which trauma is discussed. Research that uses the coding approach developed for this study but compares the worldview expressions of clients who discuss personal traumatic events with worldview expressions of those who do not might be quite informative. Since the coding system used in this study proved effective for capturing various cultural worldview expressions, this same system could be used to code sessions in which the client in treatment does not report any trauma history and the results of that study could be compared to the present one to test the assumption that clients reference their worldviews in part to mitigate anxiety caused by reflection on trauma.

Alternatively, this coding system could be employed to capture and compare cultural worldview expressions among a broader variety of trauma survivors than could be studied in the present study. Such research could compare worldview expressions between survivors of combat trauma and childhood sexual trauma, as well as within and across their sessions, for

example. The sample population could also be expanded to include client participants with much more cultural diversity in terms of gender, ethnicity, nationality, age, religious preferences, and so on. Future studies might also use comparative approaches to measure the effects of the point in therapy (intake vs. later sessions) on client worldview expressions. It may have proved informative to include more than one session per client participant to assess how each client expressed cultural worldviews throughout the treatment process as opposed to assuming that one session was representative of that client's overall treatment or that cultural expressions made during discussions of trauma would not have been present in sessions in which no trauma was discussed.

It might also prove interesting to expand on the present study to examine more in depth the content of worldview expressions, such as various modes. Although this study coded a variety of worldviews, such as those related to religion, nationality, and ethnicity, only codes within the main four coding categories were used to capture the content of the worldview expressions (e.g. derogation of others' worldviews, identification with one's worldviews, etc), and the codes from within the two. Other coding categories were only used to capture worldview salience/frequency rather than the content of the worldview expressions. Moreover, there were not separate codes for capturing elements such as client defensiveness while referencing worldviews. Most TMT literature suggests that people are more likely to dogmatically defend their cultural worldviews and even act in negative, socially destructive ways toward others after mortality is made salient (Jonas et al., 2002). It was beyond the scope of this study to measure client defensiveness and aggression in the context of trauma discussions, which may be a useful area of future research. Such research could also measure the degree to which clients affiliate with various cultural groups as clinical literature acknowledges that affiliation with cultural

groups such as ethnicity and sexual orientation is known to exist on a continuum (Jamil, Harper, & Fernandez, 2009). Such potential research might be accomplished through the use of self-report measures of identification with various cultural groups such as the Multigroup Ethnic Identity Measure (Phinney, 1992) or the American Identity Measure (Schwartz et al., 2012), and/or by measuring attitudes toward those affirming or threatening those groups (which is the most commonly used method of measuring worldview alignment in TMT; Burke et al., 2010) throughout the course of therapy in which clients address their traumas.

The present coding system could also be expanded to increase the ability of the codes in the other categories to capture worldview expressions. As discussed earlier, the main four coding categories were created based on previous TMT literature and because they were supported by this literature, these codes were more sensitive than those in the other categories. Based on the finding that the majority of the coded worldview expressions were captured using codes from outside the main four categories, the expansion of codes within the other coding categories may be warranted in future research. Future research could also compare findings from such deductive coding systems with inductive approaches, and further triangulated with participant interviews, to ensure that the richness of the diverse nature of worldview expressions could be captured and understood.

Also, future research might examine cultural worldview expressions among psychotherapy clients who have experienced trauma using quantitative or mixed methods. Such research might utilize surveys used in previous TMT research that measure identification with relevant worldviews such as the Multidimensional Social Transgression Scale (Florian & Mikulincer, 1997) and compare the scores of therapy clients who are participating in manualized trauma treatment and therapy clients without trauma histories. For example, because nationality

was the most frequent coding category used in the present study, researchers could ask participants from both groups (those involved in trauma treatment and those involved in treatment for non-trauma concerns) to read anti and pro-American essays and rate their agreement with each essay immediately following their therapy sessions. TMT would hypothesize that discussing trauma would prime for MS thereby increasing the need for distal defenses, and the group addressing trauma would be expected to rate the pro-American essay more favorably and the anti-American essay less favorably than the control group because of the increased need to align with one's cultural group (Americans). Researchers might also use measures of cultural identification from outside the TMT literature, such as the American Identity Measure (Schwartz et al., 2012), which was developed to measure affirmation of American cultural values and alignment with the United States. Such studies would be useful in testing the assumption that discussing traumatic experiences makes one's mortality more salient in his or her mind and increases the need for terror management defenses.

Future research might also use previously developed worldview defense methods (e.g., measuring attitudes toward an author of an essay criticizing participants' worldviews) to assess differences across clients based on the type of trauma experienced, which could help identify which worldviews might be best suited for managing anxiety caused by certain types of trauma and potentially contributing to PTG. For instance, using the same methodology as the example provided above, researchers could use measures of alignment to relevant religions, political affiliations, and ethnicities and compare the results to test if certain clients align with certain worldviews over others and if alignment with those worldviews (or the prevention of alignment) impacts anxiety or PTG.

Another approach for examining the effects of a therapy client discussing his or her trauma might include measuring the accessibility of thoughts of death during or immediately following sessions in which trauma is addressed. DTA research has suggested that thoughts of death are "hyperaccessible" following thoughts about topics associated with death such as medical illness (Arndt et al., 2007) and violent conflicts (Landau et al., 2004; Arndt et al., 2007). It therefore stands to reason that thoughts of death would be more accessible following therapy sessions in which the client addresses traumatic events that posed serious threats to physical integrity than in sessions in which the client addresses topics less likely to be associated with thoughts of death such as relationship difficulties. Additionally, certain types of trauma as well as the expression of certain worldviews may influence the accessibility of thoughts of death. Future research might employ methods used in measuring DTA such as those used by Schimel and colleagues (2007) who measured reaction times on lexical decision making tasks with a series of words that included some death-related words. If discussing traumatic events in session increased DTA, one would expect their reaction times to death-related words to be faster than the times of participants not involved in psychotherapy in which trauma is addressed. Another commonly used method for measuring DTA that could be used in future research is having the participants engage in word-fragment completion tasks (e.g. Greenberg et al., 1994), which involves completing a list of word fragments, some of which could be completed to compose either death-related words or neutral words. Future research might also use DTA measures in conjunction with measures of self-esteem to assess if certain worldview expressions serve the function of increasing self-esteem, which is thought to be a critical element in the anxiety buffering process (Solomon et al., 2004).

Another potentially beneficial direction for future research is the investigation of therapeutic factors from a TMT perspective. The present study focused solely on coding client verbalizations thought to be consistent with a TMT definition of a cultural worldview. One area left unstudied is therapists' statements during trauma discussions that might facilitate clients' investment in their worldviews. Research that examines how much therapists encourage client expressions in defense of their cultures would supplement this study well. This is especially relevant given previous research that has suggested that when people are provided with the opportunity to defend their worldviews, the accessibility of thoughts of death thought to be associated with existential anxiety decrease (Arndt et al., 1997), and preventing those for whom mortality is made salient from affirming valued worldviews may actually inhibit growth and coping (Simon et al., 1998). Thus, a study that could test out these hypotheses might include the application of codes used for capturing the therapists' statements or questions thought to facilitate the clients' discussions of their cultural worldviews. A separate set of codes could be created for instances in which the therapist asks a client a question about his or her cultural affiliations, reflections of the client's worldview expressions, statements promoting cultural worldview expressions, statements concerning the therapist's cultural worldviews, and so on in addition to the codes used in this study in order to assess the effect of therapists' facilitation of cultural worldview discussions. Transcript-based methods for assessing therapeutic alliance in sessions, such as the Collaborative Interaction Scale (Colli & Lingiardi, 2009) or sequential analysis (Sexton, Hembre, & Kvarme, 1996) could also be employed to help code interactions between the therapist and client.

Furthermore, the study of therapists' willingness to facilitate worldview discussions amidst trauma treatment could contribute to existing literature on cultural competency in therapy

with trauma survivors. Salzman (2001) and Serna (2006) both argued from a TMT standpoint that treatment of individuals who have experienced trauma (specifically, native Hawaiian, Alaskan, and Navajo populations) would benefit from therapeutic efforts to strengthen faith in traditional cultural worldviews. Future research that assesses if and how therapists actually incorporate such sociocultural advocacy into treatment could contribute to this conversation. Such research may prove especially beneficial given that therapists may be averse to incorporating certain worldview discussions into therapy that have been suggested to be particularly useful in managing anxiety associated with reminders of mortality, such as religion (Post & Wade, 2009; Vail et al., 2010).

In addition to measuring therapists' integration of cultural worldviews into therapy sessions, future research might investigate how often and in what ways therapists facilitate discussion of existential concerns including fear of death. Research on TMT and posttraumatic growth (PTG) suggests that if people reflect upon their deaths in a naturalistic manner that includes reviewing one's life and taking perspective of surviving others, they can experience PTG that includes a shift in value orientation toward more intrinsic, meaningful direction (Cozzolino et al., 2004). This notion that reflecting upon death might instigate personal growth is consistent with existential theorists such as Yalom (2008) who argue that therapists can help their clients achieve PTG through overcoming fears concerning death but often avoid such topics because of the existential fear it evokes within the therapists themselves. Therefore, examining therapists' reluctance to address underlying death concerns from a TMT perspective may contribute to TMT and existential psychology literature.

Although the intent of this study was to help bridge the gap between TMT and clinical psychology, and the suggestions for future research mentioned above largely provide direction

for continued integration of TMT principles into the clinical literature, this study may also have valuable implications for future TMT research in social psychology. The finding that the majority (56.14%) of worldview expressions that referenced a specific cultural group or affiliation were coded using codes developed for references to cultural affiliations not typically studied in the TMT literature suggests that continuing to expand research to study worldviews not yet examined may be warranted. By assessing the effects of MS on many different, unexamined worldviews, researchers could broaden the scope of investigation to examine the reach of terror management defenses. However, although this might prove interesting, Burke et al. (2010) noted in their meta-analysis that TMT researchers have studied investment in a large variety of worldviews ranging from sports teams to capitalistic values, and therefore, it is not the assertion of this author that TMT has failed to examine the effects of MS on a range of cultural worldviews but that certain worldviews appear to be over-represented in the TMT literature. What may be more valuable is research aimed at measuring the degree to which affiliation with certain cultural worldviews fulfill terror management functions relative to others.

Comparative research that examines which worldviews might be best suited for terror management purposes could be a useful direction for future TMT research. Although little current research examines the effectiveness of investment in certain worldviews rather than others, research conducted by Arndt et al. (2002) suggested that individuals are flexible with regard to which worldviews they turn to for terror management and tend to utilize worldviews that have become central to their value structure as influenced by their cultural surroundings. Thus, further research that targets sociocultural variables that promote investment in certain worldviews over others is needed. For example, future research might test the assumption that religion is particularly well suited for quelling existential anxiety (Vail et al., 2010) by

comparing investment in religion and other cultural affiliations, including worldviews about spirituality. Such research might also underscore the importance of clinicians discussing which cultural characteristics their clients identify with and value because investment in those worldviews might be most useful for managing anxiety, while at the same time, being aware and open to exploring therapists' own cultural characteristics and values, and how they impact the therapeutic relationship over time. Also, this research might add to clinical theory that suggests that living in accordance to cultural values promotes psychological well-being and meaning, such as Acceptance and Commitment Therapy (ACT) and logotherapy (Sharp et al., 2004).

Conclusion

One of the primary intentions of this study was provide a rationale for conceptualizing trauma through the lens of an empirically sound, yet underutilized, theory. TMT was used as a lens through which the data was analyzed in order to illuminate how clients who had experienced trauma in the form of threats to physical integrity incorporated discussions of cultural worldviews into their therapy, which might help mitigate the existential anxiety caused by reflections on that trauma. Multiple sections of this dissertation provide rationale for the underlying notion that there are clinical implications that may be drawn from TMT, and by taking these implications into consideration, treatment providers might be able to better understand clients who have experienced significant trauma and treat them more effectively. Furthermore, researchers might draw upon the insights of this study to further the body of literature dedicated to understanding human reactions to trauma and subsequent anxiety.

Chapter V

Summary

After the storm subsides, those who have experienced traumatic events in their lives might react in a variety of ways. Such response patterns following trauma, also known as trajectories (Bonanno, 2008), may include negative response patterns as shown among those suffering from posttraumatic stress disorder (APA, 2000) or resiliency, which is characterized by minimal disruption (Gillespie et al., 2007). Some people achieve a degree of personal growth that goes beyond a return to pre-trauma functioning and is characterized by positive psychological change as the result of reorganizing one's conceptualization of his or her phenomenological world (Tedeschi & Calhoun, 2004). This last response trajectory, known as posttraumatic growth (PTG), was of particular interest to this study and served to inform the direction of research. More specifically, this study was interested in factors that contribute to personal psychological growth and well-being from a terror management theory (TMT) perspective.

TMT, a theory based on existential philosophy, aims to account for broad swath of human motivation and behavior with the universal fear of death or nonexistence at the center of the theory (Solomon et al., 2004). This theory posits that as human beings have evolved into intelligent creatures and developed the knowledge that every person must eventually die, they have developed the ability to manage the constant fear of death that accompanies such knowledge by investing in cultural worldviews and deriving self-esteem by adhering to the standards and values prescribed by those worldviews (Solomon et al., 2004). By aligning with cultural worldviews, one is able to construe one's self as part of a meaningful universe and attach to something bigger than the individual that will outlast his or her earthly presence (Pyszczynski

et al., 1999). Stated differently, people can defend against the constant fear of death by taking advantage of the concept that while everyone must die, cultures live on.

Although TMT researchers have amassed an impressive collection of literature that includes hundreds of studies in social psychology (Burke et al., 2010), literature addressing the implications for this research for clinical purposes is virtually absent. The vast majority of TMT research tests the mortality salience (MS) hypothesis (Burke et al., 2010), which states that if one is reminded of his or her mortality, death related anxiety as well as the need for faith in one's cultural worldviews should increase accordingly (Pyszczynski et al., 1999). A few authors, such as Salzman (2001) and Serna (2006) have argued that trauma may serve to make mortality more salient in the minds of those who have experienced it and urged clinicians to consider the role of cultural worldviews in mitigating longstanding existential anxiety. Others have argued that meaning making is a critical aspect of PTG (Tedeschi & Calhoun, 2004) and by promoting aspects of one's cultural worldviews that emphasize adaptive qualities such as social connectivity (Routledge et al., 2004), intrinsic goal orientation (Cozzolino et al., 2004), prosocial behaviors (Jonas et al., 2002), and creativity (Routledge & Arndt, 2009), clinicians might assist their clients in achieving a degree of PTG.

This study sought to contribute to the clinical literature connecting the tenets of TMT to trauma treatment by investigating the manner in which clients who have experienced trauma expressed their cultural worldviews in psychotherapy sessions in which they discussed their trauma. Specifically, this study employed a directed content analysis approach to qualitatively examine cultural worldview expressions among 5 client participants who addressed their trauma in therapy. The researcher participants selected and transcribed one session for each of the client participants and systematically coded client worldview expressions from each of the transcribed

sessions based on the coding instructions outlined in the coding manual (Appendix C). The codes created for this study were based on the TMT literature reviewed in the first chapter and divided into six coding categories: religion, ethnicity, political affiliation, nationality, other (explicit), and other (implicit).

The results showed that a total of 77 codes were assigned across the five transcribed sessions. The number of worldview expressions in each session ranged from seven to 36, with a mean of 15.4 (SD=12.03). The most frequently applied codes were from the other (explicit) coding category (n=32), followed by other (implicit) (n=20), nationality (n=13), religion (n=8), and ethnicity (n=4). No codes from the political affiliation coding category were applied during the coding process. The results indicated that the frequency and type of worldview expressions varied both within and across sessions. The manner in which particular worldviews were expressed by individual client participants was discussed in detail in the results chapter.

The finding that more cultural worldview expressions were assigned codes from the other (explicit) coding category (n=32) than from the main four (religion, ethnicity, political affiliation, and nationality) coding categories combined (n=25) was of particular interest to this study because those four coding categories were originally created for this study based on the rationale that these four worldviews were the most commonly studied in the preexisting TMT literature (Burke et al., 2010). These results suggest that clients who have experienced trauma might turn to a variety of cultural worldviews not typically studied in the TMT literature. Approximately 25 percent (n=20) of the coded worldview expressions did not reference any specific cultural group or affiliation yet expressed a belief about the world thought to be culturally influenced. This finding affirmed the creation of the other (implicit) category, which was intended to capture instances in which clients expressed their cultural worldviews without

citing their cultural origins. This finding that clients discussed their worldviews amidst therapy sessions in which they addressed previous trauma also suggested that these beliefs might serve meaning making functions that promote growth following hardship, an explanation consistent with previously discussed PTG literature (e.g. Steger & Park, 2012; Tedeschi & Calhoun, 2004).

The results also showed variance in the amount and type of cultural worldview expressions that occurred across the five transcribed sessions. Multiple factors that could have accounted for this variance were considered and discussed in detail. These potentially influencing factors included differences among individual client participants, such as the relevance of particular worldviews to each client and the cultural background of each client, and their therapists. For example, it was noted that both of the clients who referenced ethnicity were of ethnic minority status, which may have made this cultural worldview more relevant to them. Contextual factors of each therapy session, such as themes discussed during session, the nature of the trauma being discussed, and the length and timing of the session may also have contributed to the variance in type and amount of worldview expressions. The therapists' cultural background, level of engagement and style were also considered, and it was noted that only one of the five therapists in this study directly facilitated any discussion of culture, a finding that was discussed as discrepant with TMT research suggesting that facilitating investment in cultural worldviews promotes decreased existential anxiety (Jonas & Fischer, 2006) as well as clinical literature advocating for cultural competency in therapy and training (e.g. Sehgal et al., 2011).

Although this dissertation was not without its limitations, including potential researcher biases in the creation of codes and interpretation of the transcribed data, the inability of the codes to capture all expressions of cultural worldviews, limited information regarding the cultural

background of the therapists, inability to compare results with clients who had not experienced trauma or draw trauma specific conclusions, and a participant sample with limited cultural diversity. Still, it was argued that this study still made valuable contributions to clinical psychology. Perhaps the most significant contribution of this study is that it encouraged ongoing conversation about the clinical implications of TMT, specifically, how this theory might inform trauma treatment and research. Thus, the present study may inspire future research bridging the gap between a well-supported social psychology theory and clinical practice. Such research might include studies comparing worldview expressions among clients addressing their traumatic histories in therapy with clients seeking therapy for non-trauma concerns, studies comparing death-thought accessibility (DTA) of clients in trauma treatment, research investigating the manner in which therapists facilitate discussions of cultural worldviews, and TMT research comparing the effectiveness of various cultural worldviews at mitigating death related anxiety. Overall, this study sought to provide a unique theoretical framework for better understanding clients seeking psychotherapeutic services that address past trauma and underscore the value of incorporating discussions of culture into therapy. It is hoped that the perspective espoused by this study and informed by TMT might enlighten clinicians to the notion that while reflection upon traumatic events might stir underlying death related anxiety, this existential fear might instigate faith in cultures that will outlast one's short existence and provide meaning and growth.

REFERENCES

Ahern, K. J. (1999). Pearls, pith, and provocation: Ten tips for reflective bracketing. *Qualitative Health Research, 9*(3), 407-411. Retrieved from: http://www.uk.sagepub.com/gray/Website%20material/Journals/whittemore.pdf

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.

Antai-Otong, D. (2002). Culture and traumatic events. *Journal of American Psychiatric Nurses Association, 8*, 203-208. doi:10.1067/mpn.2002.130227

Arndt, J., Cook, A., Goldenberg, J. L., & Cox, C. R. (2007). Cancer and the threat of death: The cognitive dynamics of death-thought suppression and its impact on behavioral health intentions. *Journal of Personality and Social Psychology, 92*(1), 12-29. doi:10.1037/0022-3514.92.1.12

Arndt, J., Cook, A., & Routledge, C. (2004). The blueprint of terror management: Understanding the cognitive architecture of psychological defense against the awareness of death. In T. Pyszczynski (Ed.), *Handbook of experimental existential psychology* (pp. 35-53). New York, NY: Guilford Press.

Arndt, J., Greenberg, J., & Cook, A. (2002). Mortality salience and the spreading activation of worldview-relevant constructs: Exploring the cognitive architecture of terror management. *Journal of Experimental Psychology: General, 131*(3), 307-324. doi:10.1037/0096-3445.131.3.307

Arndt, J., Greenberg, J., Solomon, S., Pyszczynski, T., & Simon, L. (1997). Suppression, accessibility of death-related thoughts, and cultural worldview defense: Exploring the psychodynamics of terror management. *Journal of Personality and Social Psychology, 73*(1), 5-18. doi:10.1037/0022-3514.73.1.5

Baka, L., Derbis, R., & Maxfield, M. (2012). The anxiety-buffering properties of cultural and subcultural worldviews: Terror management processes among juvenile delinquents. *Polish Psychological Bulletin, 43*(1), 1-11. doi:10.2478/v10059-012-0001-x

Banyard, V. L., Williams, L. M., Siegel, J. A., & West, C. M. (2002). Childhood sexual abuse in the lives of black women: Risk and resilience in a longitudinal study. *Women & Therapy, 25*(3-4), 45-58. doi:10.1300/J015v25n03_04

Barnett, L. (2009). *When death enters the therapeutic space: Existential perspectives in psychotherapy and counselling*. New York, NY: Routledge/Taylor & Francis Group.

Bauer, J. J., McAdams, D. P., & Sakaeda, A. R. (2005). Interpreting the good life: Growth memories in the lives of mature, happy people. *Journal of Personality and Social Psychology, 88*(1), 203-217. doi:10.1037/0022-3514.88.1.203

Ben-Ari, O., Florian, V., & Mikulincer, M. (1999). The impact of mortality salience on reckless driving: A test of terror management mechanisms. *Journal of Personality and Social Psychology, 76*(1), 35-45. doi:10.1037/0022-3514.76.1.35

Benish, S. G., Imel, Z. E., & Wampold, B. E. (2008). The relative efficacy of bona fide psychotherapies for treating post-traumatic stress disorder: A meta-analysis of direct comparisons. *Clinical Psychology Review, 28*(5), 746-758. doi:10.1016/j.cpr.2007.10.005

Besser, A., & Priel, B. (2010). Personality vulnerability, low social support, and maladaptive cognitive emotion regulation under ongoing exposure to terrorist attacks. *Journal for Social and Clinical Psychology, 29*(2), 166-201. doi:10.1521/jscp.2010.29.2.166

Bonanno, G. A. (2008). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *Psychological Trauma: Theory, Research, Practice, and Policy, S*(1), 101-113. doi:10.1037/1942-9681.S.1.101

Bracken, P. J., Giller, J. E., & Summerfield, D. (1995). Psychological responses to war and atrocity: The limitations of current concepts. *Social Science & Medicine, 40*(8), 1073-1082. doi:10.1016/0277-9536(94)00181-R

Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology, 68*(5), 748-766. doi:10.1037/0022-006X.68.5.748

Briere, J., Hodges, M., & Godbout, N. (2010). Traumatic stress, affect dysregulation, and dysfunctional avoidance: A structural equation model. *Journal of Traumatic Stress, 3*(6), 767-774. doi:10.1002/jts.20578

Briere, J., & Rickards, S. (2007). Self-awareness, affect regulation, and relatedness: Differential sequels of childhood versus adult victimization experiences. *Journal of Nervous and Mental Disease, 195*, 497–503. doi:10.1097/NMD.0b013e31803044e2

Briere, J., & Scott, C. (2006). *Principles of trauma therapy: A guide to symptoms, evaluation, and treatment.* Thousand Oaks, CA: Sage.

Briere, J., & Spinazzola, J. (2005). Phenomenology and psychological assessment of complex posttraumatic states. *Journal of Traumatic Stress, 18*(5), 401-412. doi:10.1002/jts.20048

Brown, G. I. (1969). Awareness training and creativity based on gestalt therapy. *Journal of Contemporary Psychotherapy, 2*(1), 25-32. doi:10.1007/BF02110893

Bruggimann, L., Annoni, J. M., Staub, F., von Steinbüchel, N., Van, d. L., & Bogousslavsky, J. (2006). Chronic posttraumatic stress symptoms after nonsevere stroke. *Neurology, 66*(4), 513-516. doi:10.1212/01.wnl.0000194210.98757.49

Burke, B. L., Martens, A., & Faucher, E. H. (2010). Two decades of terror management theory: A meta-analysis of mortality salience research. *Personality and Social Psychology Review, 14*(2), 155-195. doi:10.1177/1088868309352321

Burns, D. D., & Nolen-Hoeksema, S. (1991). Coping styles, homework compliance, and the effectiveness of cognitive-behavioral therapy. *Journal of Consulting and Clinical Psychology, 59*(2), 305-311. doi:10.1037/0022-006X.59.2.305

Busby, D. M., Walker, E. C., & Holman, T. B. (2011). The association of childhood trauma with perceptions of self and the partner in adult romantic relationships. *Personal Relationships, 18*(4), 547-561. doi:10.1111/j.1475-6811.2010.01316.x

Cabral, R. R., & Smith, T. B. (2011). Racial/ethnic matching of clients and therapists in mental health services: A meta-analytic review of preferences, perceptions, and outcomes. *Journal of Counseling Psychology, 58*(4), 537-554. doi:10.1037/a0025266

Cantón-Cortés, D., & Cantón, J. (2010). Coping with child sexual abuse among college students and post-traumatic stress disorder: The role of continuity of abuse and relationship with the perpetrator. *Child Abuse & Neglect, 34*(7), 496-506. doi:10.1016/j.chiabu.2009.11.004

Carson, D. K., & Becker, K. W. (2003). *Creativity in psychotherapy: Reaching new heights with individuals, couples, and families*. Binghamton, NY: Haworth Clinical Practice Press.

Choi, A., Lee, M. S., & Lim, H. (2008). Effects of group music intervention on depression, anxiety, and relationships in psychiatric patients: A pilot study. *The Journal of Alternative and Complementary Medicine, 14*(5), 567-570. doi:10.1089/acm.2008.0006

Clancy, C. P., Graybeal, A., Tompson, W. P., Badgett, K. S., Feldman, M. E., Calhoun, P. S., . . . Beckham, J. C. (2006). Lifetime trauma exposure in veterans with military-related posttraumatic stress disorder: Association with current symptomatology. *Journal of Clinical Psychiatry, 67*(9), 1346-1353. doi:10.4088/JCP.v67n0904

Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans. *American Psychologist, 54*(10), 805-816. doi:10.1037/0003-066X.54.10.805

Clauss-Ehlers, C. (2008). Sociocultural factors, resilience, and coping: Support for a culturally sensitive measure of resilience. *Journal of Applied Developmental Psychology, 29*(3), 197-212. doi:10.1016/j.appdev.2008.02.004

Clauss-Ehlers, C. S., Yang, Y. T., & Chen, W. (2006). Resilience from childhood stressors: The role of cultural resilience, ethnic identity, and gender identity. *Journal of Infant, Child, and Adolescent Psychotherapy, 5*(1), 124−138. doi:10.2513/s15289168jicap0501_7

Cohen, S., Gottlieb, B. H., & Underwood, L. G. (2000). Social relationships and health. In S. Cohen, L. G. Underwood, B. H. Gottlieb, S. Cohen, L. G. Underwood & B. H. Gottlieb (Eds.), *Social support measurement and intervention: A guide for health and social scientists* (pp. 3-25). New York, NY: Oxford University Press.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310-357. doi:10.1037/0033-2909.98.2.310

Colli, A., & Lingiardi, V. (2009). *The collaborative interactions scale: A new transcript-based method for the assessment of therapeutic alliance ruptures and resolutions in psychotherapy*. United Kingdom: Taylor & Francis. doi:10.1080/10503300903121098

Collins, S., & Arthur, N. (2010). Culture-infused counselling: A fresh look at a classic framework of multicultural counselling competencies. *Counseling Psychology Quarterly, 23*(2), 203-216. doi:10.1080/09515071003798204

Cornish, M. A., Wade, N. G., & Post, B. C. (2012). Attending to religion and spirituality in group counseling: Counselors' perceptions and practices. *Group Dynamics: Theory, Research, and Practice, 16*(2), 122-137. doi:10.1037/a0026663

Courtois, C. A. (2008). Complex trauma, complex reactions: Assessment and treatment. *Psychological Trauma: Theory, Research, Practice, and Policy, S*(1), 86-100. doi:10.1037/1942-9681.S.1.86

Cozzolino, P. J., Staples, A. D., Meyers, L. S., & Samboceti, J. (2004). Greed, death, and values: From terror management to transcendence management theory. *Personality and Social Psychology Bulletin, 30*(3), 278-292. doi:10.1177/0146167203260716

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: Sage.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed method approaches*. Thousand Oaks, CA: Sage.

Dadlani, M. B., Overtree, C., & Perry-Jenkins, M. (2012). Culture at the center: A reformulation of diagnostic assessment. *Professional Psychology: Research and Practice, 43*(3), 175-182. doi:10.1037/a0028152; 10.1037/a0028152.supp

Davis, C. G., & McKearney, J. M. (2003). How do people grow from their experience with trauma or loss? *Journal of Social and Clinical Psychology, 22*(5), 477-492. doi:10.1521/jscp.22.5.477.22928

Denzin, N. K., & Lincoln, Y. S. (1998). *Collecting and interpreting qualitative materials*. Thousand Oaks, CA: Sage.

deRoon-Cassini, T., Mancini, A. D., Rusch, M. D., & Bonanno, G. A. (2010). Psychopathology and resilience following traumatic injury: A latent growth mixture model analysis. *Rehabilitation Psychology, 55*(1), 1-11. doi:10.1037/a0018601

Dickter, C., & Gyurovski, I. (2012). The effects of expectancy violations on early attention to race in an impression-formation paradigm. *Social Neuroscience, 7*(3), 240-251. doi:10.1080/17470919.2011.609906

Driessen, E., & Hollon, S. D. (2011). Motivational interviewing from a cognitive behavioral perspective. *Cognitive and Behavioral Practice, 18*(1), 70-73. doi:10.1016/j.cbpra.2010.02.007

Ehlers, A., Bisson, J., Clark, D. M., Creamer, M., Pilling, S., Richards, D., . . . Yule, W. (2010). Do all psychological treatments really work the same in posttraumatic stress disorder? *Clinical Psychology Review, 30*(2), 269-276. doi:10.1016/j.cpr.2009.12.001

Ellis, A. (1993). Fundamentals of rational-emotive therapy for the 1990s. In L. K. Hill (Ed.), *Innovations in rational-emotive therapy* (pp. 1-32). Thousand Oaks, CA: Sage.

Ellis, A. A., Nixon, R. D., & Williamson, P. (2009). The effects of social support and negative appraisals on acute stress symptoms and depression in children and adolescents. *British Journal of Clinical Psychology, 48*, 347-361. doi:10.1348/014466508X401894

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing, 62*(1), 107-115. doi:10.1111/j.1365-2648.2007.04569.x

Erickson, S., Feldman, S. S., & Steiner, H. (1997). Defense reactions and coping strategies in normal adolescents. *Child Psychiatry and Human Development, 28*(1), 45-56. doi:10.1023/A:1025145119301

First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. W. (2002) *Structured clinical interview for DSM-IV Axis I Disorders, Research Version, Non-Patient Edition (SCID-I/NP).* Biometrics Research, New York State Psychiatric Institute, New York. Retrieved from: http://www.scid4.org/psychometric/scidI_validity.hml

Fleiss, J. L. (1971). Measuring nominal scale agreement among many raters. *Psychological Bulletin, 76*(5), 378–382. doi:10.1037/h0031619

Fleiss, J. L., Cohen, J., & Everitt, B. S. (1969). Large sample standard errors of kappa and weighted kappa. *Psychological Bulletin, 72*(5), 323-327. doi:10.1037/h0028106

Flett, G. L., & Hewitt, P. L. (2007). Cognitive and self-regulation aspects of perfectionism and their implications for treatment: Introduction to the special issue. *Journal of Rational-Emotive & Cognitive Behavior Therapy, 25*(4), 227-236. doi:10.1007/s10942-007-0054-5

Florian, V., & Mikulincer, M. (1997). Fear of death and the judgment of social transgressions: A multidimensional test of terror management theory. *Journal of Personality and Social Psychology,* 73(2), 369-380. doi:10.1037/0022-3514.73.2.369

Foa, E. B., Rothbaum, B. O., & Furr, J. M. (2003). Augmenting exposure therapy with other CBT procedures. *Psychiatric Annals, 33*(1), 47-53. Retrieved from: http://psycnet.apa.org/index.cfm?fa=search.displayRecord&uid=2003-04194-004

Ford, J. D. (2009). Dissociation in complex posttraumatic stress disorder or disorders of extreme stress not otherwise specified (DESNOS). In P. F. Dell, J. A. O'Neil, P. F. Dell, & J. A. O'Neil (Eds.), *Dissociation and the dissociative disorders: DSM-V and beyond* (pp. 471-483). New York, NY: Routledge/Taylor & Francis Group.

Fortuine, R. (1989). *Chills and fever: Health and disease in the early history of Alaska*. Anchorage, AK: University of Alaska Press.

Frankl, V. E., & Lasch, I. (1992). *Man's search for meaning: An introduction to logotherapy (4th ed.)*. Boston, MA: Beacon Press.

Frazier, P. A., & Berman, M. I. (2008). *Posttraumatic growth following sexual assault*. In S. Joseph, & P. A. Linley (Eds.), (pp. 161-181). Hoboken, NJ: John Wiley & Sons.

Friedman, M. J., Resick, P. A., Bryant, R. A., & Brewin, C. R. (2011). Considering PTSD for DSM-5. *Depression and Anxiety, 28*(9), 750-769. doi:10.1002/da.20767

Friedman, M., & Rholes, W. S. (2007). Successfully challenging fundamentalist beliefs results in increased death awareness. *Journal of Experimental Social Psychology, 43*(5), 794-801. doi:10.1016/j.jesp.2006.07.008

Friedman, M., & Rholes, W. S. (2009). Religious fundamentalism and terror management: Differences by interdependent and independent self-construal. *Self and Identity, 8*(1), 24-44. doi:10.1080/15298860801984788

Frueh, B. C., Hamner, M. B., Bernat, J. A., Turner, S. M., Keane, T. M., & Arana, G. W. (2002). Racial differences in psychotic symptoms among combat veterans with PTSD. *Depression and Anxiety, 16*, 157-161. doi:10.1002/da.10068

Gillespie, B. M., Chaboyer, W., & Wallis, M. (2007). Development of a theoretically derived model of resilience through concept analysis. *Contemporary Nurse, 25*(1-2), 124-135. doi:10.5172/conu.2007.25.1-2.124

Goldenberg, J. L., Arndt, J., Hart, J., & Routledge, C. (2008). Uncovering an existential barrier to breast self-exam behavior. *Journal of Experimental Social Psychology, 44*(2), 260-274. doi:10.1016/j.jesp.2007.05.002

Greenberg, J., Pyszczynski, T., Solomon, S., Simon, L., & Breus, M. (1994). Role of consciousness and accessibility of death-related thoughts in mortality salience effects. *Journal of Personality and Social Psychology, 67*(4), 627-637. doi:10.1037/0022-3514.67.4.627

Greenglass, E. R., & Fiksenbaum, L. (2009). Proactive coping, positive affect, and well-being: Testing for mediation using path analysis. *European Psychologist, 14*(1), 29-39. doi:10.1027/1016-9040.14.1.29

Greyson, B. (1992). Reduced death threat in near-death experiencers. *Death Studies, 16*(6), 523-536. doi:10.1080/07481189208252596

Grubaugh, A. L., & Resick, P. A. (2007). Posttraumatic growth in treatment-seeking female assault victims. *Psychiatric Quarterly, 78*(2), 145-155. doi:10.1007/s11126-006-9034-7

Gwet, K. L. (2010). *Handbook of Inter-Rater Reliability (2nd ed.).* Gaithersburg, MD: Advanced Analytics.

Haan, N. (1965). Coping and defense mechanisms related to personality inventories. *Journal of Consulting Psychology, 29*(4), 373-378. doi:10.1037/h0022410

Halloran, M. J., & Kashima, E. S. (2004). Social identity and worldview validation: The effects of ingroup identity primes and mortality salience on value endorsement. *Personality and Social Psychology Bulletin, 30*(7), 915-925. doi:10.1177/0146167204264080

Harmon-Jones, E., Simon, L., Greenberg, J., Pyszczynski, T., Solomon, S., & McGregor, H. (1997). Terror management theory and self-esteem: Evidence that increased self-esteem reduced mortality salience effects. *Journal of Personality and Social Psychology, 72*(1), 24-36. doi:10.1037/0022-3514.72.1.24

Harris, F. C., & Lahey, B. B. (1982). Recoding system bias in direct observational methodology: A review and critical analysis of factors causing inaccurate coding behavior. *Clinical Psychology Review, 4*(2), 539-556. doi:10.1016/0272-7358(82)90029-0

Hass-Cohen, N., & Findlay, J. C. (2009). Pain, attachment, and meaning making: Report on an art therapy relational neuroscience assessment protocol. *The Arts in Psychotherapy, 36*(4), 175-184. doi:10.1016/j.aip.2009.02.003

Hayes, J., Schimel, J., Arndt, J., & Faucher, E. H. (2010). A theoretical and empirical review of the death-thought accessibility concept in terror management research. *Psychological Bulletin, 136*(5), 699-739. doi:10.1037/a0020524

Hayes, J., Schimel, J., Faucher, E. H., & Williams, T. J. (2008). Evidence for the DTA hypothesis II: Threatening self-esteem increases death-thought accessibility. *Journal of Experimental Social Psychology, 44*(3), 600-613. doi:10.1016/j.jesp.2008.01.004

Heim, C., & Nemeroff, C. B. (2001). The role of childhood trauma in the neurobiology of mood and anxiety disorders: Preclinical and clinical studies. *Biological Psychiatry, 49*(12), 1023-1039. doi:10.1016/S0006-3223(01)01157-X

Heine, S. J., Harihara, M., & Niiya, Y. (2002). Terror management in Japan. *Asian Journal of Social Psychology, 5*(3), 187-196. doi:10.1111/1467-839X.00103

Hemenover, S. H. (2003). The good, the bad, and the healthy: Impacts of emotional disclosure of trauma on resilient self-concept and psychological distress. *Personality and Social Psychology Bulletin, 29*(10), 1236-1244. doi:10.1177/0146167203255228

Hernandez, P. (2002). Resilience in families and communities: Latin American contributions from the psychology of liberation. *The Family Journal: Counseling and Therapy for Couples and Families, 10*(3), 334-343. doi:10.1177/10680702010003011

Hill, P. C., Pargament, K. I., Hood, R. W., Jr., McCullough, M. E., Swyers, J. P., Larson, D. B., & Zinnbauer, B. J. (2000). Conceptualizing religion and spirituality: Points of commonality, points of departure. *Journal for the Theory of Social Behaviour, 30*(1), 51-77. doi:10.1111/1468-5914.00119

Hill, C. E., Thompson, B. J., & Williams, E. N. (1997). A guide to conducting consensual qualitative research. *The Counseling Psychologist, 25*, 517-572. doi:10.1177/0011000097254001

Hirschberger, G., Florian, V., & Mikulincer, M. (2005). Fear and compassion: A terror management analysis of emotional reactions to physical disability. *Rehabilitation Psychology, 50*(3), 246-257. doi:10.1037/0090-5550.50.3.246

Hobfoll, S. E., Palmieri, P. A., Johnson, R. J., Canetti-Nisim, D., Hall, B. J., & Galea, S. (2009). Trajectories of resilience, resistance, and distress during ongoing terrorism: The case of Jews and Arabs in Israel. *Journal of Consulting and Clinical Psychology 77*(1), 138-148. doi:10.1037/a0014360

Hopko, D. R., Lejuez, C. W., Ruggiero, K. J., & Eifert, G. H. (2003). Contemporary behavioral activation treatments for depression: Procedures, principles and progress. *Clinical Psychology Review, 23*(5), 699-717. doi:10.1016/S0272-7358(03)00070-9

Hovland, O. J. (1995). Self-defeating anxiety explored: The contribution of terror management theory and rational-emotive therapy. *Anxiety, Stress & Coping: An International Journal, 8*(2), 161-182. doi:10.1080/10615809508249371

Hsieh, H., & Shannon, S. E. (2005). Three approaches to qualitative analysis. *Qualitative Health Research, 15*(9), 1277-1288. doi:10.1177/1049732305276687

Jackson, J. S., Brown, T. N., Williams, D. R., Torres, M., Sellers, S. L., & Brown, K. (1996). Racism and the physical and mental health status of African-Americans: A 13-year

national panel study. *Ethnicity & Disease, 6*, 132-147. Retrieved from: http://www.isr.umich.edu/williams/All%20Publications/DRW%20pubs%201996/racism%20and%20the%20physical%20and%20mental%20health.pdf

Jamil, O. B., Harper, G. W., & Fernandez, M. I. (2009). Sexual and ethnic identity development among gay–bisexual–questioning (GBQ) male ethnic minority adolescents. *Cultural Diversity and Ethnic Minority Psychology, 15*(3), 203-214. doi:10.1037/a0014795

Jessop, D. C., Albery, I. P., Rutter, J., & Garrod, H. (2008). Understanding the impact of mortality-related health-risk information: A terror management theory perspective. *Personality and Social Psychology Bulletin, 34*(7), 951-964. doi:10.1177/0146167208316790

Johnson, L. A., & Caldwell, B. E. (2011). Race, gender, and therapist confidence: Effects on satisfaction with the therapeutic relationship in MFT. *American Journal of Family Therapy, 39*(4), 307-324. doi:10.1080/01926187.2010.532012

Jonas, E., & Fischer, P. (2006). Terror management and religion: Evidence that intrinsic religiousness mitigates worldview defense following mortality salience. *Journal of Personality and Social Psychology, 91*(3), 553-567. doi:10.1037/0022-3514.91.3.553

Jonas, E., Schimel, J., Greenberg, J., & Pyszczynski, T. (2002). The scrooge effect: Evidence that mortality salience increases prosocial attitudes and behavior. *Personality and Social Psychology Bulletin, 28*(10), 1342-1353. doi:10.1177/014616702236834

Joseph, S., Linley, P. A, & Harris, G. J. (2005). Understanding positive change following trauma and adversity: Structural clarification. *Journal of Loss and Trauma, 10*(1), 83-96. doi:10.1080/15325020490890741

Jospeh, S., Yule, W., Williams, R., & Hodgkinson, P. (1994). Correlates of post-traumatic stress at 30 months: The *Herald of Free Enterprise* disaster. *Behavior Research and Theory, 32*(5), 521-524. doi:10.1016/0005-7967(94)90139-2

Kasser, T., & Sheldon, K. M. (2000). Of wealth and death: Materialism, mortality salience, and consumption behavior. *Psychological Science, 11*(4), 348-351. doi:10.1111/1467-9280.00269

Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior, 43*(2), 207-222. doi:10.2307/3090197

Kim, J., Han, J. Y., Shaw, B., McTavish, F., & Gustafson, D. (2010). The roles of social support and coping strategies in predicting breast cancer patients' emotional well-being: Testing mediation and moderation models. *Journal of Health Psychology, 15*(4), 543-552. doi:10.1177/1359105309355338

Kirkpatrick, L. A., & Navarrete, C. D. (2006). Reports of my death anxiety have been greatly exaggerated: A critique of terror management theory from an evolutionary perspective. *Psychological Inquiry, 17*(4), 288-298. doi:10.1080/10478400701366969

Koltko-Rivera, M. (2004). The psychology of worldviews. *Review of General Psychology, 8*(1), 3-58. doi:10.1037/1089-2680.8.1.3

Krauss, S. E. (2005). Research paradigms and meaning making: A primer. *The Qualitative Report, 10*(4), 758-770. Retrieved from: http://www.researchgate.net/publication/224909183_Research_paradigms_and_meaning_making_A_primer/file/9fcfd4fa90696c8d99.pdf&sa=X&scisig=AAGBfm3IMRD6677cEcYgw6qiT2q-7nG_0Q&oi=scholarr

Lam, D., & Wong, G. (2005). Prodromes, coping strategies and psychological interventions in bipolar disorders. *Clinical Psychology Review, 25*(8), 1028-1042. doi:10.1016/j.cpr.2005.06.005

Landau, M. J., Solomon, S., Greenberg, J., Cohen, F., Pyszczynski, T., Arndt, J., . . . Cook, A. (2004). Deliver us from evil: The effects of mortality salience and reminders of 9/11 on support for President George W. Bush. *Personality and Social Psychology Bulletin, 30*(9), 1136-1150. doi:10.1177/0146167204267988

Landau, M. J., Solomon, S., Pyszczynski, T., & Greenberg, J. (2007). On the compatibility of terror management theory and perspectives on human evolution. *Evolutionary Psychology, 5*(3), 476-519. Retrieved from: http://www.epjournal.net/wp-content/uploads/EP05476519.pdf

Landis, J. R. & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics 33*(1): 159–174. doi:10.2307/2529310

Leung, Y. W., Alter, D. A., Prior, P. L., Stewart, D. E., Irvine, J., & Grace, S. L. (2012). Posttraumatic growth in coronary artery disease outpatients: Relationship to degree of trauma and health service use. *Journal of Psychosomatic Research, 72*(4), 293-299. doi:10.1016/j.jpsychores.2011.12.011

Levine, S. Z., Laufer, A., Stein, E., Hamama-Raz, Y., & Solomon, Z. (2009). Examining the relationship between resilience and posttraumatic growth. *Journal of Traumatic Stress, 22*(4), 282-286. doi:10.1002/jts.20409

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Beverly Hills, CA: Sage.

Littlefield, M. B. (2008). The media as a system of racialization: Exploring images of African American women and the new racism. *American Behavioral Scientist, 51*(5), 675-685. doi:10.1177/0002764207307747

Lykins, E. L. B., Segerstrom, S. C., Averill, A. J., Evans, D. R., & Kemeny, M. E. (2007). Goal shifts following reminders of mortality: Reconciling posttraumatic growth and terror

management theory. *Personality and Social Psychology Bulletin, 33*(8), 1088-1099. doi:10.1177/0146167207303015

Lyons, J. A. (1991). Strategies for assessing the potential for positive adjustment following trauma. *Journal of Traumatic Stress, 4*(1), 93-111. doi:10.1002/jts.2490040108

Maheswaran, D., & Agrawal, N. (2004). Motivational and cultural variations in mortality salience effects: Contemplations on terror management theory and consumer behavior. *Journal of Consumer Psychology (Lawrence Erlbaum Associates), 14*(3), 213-218. doi:10.1207/s15327663jcp1403_3

Martens, A., Greenberg, J., Schimel, J., & Landau, M. J. (2004). Ageism and death: Effects of mortality salience and perceived similarity to elders on reactions to elderly people. *Personality and Social Psychology Bulletin, 30*(12), 1524-1536. doi:10.1177/0146167204271185

Martin, L. L., & Tesser, A. (1996). Some ruminative thoughts. In R. S. Wyer Jr., & R. S. Wyer Jr. (Eds.), *Ruminative thoughts* (pp. 1-47). Hillsdale, NJ: Lawrence Erlbaum Associates.

Martin-Joy, J., & Vaillant, G. E. (2010). Recognizing and promoting resilience. In D. V. Jeste (Ed.), *Successful cognitive and emotional aging* (pp. 363-381). Arlington, VA: American Psychiatric.

Maxie, A. C., Arnold, D. H., & Stephenson, M. (2006). Do therapists address ethnic and racial differences in cross-cultural psychotherapy?. *Psychotherapy: Theory, Research, Practice, Training, 43*(1), 85-98. doi:10.1037/0033-3204.43.1.85

Mayers, A. M., Naples, N. A., & Nilsen, R. D. (2005). Existential issues and coping: A qualitative study of low-income women with HIV. *Psychology & Health, 20*(1), 93-113. doi:10.1080/08870440410001722949

McCabe, G. H. (2007). The healing path: A culture and community-derived indigenous therapy model. *Psychotherapy: Theory, Research, Practice, Training, 44*(2), 148-160. doi:10.1037/0033-3204.44.2.148

McGregor, H. A., Lieberman, J. D., Greenberg, J., Solomon, S., Arndt, J., Simon, L., & Pyszczynski, T. (1998). Terror management and aggression: Evidence that mortality salience motivates aggression against worldview-threatening others. *Journal of Personality and Social Psychology, 74*(3), 590-605. doi:10.1037/0022-3514.74.3.590

McNally, R. J. (2004). Conceptual problems with the DSM-IV criteria for posttraumatic stress disorder. In G. M. Rosen (Ed.), *Posttraumatic stress disorder: Issues and controversies* (pp. 1-14). New York, NY: John Wiley & Sons. doi:10.1002/9780470713570.ch1

Merriman, C., Norman, P., & Barton, J. (2007). Psychological correlates of PTSD symptoms following stroke. *Psychology, Health & Medicine, 12*(5), 592-602. doi:10.1080/13548500601162747

Mertens, D. M. (2009). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (3rd ed.). Thousand Oaks, CA: Sage.

Mikulincer, M., & Florian, V. (2002). The effects of mortality salience on self-serving attributions--evidence for the function of self-esteem as a terror management mechanism. *Basic and Applied Social Psychology, 24*(4), 261-271. doi:10.1207/S15324834BASP2404_2

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.

Miller, E. D. (2003). Reconceptualizing the role of resiliency in coping and therapy. *Journal of Loss and Trauma, 8*(4), 239-246.

Miller, W. R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior*. New York, NY: Guilford Press.

Mols, F., Vingerhoets, J. J. M., Coebergh, J. W., & van de Poll-Franse, L. V. (2009). Well-being, posttraumatic growth and benefit finding in long-term breast cancer survivors. *Psychology and Health 24*(5), 583-595. doi:10.1080/08870440701671362

Morrow, S. L. (2007). Qualitative research in counseling psychology: Conceptual foundations. *The Counseling Psychologist, 35*(2), 209-235. doi:10.1177/0011000006286990

Muraven, M., & Baumeister, R. F. (1997). Suicide, sex, terror, paralysis, and other pitfalls of reductionist self-preservation theory. *Psychological Inquiry, 8*(1), 36-40. doi:10.1207/s15327965pli0801_7

Murphy, R. T., Thompson, K. E., Murray, M., Rainey, Q., & Uddo, M. M. (2009). Effect of a motivation enhancement intervention on veterans' engagement in PTSD treatment. *Psychological Services, 6*(4), 264-278. doi:10.1037/a0017577

Navarrete, C. D., & Fessler, D. M. T. (2005). Normative bias and adaptive challenges: A relational approach to coalitional psychology and a critique of terror management theory. *Evolutionary Psychology, 3*, 297-325. Retrieved from: http://www.epjournal.net/wp-content/uploads/ep03297325.pdf

Navarrete, C. D., Kurzban, R., Fessler, D. M. T., & Kirkpatrick, L. A. (2004). Anxiety and intergroup bias: Terror management or coalitional psychology? *Group Processes & Intergroup Relations, 7*(4), 370-397. doi:10.1177/1368430204046144

Nolen-Hoeksema, S., & Davis, C. G. (1999). 'Thanks for sharing that': Ruminators and their social support networks. *Journal of Personality and Social Psychology, 77*(4), 801-814. doi:10.1037/0022-3514.77.4.801

Norris, F. H. (1992). Epidemiology of trauma: Frequency and impact of different potentially traumatic events on different demographic groups. *Journal of Consulting and Clinical Psychology, 60*(3), 409-418. doi:10.1037/0022-006X.60.3.409

Obasi, E. M., Flores, L. Y., & James-Myers, L. (2009). Construction and initial validation of the worldview analysis scale (WAS). *Journal of Black Studies, 39*(6), 937-961. doi:10.1177/0021934707305411

Olson, K. R. (2007). Why do geographic differences exist in the worldwide distribution of extraversion and openness to experience? the history of human emigration as an explanation. *Individual Differences Research, 5*(4), 275-288. Retrieved from: http://psycnet.apa.org/index.cfm?fa=search.displayRecord&UID=2007-18918-004

Orwin, R. G. (1994). Evaluating coding decisions. In H. Cooper & L. V. Hedges (Eds.), *The handbook of research synthesis* (pp. 139-162). New York, NY: The Russell Sage Foundation.

Pan, J.-Y., & Chan, C. L. W. (2007). Resilience: A new research area in positive psychology. *Psychologia, 50*(3), 164-176. doi:10.2117/psysoc.2007.164

Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice*. New York, NY: Guilford Press.

Park, C. L., & Blumberg, C. J. (2002). Disclosing trauma through writing: Testing the meaning-making hypothesis. *Cognitive Therapy and Research, 26*(5), 597-616. doi:10.1023/A:1020353109229

Pelham, B. W. (1997). Human motivation has multiple roots. *Psychological Inquiry, 8*(1), 44-47. doi:10.1207/s15327965pli0801_9

Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science, 8*(3), 162-166. doi:10.1111/j.1467-9280.1997.tb00403.x

Phillips, L. J., Francey, S. M., Edwards, J., & McMurray, N. (2009). Strategies used by psychotic individuals to cope with life stress and symptoms of illness: A systematic review. *Anxiety, Stress & Coping: An International Journal, 22*(4), 371-410. doi:10.1080/10615800902811065

Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7*(2), 156-176. doi:10.1177/074355489272003

Post, B. C., & Wade, N. G. (2009). Religion and spirituality in psychotherapy: A practice-friendly review of research. *Journal of Clinical Psychology, 65*(2), 131-146. doi:10.1002/jclp.20563

Prati, G., & Pietrantoni, L. (2009). Optimism, social support, and coping strategies as factors contributing to posttraumatic growth: A meta-analysis. *Journal of Loss and Trauma, 14,* 364-388. doi:10.1080/15325020902724271

Pratto, F., & Stewart, A. L. (2012). Group dominance and the half‐blindness of privilege. *Journal of Social Issues, 68*(1), 28-45. doi:10.1111/j.1540-4560.2011.01734.x

Pyszczynski, T., Abdollahi, A., Solomon, S., Greenberg, J., Cohen, F., & Weise, D. (2006). Mortality salience, martyrdom, and military might: The great Satan versus the axis of evil. *Personality and Social Psychology Bulletin, 32*(4), 525-537. doi:10.1177/0146167205282157

Pyszczynski, T., Greenberg, J., & Solomon, S. (1999). A dual-process model of defense against conscious and unconscious death-related thoughts: An extension of terror management theory. *Psychological Review, 106*(4), 835-845. doi:10.1037/0033-295X.106.4.835

Pyszczynski, T., Greenberg, J., & Solomon, S. (1997). Why do we need what we need? A terror management perspective on the roots of human social motivation. *Psychological Inquiry, 8*(1), 1-20. doi:10.1207/s15327965pli0801_1

Quale, A. J., & Schanke, A. K. (2010). Resilience in the face of coping with a severe physical injury: A study of trajectories of adjustment in a rehabilitation setting. *Rehabilitation Psychology, 55*(1), 12-22. doi:10.1037/a0018415

Reiland, S., & Lauterbach, D. (2008). Effects of trauma and religiosity on self-esteem. *Psychological Reports, 102*(3), 779-790. doi:10.2466/PR0.102.3.779-790

Reynolds, F., & Lim, K. H. (2007). Turning to art as a positive way of living with cancer: A qualitative study of personal motives and contextual influences. *The Journal of Positive Psychology, 2*(1), 66-75. doi:10.1080/17439760601083839

Ring, K., & Elsaesser Valarino, E. (1998). *Lessons from the light: What we can learn from the near-death experience*. New York, NY: Insight Books/Plenum Press.

Roth, S., Newman, E., Pelcovitz, D., van, d. K., & Mandel, F. S. (1997). Complex PTSD in victims exposed to sexual and physical abuse: Results from the DSM-IV field trial for posttraumatic stress disorder. *Journal of Traumatic Stress, 10*(4), 539-555. doi:10.1023/A:1024837617768

Routledge, C. D., & Arndt, J. (2009). Creative terror management: Creativity as a facilitator of cultural exploration after mortality salience. *Personality and Social Psychology Bulletin, 35*(4), 493-505. doi:10.1177/0146167208329629

Routledge, C., Arndt, J., & Sheldon, K. M. (2004). Task engagement after mortality salience: The effects of creativity, conformity and connectedness on worldview defense. *European Journal of Social Psychology, 34*(4), 477-487. doi:10.1002/ejsp.209

Routledge, C., Ostafin, B., Juhl, J., Sedikides, C., Cathey, C., & Liao, J. (2010). Adjusting to death: The effects of mortality salience and self-esteem on psychological well-being, growth motivation, and maladaptive behavior. *Journal of Personality and Social Psychology, 99*(6), 897-916. doi:10.1037/a0021431

Ruchkin, V., Schwab-Stone, M., Jones, S., Cicchetti, D. V., Koposov, R., & Vermeiren, R. (2005). Is posttraumatic stress in youth a culture-bound phenomenon? A comparison of symptom trends in selected U.S. and Russian communities. *The American Journal of Psychiatry, 162*(3), 538-544. doi:10.1176/appi.ajp.162.3.538

Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field Methods, 15*(1), 85-109. doi: 10.1177/1525822X02239569

Ryan, R. M., & Deci, E. L. (2004). Avoiding death or engaging life as accounts of meaning and culture: Comment on Pyszczynski et al. (2004). *Psychological Bulletin, 130*(3), 473-477. doi:10.1037/0033-2909.130.3.473

Şalcioğlu, E., Başoğlu, M., & Livanou, M. (2007). Effects of live exposure on symptoms of posttraumatic stress disorder: The role of reduced behavioral avoidance in improvement. *Behaviour Research and Therapy, 45*(10), 2268-2279. doi:10.1016/j.brat.2007.04.012

Salsman, J. M., Segerstrom, S. C., Brechting, E. H., Carlson, C. R., & Andrykowski, M. A. (2009). Posttraumatic growth and PTSD symptomology among colorectal cancer survivors: A 3-month longitudinal examination of cognitive processing. *Psycho-Oncology, 18*, 30-41. doi: 10.1002/pon.1367

Salzman, M. B. (2001). Cultural trauma and recovery: Perspectives from terror management theory. *Trauma, Violence, & Abuse, 2*(2), 172-191. doi:10.1177/1524838001002002005

Santa Ana, E. J., Saladin, M. E., Back, S. E., Waldrop, A. E., Spratt, E. G., McRae, A. L., . . . Brady, K. T. (2006). PTSD and the HPA axis: Differences in response to the cold pressor task among individuals with child vs. adult trauma. *Psychoneuroendocrinology, 31*(4), 501-509. doi:10.1016/j.psyneuen.2005.11.009

Sarid, O., & Huss, E. (2010). Trauma and acute stress disorder: A comparison between cognitive behavioral intervention and art therapy. *The Arts in Psychotherapy, 37*(1), 8-12. doi:10.1016/j.aip.2009.11.004

Sawyer, A., Ayers, S., & Field, A. P. (2010). Posttraumatic growth and adjustment among individuals with cancer or HIV/AIDS: A meta-analysis. *Clinical Psychology Review 30*, 436-447. 10.1016/j.cpr.2010.02.004

Schimel, J., Hayes, J., Williams, T., & Jahrig, J. (2007). Is death really the worm at the core? Converging evidence that worldview threat increases death-thought accessibility. *Journal of Personality and Social Psychology*, *92*(5), 789-803. doi:10.1037/0022-3514.92.5.789

Schwartz, S. J., Park, I. J. K., Huynh, Q., Zamboanga, B. L., Umaña-Taylor, A. J., Lee, R., . . . Agocha, V. B. (2012). The American identity measure: Development and validation across ethnic group and immigrant generation. *Identity: An International Journal of Theory and Research, 12*(2), 93-128. doi:10.1080/15283488.2012.668730

Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocanki, J. (2010). Rethinking the concept of acculturation: Implications for theory and research. *Amercian Psychologist, 65*(4), 237-251. doi:10.1037/a0019330

Scurfield, R. M., & Mackey, D. W. (2001). Racism, trauma and positive aspects of exposure to race-related experiences: Assessment and treatment implications. *Journal of Ethnic & Cultural Diversity in Social Work, 10*(1), 23-47. doi:10.1300/J051v10n01_02

Sehgal, R., Saules, K., Young, A., Grey, M. J., Gillem, A. R., Nabors, N. A., . . . Jefferson, S. (2011). Practicing what we know: Multicultural counseling competence among clinical psychology trainees and experienced multicultural psychologists. *Cultural Diversity and Ethnic Minority Psychology, 17*(1), 1-10. doi:10.1037/a0021667

Serna, A. K. (2006). The application of terror management theory to native Hawaiian well-being. *Hulili: Multidisciplinary Research on Hawaiian Well-Being, 3*(1), 127-148. Retrieved from: http://www.hawaiilibrary.net/Details.aspx?BookId=WPLBN0002096834

Sexton, H. C., Hembre, K., & Kvarme, G. (1996). The interaction of the alliance and therapy microprocess: A sequential analysis. *Journal of Consulting and Clinical Psychology, 64*(3), 471-480. doi:10.1037/0022-006X.64.3.471

Sharp, W., Schulenberg, S. E., Wilson, K. G., & Murrell, A. R. (2004). Logotherapy and acceptance and commitment therapy (ACT): An initial comparison of values-centered approaches. *International Forum for Logotherapy, 27*(2), 98-105. Retrieved from: http://psycnet.apa.org/psycinfo/2005-07414-006

Sheikh, A. I. (2008). Posttraumatic growth in trauma survivors: Implications for practice. *Counselling Psychology Quarterly 21*(1), 85-97. doi: 10.1080/09515070801896186

Showers, C. J., & Ryff, C. D. (1996). Self-differentiation and well-being in a life transition. *Personality & Social Psychology Bulletin, 22*, 448-460. doi: 10.1177/0146167296225003

Simon, L., Arndt, J., Greenberg, J., Pyszczynski, T., & Solomon, S. (1998). Terror management and meaning: Evidence that the opportunity to defend the worldview in response to mortality salience increases the meaningfulness of life in the mildly depressed. *Journal of Personality, 66*(3), 359-382. doi:10.1111/1467-6494.00016

Smith, T. B., McCullough, M. E., & Poll, J. (2003). Religiousness and depression: Evidence for a main effect and the moderating influence of stressful life events. *Psychological Bulletin, 129*(4), 614-636. doi:10.1037/0033-2909.129.4.614

Sobell, L. C., & Sobell, M. B. (2003). Using motivational interviewing techniques to talk with clients about their alcohol use. *Cognitive and Behavioral Practice, 10*(3), 214-221. doi:10.1016/S1077-7229(03)80033-0

Solomon, S., Greenberg, J., & Pyszczynski, T. (2004). The cultural animal: Twenty years of terror management theory and research. In T. Pyszczynski (Ed.), *Handbook of experimental existential psychology* (pp. 13-34). New York, NY: Guilford Press.

Sorsoli, L. (2007). Where the whole thing fell apart: Race, resilience, and the complexity of trauma. *Journal of Aggression, Maltreatment & Trauma, 14*(1/2), 99-121. doi:10.1300/J146v14n01_06

Steger, M. F., & Park, C. L. (2012). The creation of meaning following trauma: Meaning making and trajectories of distress and recovery. In R. A. McMackin, E. Newman, J. M. Fogler & T. M. Keane (Eds.), *Trauma therapy in context: The science and craft of evidence-based practice* (pp. 171-191). Washington, DC: American Psychological Association. doi:10.1037/13746-008

Stiles, W. B., Honos-Webb, L., & Knobloch, L. M. (1999). Treatment process research methods. In G. N. Holmbeck (Ed.), *Handbook of research methods in clinical psychology (2nd ed.)* (pp. 364-402). Hoboken, NJ: John Wiley & Sons.

Sugarman, D. E., Nich, C., & Carroll, K. M. (2010). Coping strategy use following computerized cognitive-behavioral therapy for substance use disorders. *Psychology of Addictive Behaviors, 24*(4), 689-695. doi:10.1037/a0021584

Taubman-Ben-Ari, O. (2004). Intimacy and risk sexual behaviour--what does it have to do with death? *Death Studies, 28*(9), 865-887. doi:10.1080/07481180490490988

Tedeschi, R. G., & Calhoun, L. G. (1995). *Trauma and transformation: Growing in the aftermath of suffering.* Thousand Oaks, CA: Sage.

Tedeschi, R. G., & Calhoun, L. G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*(3), 455-472. doi:10.1002/jts.2490090305

Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry 15*(1), 1-18. 10.1207/s15327965pli1501_01

Tedeschi, R. G., & Calhoun, L. G. (2008). Beyond the concept of recovery: Growth and the experience of loss. *Death Studies, 32*(1), 27-39. doi:10.1080/07481180701741251

Tedeschi, R. G., Calhoun, L. G., & Cann, A. (2007). Evaluating resource gain: Understanding and misunderstanding posttraumatic growth. *Applied Psychology: An International Review, 56*(3), 396-406. doi:10.1111/j.1464-0597.2007.00299.x

Tedeschi, R. G., Park, C. L., & Calhoun, L. G. (1998). *Posttraumatic growth: Positive changes in the aftermath of crisis*. Mahwah, NJ: Lawrence Erlbaum Associates.

Tedstone, J. E., & Tarrier, N. (2003). Posttraumatic stress disorder following medical illness and treatment. *Clinical Psychology Review, 23*(3), 409-448. doi: 10.1016/S0272-7358(03)00031-X

Thobaben, M. (2005). Defense mechanisms and defense levels. *Home Health Care Management & Practice, 17*(4), 330-332. doi:10.1177/1084822304274097

Trawalter, S., Todd, A. R., Baird, A. A., & Richeson, J. A. (2008). Attending to threat: Race-based patterns of selective attention. *Journal of Experimental Social Psychology, 44*(5), 1322-1327. doi:10.1016/j.jesp.2008.03.006

Tummala-Narra, P. (2007). Conceptualizing trauma and resilience across diverse contexts: A multicultural perspective. *Journal of Aggression, Maltreatment & Trauma, 14*(1), 33-53. doi:10.1300/J146v14n01_03

Tweed, R. G., & Conway, L. G. (2006). Coping strategies and culturally influenced beliefs about the world. In L. C. J. Wong (Ed.), *Handbook of multicultural perspectives on stress and coping* (pp. 133-153). Dallas, TX: Spring. doi:10.1007/0-387-26238-5_7

Vail, K. E. I., II, Arndt, J., Motyl, M., & Pyszczynski, T. (2012). The aftermath of destruction: Images of destroyed buildings increase support for war, dogmatism, and death thought accessibility. *Journal of Experimental Social Psychology, 48*(5), 1069-1081. doi:10.1016/j.jesp.2012.05.004

Vail, K. E., III, Rothschild, Z. K., Weise, D. R., Solomon, S., Pyszczynski, T., & Greenberg, J. (2010). A terror management analysis of the psychological functions of religion. *Personality and Social Psychology Review, 14*(1), 84-94. doi:10.1177/1088868309351165

Vaillant, G. E. (1992). *Ego mechanisms of defense: A guide for clinicians and researchers*. Washington, DC: American Psychiatric Association.

van der Kolk, B. A. (2001). The assessment and treatment of complex PTSD. In R. Yehuda (Ed.), *Traumatic stress.* Washington, DC: American Psychiatric Press.

Walker, D. F., Reid, H. W., O'Neill, T., & Brown, L. (2009). Changes in personal religion/spirituality during and after childhood abuse: A review and synthesis.

Psychological Trauma: Theory, Research, Practice, and Policy, 1(2), 130-145. doi:10.1037/a0016211

Walters, K. L., & Simoni, J. M. (2002). Reconceptualizing Native women's health: An "indigenist" stress-coping model. *American Journal of Public Health, 92*(4), 520-524. doi:10.2105/AJPH.92.4.520

Weathers, F. W., & Keane, T. M. (2007). The criterion a problem revisited: Controversies and challenges in defining and measuring psychological trauma. *Journal of Traumatic Stress, 20*(2), 107-121. doi:10.1002/jts.20210

Westphal, M., & Bonanno, G. A. (2007). Posttraumatic growth and resilience to trauma: Different sides of the same coin or different coins? *Applied Psychology: An International Review, 56*(3), 417-427. doi:10.1111/j.1464-0597.2007.00298.x

Williams, W. I. (2006). Complex trauma; Approaches to theory and treatment. *Journal of Loss and Trauma, 11,* 321-335. doi:10.1080/15325020600663078

Wisman, A., & Koole, S. L. (2003). Hiding in the crowd: Can mortality salience promote affiliation with others who oppose one's worldviews? *Journal of Personality and Social Psychology, 84*(3), 511-526. doi:10.1037/0022-3514.84.3.511

Yalom, I. D. (2008). *Staring at the sun: Overcoming the terror of death*. San Francisco, CA: Jossey-Bass.

Yalom, I. D. (1980). *Existential psychotherapy*. New York, NY: Basic Books.

Yin, R. K. (2006). *Case study methods*. Mahway, NJ: Lawrence Erlbaum Associates. doi:10.1037/13620-009

Zagefka, H. (2009). The concept of ethnicity in social psychological research: Definitional issues. *International Journal of Intercultural Relations, 33*(3), 228-241. doi:10.1016/j.ijintrel.2008.08.001

APPENDIX A
Client Consent Form

Pepperdine University
Counseling and Educational Clinics
Consent for Services

INITIALS

Welcome to Pepperdine University's Counseling and Educational clinics. Please read this document carefully because it will help you make an informed decision about whether to seek services here. This form explains the kinds of services our clinic provides and the terms and conditions under which services are offered. Because our clinic complies with the Health Insurance Portability and Accountability Act (HIPAA), be sure to review the Privacy Rights pamphlet that was also given to you today. It is important that you understand the information presented in this form. If you have any questions, our staff will be happy to discuss them with you.

Who We Are: Because the clinic is a teaching facility, graduate students in either the Clinical Psychology Doctorate Program or the Masters in Marriage and Family Therapy Program provide the majority of services. Our graduate student therapists are placed in the clinic for a time-limited training position, which typically lasts 8-12 months. In all cases, all therapists are supervised by a licensed clinical psychologist or a team that includes a licensed mental health professional. The clinic is housed in Pepperdine University and follows the University calendar. As a general rule, the clinic will be closed when the University is not in session. No psychological services will be provided at those times.

- I understand and agree that my services will be provided by an unlicensed graduate student therapist who will be working under the direct supervision of a licensed mental health professional.
- I understand and agree that, as required by law, my therapist may disclose any medical, psychological or personal information concerning me to his/her supervisor(s).
- I confirm that I have been provided with information on how to contact my therapist's supervisor(s) should I wish to discuss any aspects of my treatment.

I understand and agree with the above three statements. _____

Services: Based on the information you provided in your initial telephone interview, you have been referred to the professional service in our clinic

appropriate to your concern. The clinic provides the following professional psychological services:

Psychotherapy: The first few sessions of therapy involve an evaluation of your needs. At the end of the evaluation phase, a determination will be made regarding whether our services appropriately match your mental health needs. A determination will also be made regarding whether to continue with services at our clinic, or to provide you with a referral to another treatment facility more appropriate to your needs. As part of your services, you will be asked to complete questionnaires during your intake session, at periodic intervals (e.g., every fifth session), and after you have completed treatment. Psychotherapy has both benefits and risks. Risks sometimes include being asked to discuss unpleasant aspects of your life and experiencing uncomfortable feelings like sadness, guilt, anger, frustration, loneliness, and helplessness. Sometimes decisions are made in therapy that are positive for one family member and can be viewed negatively by another family member. On the other hand, psychotherapy has also been shown to have many benefits. Therapy often leads to better relationships, solutions to specific problems, and significant reduction in feelings of distress. But there are no guarantees of what you will experience. In order for therapy to be effective, a commitment to regular attendance is necessary. Frequent cancellations or missed therapy appointments may result in termination of services or a referral to an alternative treatment setting. Unless otherwise arranged, therapy sessions are scheduled once a week for 50 minutes. Educational Therapy is also offered in some of our clinics. This is an intervention that focuses on learning difficulties by addressing how circumstances in a person's life contribute to these difficulties. Educational therapy combines tutoring as well as attention to socio-emotional issues that affect learning.

Psychological Assessment: The clinic provides psychological and psycho-educational assessments. These assessments may be initiated by you, your therapist or a third party. Assessment sessions are longer than therapy sessions and can take several hours to complete. The number of sessions required for conducting the assessment will be determined based on the nature and number of tests administered. You have the right to request a copy of your assessment report and test data. You also have the right to receive feedback regarding your assessment results. However, there are some situations in which we may not be able to release test results, including test data, to you: a) When such a disclosure may cause substantial harm or misuse of the test results and test data, and/or b) When you were notified and agreed in advance and in writing that the assessment was ordered and/or paid for by a third party and that we would release your results only to that third party. The benefits of psychological assessment include a clearer understanding of your cognitive and emotional functioning. Although the risks of participating in a psychological assessment are generally no greater than the risks of counseling, test results may reveal information that may be painful and/or difficult to accept. If that is the case, we recommend that you review with the examiner options for addressing your concerns.

Consent to Video/audio taping and Observations: It is standard procedure at our clinic for sessions to be audio taped and videotaped for training/teaching and/or research purposes. **It should be noted that videotaping for teaching/training purposes is a prerequisite for receiving services at our clinic**. In addition, sessions may be observed by other therapists and/or supervisors at the clinic through the use of a one-way mirror or direct in-session observation.

- For Teaching/Training purposes, check all that apply:
  I understand and agree to _____

  _____ Video/audio taping
  _____ Direct Observation

Psychological Research: As a university based clinic, we engage in research activities in order to determine the effectiveness of our services, including client satisfaction, as well as to better understand assessment and therapy practices. Participation in research is totally voluntary and means that the forms you complete as a part of your treatment will be placed in a secure research database. Clinic staff will remove any of your identifying information (e.g., name, address, date of birth) from the written materials before they are placed in the database. You may also consent to have your taped sessions included in the research database, and if so these tapes will be used and stored in a confidential manner. Only those professors and graduate students who have received approval from the Clinic Research Committee, and who have signed confidentiality agreements, will be granted access to the database in order to conduct scholarly research. If any information from the database is involved in a published study, results will be discussed in reference to participant groups only, with no personally identifying information released. Your services do not depend on your willingness to have your written and/or taped materials included in our research database. You may also change your mind about participation in the research database at any time. While there is no direct benefit to you to have your materials placed in the database, your participation may provide valuable information to the field of psychology and psychotherapy.

Please choose from the following options (confirm your choice by initialing in the margin).

- I understand and agree that information from my services will be included in the Research Database (check all that apply).

  _____ Written Data
  _____ Videotaped Data
  _____ Audiotaped Data

OR

- I do not wish to have my information included in the Research Database. _____

- I understand and agree that I may be contacted in the future about the opportunity to participate in other specific research programs. _____

OR

- I do not wish to be contacted in the future about the opportunity to participate in other specific research programs. _____

Fees: The fee for the initial intake is nonrefundable.
Payment for services is due at the time the services are rendered. You're on going fee will be based on your income (for minors: the income of your parents) or upon your ability to pay. Once an appointment is scheduled, you will be expected to pay for it unless you provide 24-hour notice of cancellation prior to the appointment time. Please notify us of your cancellation via phone. Please do not use E-mail since we cannot guarantee a secure and confidential correspondence. Failure to pay for services may result in the termination of treatment and/or the use of an outside collection agency to collect fees. In most collection situations, the only information released is your name, the nature of services provided and amount due.
Payment for psychological assessment services: The intake fee is due at the time of the first appointment. Following this appointment, the full cost of the psychological testing will be determined. Payment in full for the psychological testing is required prior to the completion of the testing. Feedback from the testing as well as a test report will be provided after payment has been made in full. Fees for psychological testing cover: initial interview, test administration, scoring and interpretation, oral feedback of test results, and a written test report. Any additional services requested will be billed separately.

_____

After Hours and Emergency Contact: Should you need to reach your therapist during or after business hours you may leave a message on the clinic's voice-mail. The therapist will most likely return your call by the next day. Should you need to contact your therapist for an urgent matter, you may use the clinic's pager number, provided to you, to get in touch with the on-call therapist. Please be aware that the clinic is not equipped to provide emergency psychiatric services. Should you need such services, during and/or after business hours, you will be referred to more comprehensive care centers in the community.

_____

Confidentiality & Records: All communications between you and your therapist are strictly confidential and may not be disclosed to anyone outside the clinic staff without your written authorization. However, there are some situations in which disclosure is permitted or required by law, without your consent or authorization:

- Your therapist may consult with other mental health professionals regarding your case. The consultants are usually affiliated with Pepperdine University. Your therapist may also discuss your case in other teaching activities at Pepperdine, such as class discussions, presentations and exams. Every effort is made to avoid revealing your identity during such teaching activities.
- If the situation involves a serious threat of physical violence against an

identifiable victim, your therapist must take protective action, including notifying the potential victim and contacting the police.

- If your therapist suspects the situation presents a substantial risk of physical harm to yourself, others, or property he/she may be obligated to seek hospitalization for you or to contact family members or others who can help.
- If your therapist suspects that a child under the age of 18, an elder, or a dependent adult has been a victim of abuse or neglect, the law requires that he/she file a report with the appropriate protective and/or law enforcement agency.
- If you are involved in a court proceeding and a request is made for information about the services provided to you, the clinic cannot provide any information, including release of your clinical records, without your written authorization, a court order, or a subpoena.
- If you file a complaint or lawsuit against your therapist and/or the clinic, disclosure of relevant information may be necessary as part of a defense strategy.
- If a government agency is requesting the information pursuant to their legal authority (e.g., for health oversight activities), the clinic may be required to provide it for them.
- If the clinic has formal business associates who have signed a contract in which they promise to maintain the confidentiality of your information except as specifically allowed in the contract or otherwise required by law.

If such a situation arises, your therapist will make every effort to fully discuss it with you before taking any action. Disclosure will be limited to what is necessary for each situation.

Your Records: The clinic keeps your Protected Health Information in your clinical records. You may examine and/or receive a copy of your records, if you request it in writing, except when: (1) the disclosure would physically or psychologically endanger you and/or others who may or may not be referenced in the records, and/or (2) the disclosure includes confidential information supplied to the clinic by others.

HIPAA provides you with the following rights with regard to your clinical records:

- You can request to amend your records.
- You can request to restrict from your clinical records the information that we can disclose to others.
- You can request an accounting of authorized and unauthorized disclosures we have made of your clinical records.
- You can request that any complaints you make about our policies and procedures be recorded in your records.
- You have the right to a paper copy of this form, the HIPAA notice form, and the clinic's privacy policies and procedures statement.

The clinic staff is happy to discuss your rights with you. _____

Treatment & Evaluation of Minors:
As an un-emancipated minor (under the age of 18) you can consent to services subject to the involvement of your parents or guardians.

- Over the age of 12, you can consent to services if you are mature enough to participate in services and you present a serious danger to yourself and/or others or you are the alleged victim of child physical and/or sexual abuse. In some circumstances, you may consent to alcohol and drug treatment.
- Your parents or guardians may, by law, have access to your records, unless it is determined by the child's therapist that such access would have a detrimental effect on the therapist's professional relationship with the minor or if it jeopardizes the minor's physical and/or psychological well-being.
- Parents or guardians will be provided with general information about treatment progress (e.g., attendance) and they will be notified if there is any concern that the minor is dangerous to himself and/or others. For minors over the age of 12, other communication will require the minor's authorization.
- All disclosures to parents or guardians will be discussed with minors, and efforts will be made to discuss such information in advance.

_____

My signature or, if applicable, my parent(s) or guardian's signature below certifies that I have read, understood, accepted, and received a copy of this document for my records. This contract covers the length of time the below named is a client of the clinic.

_____ and/or _____

Signature of client, 18 or older
(Or name of client, if a minor)

Signature of parent or guardian

_____
Relationship to client

_____
Signature of parent or guardian

_____
Relationship to client

_____ please check here if client is a minor. The minor's parent or guardian must sign unless the minor can legally consent on his/her own behalf.

_____ _____

Clinic/Counseling Center Representative/Witness

Translator

_____

Date of signing

APPENDIX B

Therapist Consent Form

INFORMED CONSENT FOR THERAPIST PARTICIPATION IN PEPPERDINE CLINICS RESEARCH DATABASE PROJECT

1. *I, _____ , agree to participate in the research database project being conducted under the direction of Drs. Eldridge, Ellis, and Hall, in collaboration with the clinic directors. I understand that while the study will be under the supervision of these Pepperdine GSEP faculty members, other personnel who work with them may be designated to assist or act in their behalf. I understand that my participation in this research database is strictly voluntary.*

2. *One purpose of research at the Pepperdine University GSEP Clinics and Counseling Centers is to examine the effectiveness of new clinic policies and procedures that are being implemented. This is being done through standard internal clinic practices (headed by the clinic directors and the Clinic Advancement and Research Committee) as well as through the construction of a separate research database (headed by Drs. Eldridge, Ellis, and Hall). Another purpose of this research project is to create a secure database from which to conduct research projects by the faculty members and their students on other topics relevant to clinical practice.*

3. *I have been asked to participate in the research database project because I am a student therapist or intern at a GSEP Clinic or Counseling Center. Because I will be implementing the new clinic policies and procedures with my clients, my input (or participation) will provide valuable data for the research database.*

My participation in the research database project can involve two different options at this point. I can choose to participate in any or neither of these options by initialing my consent below each description of the options.
First, my participation in the research database project will involve being asked, from time to time, to fill out questionnaires about my knowledge, perceptions and reactions to clinic trainings, policies and procedures. In addition, my participation involves allowing questionnaires that I complete about my clients (e.g., treatment alliance) and/or tapes from my sessions with clients to be placed into the database.

<u>Please choose from the following options by placing your initials on the lines.</u>

- I understand and agree that the following information will be included in the Research Database (check all that apply).
  _____ Written questionnaires about my knowledge, perceptions and reactions to clinic trainings, policies and procedures
  _____ Written Data about My Clients (e.g., Therapist Working Alliance Form)
  _____ Video Data of sessions with my clients (i.e., DVD of

sessions)

_____ Audio Data of sessions with my clients (i.e., CD or cassette tapes of sessions)

OR

- I <u>do not</u> wish to have <u>any/all</u> of the above information included in the Research Database.

_____

<u>Please choose from the following options by placing your initials on the lines.</u>

- I understand and agree that I may be contacted in the future about the opportunity to participate in other specific research programs at the GSEP Clinic or Counseling Center.

_____

OR

- I <u>do not</u> wish to be contacted in the future about the opportunity to participate in other specific research programs at the GSEP Clinic or Counseling Center.

_____

4. *My participation in the study will last until I leave my position at the GSEP Clinic or Counseling Center.*

5. I understand that there is no direct benefit from participation in this project, however, the benefits to the profession of psychology and marriage and family therapy may include improving knowledge about effective ways of training therapists and implementing policies and procedures as well as informing the field about how therapy and assessments are conducted in university training clinics.

6. I understand that there are certain risks and discomforts that might be associated with this research. These risks include potential embarrassment or discomfort at having faculty review materials about my clinic practices, which may be similar to feelings about supervisors reviewing my work; however this risk is unlikely to occur since the written materials will be coded to protect your identity. Sensitive video data will be also coded to protect confidentiality, tightly secured (as explained below), and reviewed only by those researchers who sign strict confidentiality agreements.

7. I understand that I may choose not to participate in the research database project.

8. I understand that my participation is voluntary and that I may refuse to participate and/or withdraw my consent and discontinue participation in the research project at any time without prejudice to my employment in the GSEP Clinics and Counseling Centers. I also understand that there might be times that the investigators may find it necessary to end my study participation (e.g., if my client withdraws consent for participation in the research study).

9. I understand that the investigators will take all reasonable measures to protect the

confidentiality of my records and my identity will not be revealed in any publication that may result from this project.

10. The confidentiality of my records will be maintained in accordance with applicable state and federal laws. Under California law, there are exceptions to confidentiality, including suspicion that a child, elder, or dependent adult is being abused, or if an individual discloses an intent to harm him/herself or others. I understand there is a possibility that information I have provided regarding provision of clinical services to my clients, including identifying information, may be inspected and/or photocopied by officials of the Food and Drug Administration or other federal or state government agencies during the ordinary course of carrying out their functions. If I participate in a sponsored research project, a representative of the sponsor may inspect my research records.

11. The data placed in the database will be stored in locked file cabinets and password-protected computers to which only the investigators, research team members and clinic directors will have access. In addition, the information gathered may be made available to other investigators with whom the investigator collaborates in future research and who agree to sign a confidentiality agreement. If such collaboration occurs, the data will be released without any personally identifying information so that I cannot be identified, and the use of the data will be supervised by the investigators. The data will be maintained in a secure manner for an indefinite period of time for research purposes. After the completion of the project, the data will be destroyed.

12. I understand I will receive no compensation, financial or otherwise, for participating in study.

13. I understand that the investigators are willing to answer any inquiries I may have concerning the research herein described. I understand that I may contact Dr. Kathleen Eldridge at (310) 506-8559, Dr. Mesha Ellis at (310) 568-5768, or Dr. Susan Hall at (310) 506-8556 if I have other questions or concerns about this research. If I have questions about my rights as a research participant, I understand that I can contact the Chairperson of the Graduate and Professional Schools IRB, Pepperdine University at (310) 568-5600.

14. I will be informed of any significant new findings developed during the course of my participation in this research which may have a bearing on my willingness to continue in the study.

15. I understand to my satisfaction the information regarding participation in the research project. All my questions have been answered to my satisfaction. I have received a copy of this informed consent form which I have read and understand. I hereby consent to participate in the research described above.

_____ _____

Participant's signature Date

_____

Participant's name (printed)

I have explained and defined in detail the research procedure in which the participant has consented to participate. Having explained this and answered any questions, I am cosigning this form and accepting this person’s consent.

_____ _____

Researcher/Assistant signature Date

_____

Researcher/Assistant name (printed)

APPENDIX C

Coding Manual

RESEARCH PROJECT CODING MANUAL

This training manual is intended to describe the methods of participant selection, transcription, and coding that will be utilized for the team's dissertation research projects. The specific videotaped therapy sessions will be of clients and therapists at Pepperdine University GSEP clinics selected based on inclusion/exclusion criteria (e.g. individual adult clients representing diverse ethnicities, genders, religions, and presenting issues). Rebecca Dragosits, Celine Crespi-Hunt, and Christopher Ogle will be using this data for their respective dissertations to gain a more in-depth understanding of how clients who have experienced a trauma express/discuss humor, social supports, and cultural worldviews in psychotherapy. Research assistants will also assist in the participant selection and transcription processes, including the identification of discussions of trauma within videotaped psychotherapy sessions.

I. PARTICIPANT SELECTION AND IDENTIFICATION OF TRAUMA DISCUSSION: INSTRUCTIONS

Participant Selection Procedures

Step 1: Obtain a list of potential participants. The researchers should first obtain a comprehensive list of research records for clients who are no longer receiving therapy services and whose clinical records are already de-identified and entered into the research database.

Step 2: Narrowing the list based on demographic inclusion criteria. Next, researchers should narrow down the list to include clients who are at least 18 years of age, are English-speaking, and have engaged in individual therapy.

Step 3: Narrowing the list based on experiences of trauma. The list of potential research participants should then be limited only to those individuals who have experienced trauma, as noted in clinical records included in the database. For the purposes of these studies, traumatic events will be defined as:

> direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or [directly] witnessing an event that involves death, injury, or a threat to the physical integrity of another person. (APA, 2000, p. 463)

In order to meet these criteria, an individual must have directly witnessed or experienced a traumatic event and responded in fear, horror, or helplessness, as indicated on clinical records/instruments described below. Common examples of traumatic events include serious accidents or fire, life threatening combat experiences, rape or physical assault, life threatening major disasters, and seeing another person being killed or badly hurt (First et al., 2002). This definition also includes forms of trauma related to cultural or race-based factors (e.g., hate crimes involving threatened or actual assault.

Several data instruments should be used to help determine whether a potential participant has experienced a traumatic event that meets the above definition. The researchers should first look at the information presented under the Family Data section of the Client Information Adult Form (Appendix X). In this section, the client is asked to indicate "Which of the following have family members, including yourself, struggled with," and is provided with a comprehensive list of distressing and potentially traumatic situations. The researchers should look to see if the client marked "Yes- This Happened" in the "Self" column for stressors such as discrimination (e.g., hate crimes), death and loss, physical abuse, sexual abuses, rape/sexual assault, injury, debilitating illness, or disability.

Additional information from the Telephone Intake Form (Appendix X), the Intake Evaluation Summary (Appendix X), and the Treatment Summary (Appendix X) will be used to determine whether clients have experienced trauma. On the Telephone Intake Summary, for example, the Reason for Referral portion describes the client's rationale for seeking therapy; the researchers should examine this portion to see if the client reports seeking therapy for reasons associated with the experience of trauma. Various sections of the Intake Evaluation Summary will also be examined for any reference to a trauma history, including: Presenting Problem/Current Condition (Section II), History of Presenting Problem and Other Psychological Conditions (Section III), Psychosocial History (Section IV), DSM-IV-TR Multiaxial Diagnosis (Section VIII), and Treatment Recommendations (Section X). In addition, the Treatment Summary will also be reviewed for any indication that a trauma-related diagnosis had been considered or that the course of therapy involved discussing or processing trauma. The researchers must all agree that at least one of these forms clearly indicate the experience of trauma for a given client before moving on to the next step. The researchers will also use an Excel spreadsheet to track information regarding a client history of trauma found on clinic forms (see Appendix X).

Step 4: Narrowing selection based on discussions of trauma. To be included in this study, clients must openly discuss their traumatic experience(s) with their therapist in at least one recorded therapy session. The researchers for these studies should review each video recording of potential participants' therapy sessions to determine whether such a discussion took place. Based on definitions used in the literature regarding disclosures, discussions of trauma will be classified as client verbalizations that consist of the following: (a) descriptions of a traumatic event; (b) evaluative content about the traumatic event (e.g., beliefs, thoughts, attitudes); and (c) affective content (e.g., feelings and/or emotions regarding the traumatic event; Chelune, 1979; Cozby, 1973; Jourard, 1971; Omarzu, 2000; Pennebaker, Zech, & Rimé, 2001). Sessions in which discussions of trauma did take place will later be transcribed and coded. If there is more than one recorded therapy session in which a client participant engages in a discussion of trauma, only one should be chosen for transcription and analysis. That session should be selected based on the length of time in session spent discussing the trauma; that is, the session in which the client discussed the trauma for the longest length of time (compared to other sessions in which trauma was discussed) should be chosen.

Step 5: Narrowing selection based on cultural diversity. The researchers should attempt to choose culturally and demographically diverse participants who vary in age, gender, religion, and race/ethnicity. Specifically, there should be no more than four clients that identify with each of these demographic categories/groups. The researchers will determine participant's

demographic and cultural characteristics using multiple clinic forms. Specifically, the researchers should check clients' age and gender that are indicated in the Telephone Intake (Appendix E). Clients may self-indicate religion/spirituality, ethnicity or race, and disability status in the Social Cultural (Optional) section of the Client Information Adult Form (Appendix D); researchers should examine this section for information about the client's identification in these areas. Finally, researcher should look at cultural information that may be included in the Cultural Factors & Role of Religion in Client's Life portion (section F) of the Intake Evaluation Summary (Appendix F).

Procedures for Identifying Trauma Discussion

The start time should be noted on the transcription by writing the word Start and then the time in bold, highlighted (in green) brackets. When the discussion changes to a topic other than a trauma discussion, again pause the video and write the word Stop and then the time in bold, highlighted (in red) brackets.
Example: I have had a difficult marriage Start **[1:14].** Most of the time my husband hits me. Sometimes he even throws things at me… Stop **[1:45**

Introduce following sample transcription

MASTER TRAUMA TRANSCRIPTION

Laura S. Brown Therapy Session from APA Series III-Specific Treatments for Specific Populations – Working with Women Survivors of Trauma and Abuse

Confidentiality: The following is a confidential document, which may contain information that could be detrimental if used by untrained individuals. Nonconsensual disclosure by individuals not associated with Pepperdine University and the Positive Psychology PARC lab is prohibited.

Introduction: This session was included in a training video for APA, entitled, "Series II-Specific Treatments for Specific Populations," and was hosted by Jon Carlson, PsyD, EdD. The session that follows was transcribed verbatim, for the purposes of coder training for Pepperdine University as a part of the Positive Psychology PARC Lab supervised by Susan Hall, JD, PhD. This format will be followed for future transcribed sessions to be utilized in the actual research.

Therapist: Dr. Laura Brown Session Number: 1
Client: Ms. M. Date of Session:

T = Therapist; C = Client

CONFIDENTIAL VERBATIM TRANSCRIPT

Verbatim Transcript of Session	**Initial Coding Impressions**
T1: Ms. M, I want to start by thanking you for being here this afternoon. And we talked a little bit before the cameras came on about	

what you want to talk about with me today. So, why don't you tell me about that, let's start from there [therapist used open hand gesture inviting client to share].	
C1: Well, um, [client scratching under nose as talking], I have, um [client looking down], I have dealt with a lot of issues in therapy, um, but one of the issues that I really haven't talked about or really dealt with in therapy [client briefly looking off] is my relationship with my sister. She's my younger sister, um, she's three years younger than me. Um, we really are not talking. We haven't been talking [client briefly looking up] since, I think, the year 2000, since my mother passed away. We haven't, we haven't really spoken. We talk but it's very business-related when things have to get done but I really don't talk to her and I [client looking down], um, I really don't have any desire to have a relationship with her. I liked to, a part of me wants to but a part of me, um, doesn't want to because she is, um, she gets really angry, and I sense that I really can't be myself around her, um, that she, for some reason, I don't know, it might be the past that she's angry and I have no idea because I don't know [client clearing throat] and I have a sense that she doesn't know either why she's angry with me. But, um [client looking down and taking a deep sigh], she was, um, we never really got along when we were growing up. We fought a lot [client looking away and down]. I spent a lot of time with her. I grew up in a family of seven. And, um, she was very, she was always fighting with all of us. She was very angry.	
T2 : [therapist nodding] Fighting physically or verbally or both?	
C2: Start **[1:42]** Sometimes it was physical with my brothers, and, but it was verbal with me because I wouldn't I wouldn't get into fights with her because I was afraid of her because I watched how angry she would get with my brothers and my brothers were (2) they were pretty, violent too, and, um, one of my brothers, one of my younger bothers was in	

a gang, was a gang member, and she would fight with him. [therapist nodding] She, I saw her one time, um, put an iron right to his chest and when I saw these things happening, I just I grew really afraid of her. And so when we would argue I knew what she was capable of so, I I would stay clear of any like physical, anything physical with her. I would try to talk my talk my way out of it.	
T3: [therapist nodding] Mm-hmm. Were there ever times where she was physically violent with you?	
C3: Well, there was one time when we got into it and my mom was there and my father was there. Um [client sighs deeply], my mother immediately got between us [therapist nodding] and she just got us both together and said she was going to hit both of us. Um [client pressed lips], that was the only time that we were rolling on the floor and really nothing happened.	
T4: Mm-hmm [therapist nodding]	
C4: She just was, we were pulling each other's hair, and actually I was mo—I was mostly like trying to get her away from me, trying to get her off of me.	
T5: Mm-hmm [therapist nodding]	
C5: Um, but that was the only time that we got into it. I never, after that, wanted to get into any physical. I don't, I don't know why I just- she really scared me.	
T6: Yeah I kind of get a sense, and tell me if I'm reading this accurately, that it's like you saw her as having no fear…	
C6: Right [client slowly nods]	
T7: …as having no limits [slowly nodding] to what she would be willing to do.	
C7: Right [Client nods]. And that scared me.	
T8: Mm-hmm [therapist nodding]	
C8: And the verbal things that she would say to me were really scary. Like, "I'm gonna stab you, I'm gonna—" she would tell me all these things that she was gonna do to me.	
T9: Mm-hmm [therapist nodding]	
C9: And they were very detailed.	
T10: Mm-hmm [therapist nodding]	

C10: And that scared me. And the things that I saw I mean I saw her doing [client takes a deep breath in and out] being a, not being afraid of my brothers who were violent themselves. Um who were gang members who fought with weapons and that didn't scare her [client swallows]. They didn't scare her. So to me I thought she would, she would, there would be no limits to what she would do. That she…	
T11: So it sounds like [therapist scrunches up her face and squints] she feels dangerous to you [therapist nodding].	
C11: Yeah [client nods]. To this day she feels dangerous to me. And [licks lips] I had— I would go back and forth with having relationship with her. My sister has a really sweet personality. And then on the other hand, when you say something, and she interprets it as being, like she has to get on the defense…	
T12: Mm-hmm [therapist nodding]	
C12: …she, she can get really violent. And it happened more with me [client scrunches up face inquisitively] I sensed, than with more-- I, I she was real sensitive with me. Um, well that's what my nieces say that it was something historically with us.	
T13: Mm-hmm [therapist nodding]	
C13: [Client looks down] Um, but she recently had an altercation with my [client points to the side] my niece. And my niece confirmed to me that [client looks up at therapist] it wasn't me that it was my sister. And my sister has had a past with [client scratches chin] violence, like she has had a past with her husband with, with um, hitting her husband [client nods]. And I've seen her doing it.	
T14: So you know she's capable of being physically violent.	
C14: Mm-hmm	
T15: You know she has these really violent fantasies about what [client nods] she might do to you. She's had them over the years…	
C15: Mm-hmm [client nodding]	
T16: …and you experience her as not having any internal limits [therapist's hands gesture toward middle of her body], no sense of	

[therapist nodding] something that will stop her even when she might actually be in danger.	
C16: Mm-hmm [client nods] that's right, that's correct.	
T17: So it does sound like she's a pretty scary person.	
C17: [client nodding] Yeah, although, um, for a lot, [client looks up at ceiling] for a long time and still [client looks down at floor], other family members, um, that were close to her [client looks back up at therapist] didn't want to believe that about her. And so I always thought that it was me. I always felt that it was me because I, we were really close [client looks down at ground], um,	
T18: Thought that it was you like [therapist scrunches up face, squints, and puts hand up in the air] you were overreacting or—	
C18: Yeah that I was overreacting or that my sister just didn't like me for whatever reason…	
T19: Mm-hmm [therapist nodding]	
C19: …and it was— but I also sensed that they kind of protected her too. Um, (3) the, she can be really sweet she has a nice she has a really good disposition. Um, but once you get to know her she gets pretty scary and (3) [client gazes up in the air] we don't— she doesn't have a relationship really with any of my brothers [client gazes towards the floor] and my sister- my older sister who passed away they didn't get along either (3) so—	
T20: So it's not as if she really relates to anybody in the family [therapist gestures at middle of body with both hands as speaks]	
C20: [client nodding] Right, right now she does, she's not— [client gestures with both hands as speaks] she's kind of isolated, um, each family member throughout the years and for me it happened very early because I grew up with her and I had experience with her.	
T21: So, it seems like what you're saying is [therapist gestures with both hands as speaks] so here you are now today an adult and this person is still being really scary for you. [therapist nodding]	
C21: [client nods head in agreement] Yeah, she	

is and that bothers me. [both therapist and client nod heads in agreement]	
T22: It bothers you because—	
C22: It bothers me because [client gazes down toward the floor away from the therapist] uh, she can't hurt me. [client looks directly at therapist] I mean, she can't do anything to me now. I mean, if she laid a hand on me, [client looks around the room] I know that I'd be able to call the co- call the police or— [therapist nodding] um, there'd be somebody there to defend me or I could defend myself. Stop **[7:52]**	

II. TRANSCRIPTION INSTRUCTIONS
(adapted from Baylor University's Institute for Oral History - http://www3.baylor.edu/Oral_History/Styleguiderev.htm)

Research assistants will transcribe verbatim each therapy session to be included in the research to provide a format for more in-depth analysis of therapist and/or client statements to then be coded. Attached at the end of this section is a template that you will use for your transcriptions. After reading this manual and discussing questions during training, you will be asked to practice transcribing an excerpt from a Motivational Interviewing tape by William Miller. At the end of the practice, we will review with you a completed transcript to check your work and address any questions.

A good transcription should reflect as closely as possible the actual words, speech patterns, and thought patterns of the speakers. The speakers' word choice, including his/her grammar, nonverbal gestures including sighs, yawning, body movement (e.g., adjusting positions, posture etc), and speech patterns should be accurately represented. The transcriber's most important task is to render as close a replica to the actual event as possible. Accuracy, not speed, is the transcriber's goal.

When identifying who is speaking, us a "**T**" to indicate the therapist is speaking and a "**C**" to indicate the client is speaking. In addition, please use numbers to indicate how many times each person is speaking. For example, the first time the therapist speaks represent it as T1: and the second time as T2, T3, etc., and vice versa for the client (C1, C2, C3, etc.)

In addition to capturing the actual words, speech patterns and thought patterns of the speakers, we would like to try and capture some of the more important non-verbal behaviors/communication taking place between the therapist and client. In order to do so, please use parentheses with numbers inside of them to indicate pauses in a speaker's response. For example, use (3) to represent a three second pause or (10) for a ten second pause. Use this whenever there are significant pauses or moments of silence between the speakers.

When attempting to capture non-verbal behaviors/movements that are significant to the therapeutic interaction taking place, use brackets [ ] to indicate these movements and clearly state which person—the therapist or client—is performing the movement and what specifically he/she does. For example, [Client turned away from the therapist and looked down at the ground] or [Client laughs] or [Therapist sighed deeply and looked away briefly]. Only note hand gestures that have meaning. For example, the therapist gestures toward her heart when asking about how the client feels, or gestures hands toward self when asking client to say more. Do not note hand gestures that do not carry meaning, such as simply moving hands in the air while talking. Also use brackets to indicate the inability to hear/understand a word or sentence: [Unintelligible] or [Inaudible]. Please make every effort to hear and understand what is said. Sometimes you can figure out a word by the context of what the speaker is saying. If you can make an educated guess, type the closest possible approximation of what you hear, underline the questionable portion, and add two question marks in parentheses.

Example: I went to school in Maryville (??) or Maryfield (??).

If you and those you consult (i.e., other RA's) cannot make a guess as to what is said, leave a blank line and two question marks in parentheses.

Example: We'd take our cotton to Mr. _____(??)'s gin in Cameron.

If a speaker lowers his/her voice, turns away from the microphone, or speaks over another person, it may be necessary to declare that portion of tape unintelligible.

Example: When he'd say that, we'd— [unintelligible].

While there is some merit in having an absolutely verbatim tape, which includes all the feedbacks (such as Um-hm and Yeah), too many interruptions in the flow of the therapist's remarks make for tedious transcribing now and exhaustive reading later. Knowing when to include feedback sounds and when to omit them calls for very careful judgment. Usually the therapist's noises are intended to encourage the client to keep talking. Look at your transcript. If every other line or so is a therapist's feedback, go back and carefully evaluate the merit of each feedback. Don't include every feedback, especially if it interrupts the client's comments in midstream. Only if the feedback is a definite response to a point being made by the client should you include it. When in doubt, please ask the research team.

Type no more than two crutch words per occurrence. Crutch words are words, syllables, or phrases of interjection designating hesitation and characteristically used instead of pauses to allow thinking time from the speaker. They also may be used to elicit supportive feedback or simple response from the listener, such as: you know?, see?, or understand?

Use of *Uh*: The most common word used as a crutch word is *uh*. When *uh* is used by the narrator as a stalling device or a significant pause, then type *uh*. But sometimes a person will repeatedly enunciate words ending with the hard consonants with an added "uh," as in and-uh, at-uh, did-uh, that-uh, in-uh. Other examples are to-uh, of-uh, they-uh. In these instances, do **not** type *uh*.

Guggles are words or syllables used to interrupt, foreshorten, or end responses, and also as sounds of encouragement. Guggles are short sounds, often staccato, uttered by the therapist to signal his/her desire to communicate. They may be initial syllables of words or merely *oh, uh, ah*, or *er*. Spelling of specific guggles: Agreement or affirmation: uh-huh, um-hm; Disagreement: unh-uh.

For consistency, use **only** the following for exclamations:

- Uh
- Um
- Uh-huh
- Mm-hmm
- Unh-uh

Do **not** use ah, oh, er, and so forth. Pick from the list above and use what seems closest to what is being uttered.

Incomplete sentences are familiar occurrences in oral history because of its conversational nature. They are best ended with an em dash (—). Use one dash (-) for an incomplete word that is then continued (e.g., mo- mother). Interruptions should be indicated using an ellipsis (…).

Similarly, an ellipsis should be used when the person who was interrupted continues their sentence after the interruption.

Example: Interruption

T1: Do you feel like he was ignoring you or…
C2: No, I just felt like he wasn't understanding what I was saying.

Interruption and continuation

T1: He was coming toward me and I felt, I felt…
C2: Scared?
T2: …scared and confused.

Quotation Marks:

1. When a direct expression is spoken by one person (I, he, she), set apart the expression with commas, use opening and closing quotation marks, and capitalize the first letter of the first word quoted.

Example: She said, "I am going to graduate in May."

2. When a direct expression is spoken by more than one person (we, they), do not use quotation marks, but do set apart the expression with commas and do capitalize the first letter of the first word quoted.

Example: They said, What are you doing here?

3. When a thought is quoted, do not use quotation marks, but do set the thought apart by commas and capitalize the first letter of the first word quoted.
Example: I thought, Where am I?
When you have completed the transcription, please go through the session one time to make sure you have captured all the spoken data, and an additional time to ensure you have noted all the significant non-verbal behaviors.

TRANSCRIPTION TEMPLATE

CONFIDENTIAL VERBATIM TRANSCRIPT

Confidentiality: The following is a confidential document, which may contain information that could be detrimental if used by untrained individuals. Nonconsensual disclosure by individuals not associated with Pepperdine University and the Positive Psychology PARC lab is prohibited.

Session Number: Coder:
Client #: Date of Session:

C = Client
T = Therapist

Verbatim Transcript of Session	**Initial Coding Impressions**
T1:	
C1:	
T2 :	
C2:	
T3:	
C3:	
T4:	
C4:	
T5:	
C5:	

VERBATIM TRANSCRIPT FOR CODING TRAINING
William Miller Therapy Session from APA Series III-Behavioral Health and Counseling

Therapist: Dr. William Richard Miller Session Number: 1
Client: Ms. S Date of Session: xx/xx/xxxx

Introduction: This session was included in a training video for APA, entitled, "Behavioral Health and Health Counseling: William Richard Miller, PhD, Drug and Alcohol Abuse," and was hosted by Jon Carlson, PsyD, EdD. The session that follows was transcribed verbatim, for the purposes of coder training for Pepperdine University as a part of the Positive Psychology PARC Lab supervised by Susan Hall, JD, PhD. This format will be followed for future transcribed sessions to be utilized in the actual research.

T = Therapist; C = Client

Verbatim Transcript of Session	
T1: Ok, Well now that we're settled in just a little bit, um, I understand that what you wanted to talk about was alcohol and perhaps some other drugs and how that fits into some of the other things that you are dealing with in your life, so fill me in a little, what's happening?	
C1: Well, as far as the alcohol and drugs I've been in and out of recovery since 1995. I used to be basically a social drinker. I lived in Chicago 32 years and moved to California and that's when the heavy use started.	
T2: Uh-huh. [Head nodding]	
C2: A lot of that had to do with, I think, the change in lifestyle. Out there, especially where I lived, it was the Palm Springs area. A lot of people, a lot of partying, a lot of drugs. And I just kind of got into it because the people were in the environment where I was living, it—um, that's what everybody did. C2.1: I actually started cuz I was going to college, and I wanted, a girl who I was a neighbor suggested I try speed to keep me awake. She used it as a waitress and it helped her and I thought, well, and that's how I got started into that part of it. C2.2: I had been smoking marijuana for the longest time, since the eighties, but I had done nothing else. And then when I moved to California, I started drinking because I hung	

out with younger people, and we would drink, I don't mean just beers, we'd drink hard liquor.	
T3: Yeah, you get thrown along with the lifestyle	
C3: Exactly, and that was also a problem because I have an addictive personality and it's, I believe it's hereditary and it's part of other problems that I have. C3.1: It just manifested itself very quickly. I did in perhaps one year, what some people would do 3, 4, 5 years. I just crammed it all together. I got started with the speed, and then I switched to cocaine. Now, people call it crack or rock, whatever you want to call it. Free, the freebasing. You buy the, buy it in the rock form or in the powdered form, and I spent, I spend $7000 in 3 months on that.	
T4: So you're very efficient about the drug use, packing it into a short period of time.	
C4: Well I packed it in, unfortunately, I don't know if it's good or it's bad, I went from buying it from people I didn't really, trying to get what I could from wherever, to climbing up the ladder to finding the main source, so to speak. C4.1: And I was one of those people, who I'm always proud to say, I never did any sex or anything for drugs or anything like that. Now, I didn't do any, anything… prostitution, or there was a lot of girls that would, a lot of women that would do that.	
T5: [Head nodding] So it was very common.	
C5: And, I was the kind of person, I got my nose broken because I wouldn't sleep with somebody's; this one fella wanted me to sleep with him when his girlfriend was at work and I wouldn't do it so he busted my nose. That's the kind of person I am. I don't believe in, that the two have to meet. My love was drugs. I didn't need a man, I didn't need relationships. If I had the money, if I didn't have the money, I had a way to get, you know, get it through people. I had, I didn't just party you know. I partied with uh--	
T6: Contacts.	
C6: Yeah, people who used to be in the show	

business industry, so to speak. You know, or who were related, A girl that was related to a guitarist in a famous rock star's band, and I'm not gonna name names, and she unfortunately—she died of AIDS but she had the money and she had, always, there was always partying going on with her. We'd go to the hotel and party, party, party.	
T7: And you got caught up in that very quickly.	
C7: Oh, very quickly, and it's easy to I guess, if you have the personality for it, you know. And I didn't have any, and I was at a point in my life where I didn't really care about anything. And I wasn't young either. I was 32.	
T8: So it sort of felt natural to you.	
C8: It felt fun, it felt, actually, it felt good, you know. I was trying to, as they say, chase that next high. It got fun, but when I started running out of the money and I don't know how I had the stamina for it because I actually still worked, paid rent, kept a job, I did everything, well, which a lot of people can do, but for the amount of drugs and drinking I did--	
T9: Pretty remarkable--	
C9: Some people would probably not even be able to get out of bed. I'm not bragging about it. C9.1: Now, ten years later, I feel like I'm physically, I'm just kind of burnt out, you know, C9.2: I stopped doing cocaine in '95, and then I admitted myself into rehab in California that same year, and I've done it still on occasion, but I'm on medication which, thank goodness, doesn't make it where the drug has addictive properties.	
T10: Really?	
C10: Ya, I found it very interesting. I could do cocaine and put it down and not go back to it.	
T11: Which was new?	
C11: Which is something new to me, I mean, this is as recent as moving back to Chicago. [Therapist's head nodding] You know, I haven't been able, I've struggled in and out of sobriety, you know, I feel like Robert Downey,	

Jr. sometimes. [Therapist laughs] C11.1: It's like okay, but I've not, I've never gotten arrested for drugs, or for selling, you know, one of those people who was too smart to keep it in the house and you know, I even though I never had money I had the common sense of well, you don't keep it in the house, don't drive around with it, you don't drink and drive, you don't drink and use. You know, why ask yourself for trouble? C11.2: One time I had drank and drove, and that was because I was at my boyfriend's, we were out, I had an argument, and we both went our separate ways. So, I ended up having to go home inebriated. And, um, fortunately nothing happened so I was pretty lucky. C11.3: And um, I've been in and out of recovery with AA and NA and, although I love the program and I espouse to do it, they say anonymity in AA, but I think that the condition in a situation like this, it's…well, it's part of talking about recovery and addiction. And, I've worked in and out of the program, I was clean, and sober for 3 years until I moved back to Chicago. Because I had gotten myself surrounded by people in recovery. Yet, when I moved back here, I was not surrounded by people in recovery and I discovered that I was staying clean and sober for the wrong reasons. I was doing it for other people, not for myself. I was doing it to help my mother, because my mother was dying of cancer, so I tried to, I wanted to…	
T12: So the change again of, of moving--	
C12: Right, they say geographics, you are running away from yourself. But I left California for many reasons. And uh.	
T13: And coming back here in a way set off--	
C13: It set off, right. It set off everything because I felt like I had the freedom. There was nobody there, I had no sponsor, no clean and sober neighbor, nobody checking up on me so to speak to make sure I was still, I was still smoking pot. I hadn't quit marijuana and, but the alcohol was the one that really got to me. I had been, I had quit marijuana for about a 7-8	

months after I got out of recovery, but ended up getting back into that situation when I moved in, uh, out of sober living and I ended up eventually moving in keeping a roommate who was a friend of mine from my drinking and using days who was dying of AIDS. But he needed someone to take care of him. And I was going back to school at night plus working, so basically, my drug use was limited to marijuana and alcohol, sometimes doing coke or whatever. I never liked speed really because I saw people, the more they did that their teeth would rot out and, you know, it's Drain-o or rat poison, it comes in so many different colors. I've noticed it's not that big here in Illinois, in Chicago.	
T14: So when you say your in and out of recovery now, its alcohol and marijuana your talking about—and every now and then cocaine.	
C14: Right, ya, well the cocaine, basically I've stopped, ah, pretty much avoided that because the individual who introduced me to that again, I avoid seeing him at all costs…which I do for my own well being. I don't want to ride the dragon again. I don't want to go there, even though I know that if I do, I'm not going to be going there again every day. I won't be getting loaded every day because of the medication I take. But, and, he was paying for it, but I realized it was just something that I wasn't even enjoying.	
T15: So why do it?	
C15: Right, you know, to me, everybody, I believe has an addiction. We all have addictions be it food, sex, drugs, alcohol, gambling, family life, work. You know, whatever it may be, I think everybody has one, one thing at least that they crave and that in the back of their mind that they focus on and they really desire.	
T16: And you said you think you have an addictive personality--someone who easily gets drawn into things	
C16: Yeah, well right, I have been. I'm an artist, freelance artist as well, and my addiction	

used to just be drawing. As a child, I would just come home and draw, you know.	
T17: So whatever you do like that you do it intensely	
C17: Yeah, I wish I could do it to make money and do it, you know. [Therapist laughs] Get a money making idea and do like that, I'd probably be rich, it's just um, but not able to find a proper substitute, you know. At this time, I'm trying to get back into drawing and being more creative, and my personal life, though I feel so mentally, emotionally, and physically exhausted after all I've been through in my life, that all I want to do is almost not do anything. I'm trying not to focus on any addictions. I'm at the point where I'm getting tired. You almost get tired of it physically. Like, if I drink I feel, I don't get the hangovers cuz I won't even allow myself to drink enough, but physically the next day, I feel, I ache, you know I feel the hangover with the headache would manifest itself with my body aches, and I don't want to, want to get up on the…you feel as vital and I've just done so much that I'm burning out.	
T18: And you've used up your chances, huh?	
C18: Yeah, pretty much. And being single all my, which, since 1990 and not having…being blessed without having children, which I never wanted, thank God, I'm not a kid lover. I chose not to have kids also because of my husband and that was one of the reasons we also parted ways. I was happy. I'm lucky enough to where I've had my own life and I've not had to drag anybody, drag anybody down with me, you know. It did affect family members. Anytime you're, you have an addiction, people who care about you, it will, but eventually they turn you away too.	
T19: Now what is recovery for you besides not using alcohol or marijuana?	
C19: To me recovery would be going to meetings, having a sponsor, working a twelve step program, um, I still try to incorporate 12 step beliefs and behaviors in my life as far as, "Let go, Let God," the use the steps,	

resentment, a lot of people say if you're drinking and using you cannot work the steps, but I think you can use them in a behavior, method of behavior modification if you're, instead of turning to getting loaded or anger or what have you, when you have a problem in life, try to do something positive, call somebody, read if you have an AA Big Book or an NA Big Book, pick something up in there and try to read it. Try to keep yourself as close to the, that behavior as you can because it helps you to get…the closer I try to stay to meetings, even if I'm drinking, if I go to meetings it helps me from not wandering too far off track to where I'll say drink more, or just stop totally leaving in that whole lifestyle or that whole belief process.	
T20: There's a piece here which were missing before we go, which is what are you wanting to move toward? What do you--	
C20: What I want to move toward is to just be able to totally not have to drink or use. And at this point--	
T21: Which is doing nothing.	
C21: Right. Well, at this point I still enjoy my pot. I'll be the old person sitting out there smoking a joint on the steps with all my cats around me, you know, and that's okay with me, but I don't want to drink. That's what I'm trying to avoid, and I'll be, I'll go a couple weeks without drinking and then maybe I'll drink again. But it's getting to where I want it less and less again.	

III. CODING OVERVIEW

The third step of the process involves the researcher-participants engaging in the coding processes, specifically for expressions of humor (A), social support (B), and cultural worldviews (C). Operational definitions and relevant codes are discussed in this section.

A. Expressions of Humor

The first step of the coding process involves the researcher-participants coding client expressions of humor. Humor will be defined broadly to refer to "anything that people say or do that is perceived as funny and tends to make others laugh, as well as the mental processes that go into

both creating and perceiving such an amusing stimulus, and also the affective response involved in the enjoyment of it" (Martin, 2007, p 5). For the purposes of the current dissertation, verbal expressions of humor will be coded in the context of psychotherapy sessions in which a discussion of trauma occurs. Verbal expressions of humor can include, but are not limited to, jokes, anecdotes, wordplay, or use of irony.

Verbal Expressions of Humor

Humor codes and their definitions and examples are presented in the table below for the researcher-participant to use in coding transcribed sessions. Due to the complex and multidimensional nature of humor, expressions of humor will be coded along various dimensions. For example, each humorous verbalization should first be coded as either (a) Spontaneous/Reactive or (b) Productive. Expressions of humor should then be further coded as one of the following: (a) Playful/benign; (b) Aggressive/hostile; (c) Self-ridicule/deprecation; (d) Black/dark/gallows; or (e) Expression of humor not otherwise specified. Additionally, these categories are not completely mutually exclusive and it may be possible for an expression of humor to be assigned to multiple categories (e.g., aggressive *and* dark humor).

Coding System for Identifying Verbal Expressions of Humor

	Spontaneous/Reactive Humor (Code F1) ***The client recognizes and responds to humorous stimuli in the environment (e.g., reaction to therapist humor or situational/unintentional humor in environment).***	**Productive Humor** (Code F2) ***The client deliberately produces and uses humor in a situation that does not appear to be inherently humorous.***
Playful/Benign Humor (Code H1) ***The client uses humor in a playful, benign manner, containing no apparent aggressive, self-deprecatory, or dark elements.***	**Example:** [Session takes place on a stormy day; client walks in with an umbrella] T: "Beautiful day out, huh?" C: "Oh yes, days like this really make me appreciate living in Southern California!"	**Example:** C: "I'm sorry for crying so much today." T: "No need to apologize, I think it's important for you to freely express your emotions in here." C: "Yeah, well, thank goodness the red-eyed look is totally in this season."
Aggressive/Hostile Humor (Code H2) ***The client expresses***	**Example:** C: "My wife and I have been getting along better because we have decided to	**Example:** T: "So is this [activity/intervention] something you want to

humor in a way that is hostile or demeaning to others, including the therapist or regarding another person not present in the therapy room (e.g., sarcasm, satire, ridicule, teasing).	put aside our differences and focus on being responsible for the kids' sake." T: "Maybe you should share some of your secrets with Congress." C: "I think my kids have a better shot at raising themselves than that group of idiots does at learning to cooperate."	try? C: "Oh, *definitely*, doc, I'm sure it will totally cure me. You're a genius.
Self-Ridicule/Deprecation (Code H3) ***The client uses humor in a way that is self-disparaging or appears to attempt to entertain the therapist by saying or doing things at his or her own expense. Client targets his or herself as the object of humor (e.g., to put listener at ease or ingratiate him or herself to listener, to demonstrate modesty).***	**Example** T: "So the prostitution- I mean prosecution- is going well?" C: [a lawyer, in the midst of an important case] "Prosecution is going well, but prostitution is probably not an option for me- I don't think women would sleep with me even if I offered *them* money."	**Example** T: "So you were hurt when your wife called you two-faced?" C: "Well, maybe more confused than hurt- if I were two-faced, do you really think I'd choose to wear this one?"
Black/Dark/Gallows Humor (Code H4) ***The client uses humor in a way that makes fun of a life-threatening, terrifying, or disastrous situation; humor is used to treat serious, frightening, or painful subject matter in a light manner.***	**Example:** T: "So how was your recent hospital stay? Just delightful, I'm sure." C: [recently diagnosed with a terminal form of cancer] "Oh yes, a total blast. It's a shame I couldn't stay longer. You know, I've decided that I'm no longer afraid to die- I just don't want to be there when it happens."	**Example:** T: "So how was your trip home?" C: "Well, as disasters go, it was better than the Titanic, but worse than the Hindenburg. My brother is back in rehab, my parents are getting divorced, and my favorite family dog just died."
Expression of Humor Not Otherwise Specified (Code H5)	**Example:** T: "You have a unique sense of humor, you know that?" C: "Oh yeah? You're pretty	**Example** C: "I have been getting along with my roommate much better lately"

The client uses a form of humor or refers to humorous stimuli in a way that is not captured by any of the aforementioned codes.	funny yourself."	T: "Really?" C: "Yeah, the other day he told me this joke about this duck who crossed the road. He totally cracked me up."

B. Social Support

The next step in the coding process consists of the researcher-participants coding client-participant expressions of social support. For the purposes of this study, which focuses on clients' trauma experiences, social support can be defined as the interpersonal networks that are experienced or sought by an individual during or in the aftermath of traumatic events that provide, or attempt to provide, that person with tangible and/or emotional help and that are expected to contribute, either positively or negatively, to his or her posttraumatic experience. Because this study will include only psychotherapy sessions in which discussions of trauma occur, all expressions of social support within the selected sessions will be coded and analyzed in the context of the session. Therefore, for the purposes of coding client expressions of social support in this study that may not concern a threat to physical integrity, social support will also be defined as client experiences within or beliefs about interpersonal networks and relationships that are anticipated, offered or received to provide him or her with either positive or negative helping behaviors.

Social support codes and their definitions and examples are presented in the table below for the researcher-participant to use in coding transcribed sessions. However, given the conceptual overlap that occurs amongst constructs of social support, it is likely that many expressions of social support may be coded in more than one category. Once identified, expressions of social support should be placed in any of the applicable following categories (they are not mutually exclusive): (a) Received support; (b) Perceived support; (c) Extended support; (d) Support functions; (e) Support content; (f) Other.

Coding System for Identifying Client Expressions of Social Support In Psychotherapy Sessions that Involve Discussions of Trauma

Client Expressions of Social Support: *Received Support*

Codes	Descriptions	Examples
Positive received support: (Code RS1)	The client reports on support that was provided and describes it as positive (e.g., helpful, beneficial, or useful).	C: "I don't know what I would have done without my sister's help. Her encouragement was such a blessing!"
Negative received support (Code RS2)	The client describes support that was given and describes it as negative (e.g., unhelpful, unwanted, or damaging).	C: "My brother thought he was being such a big help but he just made it worse. His words were so critical."

Received support: Not Otherwise Specified (Code RS3)	The client discusses support that was received and describes it as neither positive or negative (e.g., ambivalent, impartial).	C: "The church gave us food and clothes."

Client Expressions of Social Support: *Perceived Support*

Codes	Descriptions	Examples
Positive perceived support (Code PS1)	The client speaks about beliefs about support that are positive (e.g., expectations for support to be available and effective).	C: "I just know my friends will always be there for me, ready to help me out."
Negative perceived support (Code PS2)	The client describes beliefs about support that are negative (e.g., expectations that support will not be available or will not be effective).	C: "I can't rely on anyone and I doubt I ever will."
Perceived support: Not Otherwise Specified (Code PS3)	The client reports beliefs about support that are neither positive nor negative or unspecified beliefs about support.	C: "Sometimes you can count on your friends and sometimes you can't."

Client Expressions of Social Support: *Extended Support*

Codes	Descriptions	Examples
Positive extended support: (Code ES1)	The client reports on support that he or she provided to others and describes the experience as positive (e.g., beneficial, fulfilling, meaningful).	C: "It felt so good to be needed for once! I was the person she talked to and counted on."
Negative extended support (Code ES2)	The client describes support that he or she gave to others and describes it as negative (e.g., unhelpful, burdensome, or stressful).	C: "Everyone is always relying on me for everything. I'm so sick of constantly taking care of everyone else."
Extended support: Not Otherwise Specified (Code ES3)	The client discusses support that he or she provided to others and does not distinctly specify the quality of the experience (e.g., mixed feelings, ambivalence, vague descriptions, factual or non-	C: "I get so annoyed that I have to help him but I feel better after doing it." C: "I took over the childcare duties for them."

	emotional descriptions).	

Client Expressions of Social Support: *Support Functions*

Codes	Descriptions	Examples
Support function: Esteem (Code F1)	The client reflects on words of encouragement or communication from others intended to enhance self-esteem or self-worth.	C: "Receiving that card from her let me know how special I am."
Support function: Emotional (Code F2	The client shares that others acknowledged or otherwise were responsive to his/her affective experience and expressions.	C: "He was just so understanding when I cried."
Support function: Advice/informational (Code F3)	The client acknowledges/listens to or discusses guidance, instructions or directions received from others.	C: "She told me that what happened was illegal and I should talk to a lawyer."
Support function: Feedback (Code F4)	The client talks about others' evaluations of his/her progress.	C: "My best friend told me I'm getting better every day."
Support function: Instrumental (Code F5)	The client reports on material aid or stress-related task offered and/or provided by others.	C: "My mother let us stay at her place and borrow her car."
Support function: Social companionship (Code F6)	The client describes the affiliation, belongingness, or time spent with others.	C: "When we were at the beach and laughing together, I totally forgot about how bad everything has been."

Client Expressions of Social Support: *Support Content*

Codes	Descriptions	Examples
Support content: Primary kin (Code C1)	The client describes experiences with members of his/her family of origin, spouse/partner, or children.	C: "I have a hard time talking to my parents about it."
Support content: Secondary kin (Code C2)	The client speaks about experiences with members from his/her extended family system (e.g., aunts, uncles, cousins, in-laws).	C: "My wife's parents stayed with us after the accident."
Support content: Primary friend (Code C3)	The client discusses platonic relationships which he or she considers to be	C: "My three closest friends are the guys I grew up with."

	significant (e.g., close friends).	
Support content: Secondary friend (Code C4)	The client reports on distal platonic relationships (e.g., acquaintances).	C: "I don't really talk about personal stuff with the other moms at the playgroup."
Support content: Sexual/Romantic (Code C5)	The client talks about relationships that are sexual or romantic.	C: "I've been dating this girl for about six months."
Support content: Affiliative (Code C6)	The client reflects on relationships that stem from group organizations and affiliation (e.g., religious, political, recreational, professional).	C: "The people in my hiking group have been so understanding when I've had to cancel."
Support content: Mutual aid (Code C7)	The client reports on relationships that were established specifically to exchange support (e.g., support/self-help groups; relationships with other survivors that did not pre-exist the traumatic event(s)).	C: "The women in my support group have shared so much."
Support content: Service (Code C8)	The client describes relationships with professional service providers.	C: "I just didn't connect with my previous therapist."

Client Expressions of Social Support: *Other*

Codes	Descriptions	Examples
Expression of social support not otherwise specified (Code SS)	The client expresses social support in a way that is not captured by any of the aforementioned codes.	"Even though my mother passed away, I still get so much strength from thinking of and talking to her."

C. Cultural Worldviews

The third step of the coding process involves the researcher-participants coding client discussions of cultural worldviews. In this study, *Cultural Worldview* is defined as*:* A humanly constructed symbolic conception of reality that imbues life with order, permanence, and stability; a set of standards through which individuals can attain a sense of personal value; and some hope of either literally of symbolically transcending death for those who live up to these standards of value (Pyszczynski, Greenberg, & Solomon, 1999, p. 835).

Cultural worldview codes and their definitions and examples are presented in the table below for the researcher-participant to use in coding trauma discussions in the transcribed sessions: (a) Religion, (b) Ethnicity, (c) Political Affiliation, (d) Nationality, and (e) Other.

Coding System for Identifying Client Discussions of Cultural Worldviews

Identifying Discussions of Cultural Worldviews: *Religion*

Codes	Descriptions	Examples
Religious Group or Denomination (Code R1)	The client refers to his or her religious identification	C: "As a Christian, I feel that giving to charity is important."
Religious Practice (Code R2)	The client discusses an event or practice that he or she engages in for religious purposes	C: "I am fasting because it's Ramadan."
Vague Reference to Religion (Code R3)	The client uses a generic term when referring to his or her religious ideology	C: "I am thankful for my faith because I feel like it has helped me get through this hard time."
Others' Religion (Code R4)	The client discusses the religious identification or practices of others in a neutral or positive manner	C: "My friend and his family believe in reincarnation."
Religious Derogation (Code R5)	The client speaks negatively about the religious views or practices of others	C: "I think people who believe in God are just unintelligent and easily manipulated."
Religious Discussion Not Otherwise Specified (Code R6)	The client discusses religion in a way that is not captured by any of the aforementioned codes	C: "Lately, I have found myself intrigued by various religions."

*Note: This study is interested in discussions concerning religion rather than spirituality. However, some statements could be considered discussions of beliefs or practices that are both spiritual and religious (e.g. prayer). Client statements that seem to convey a belief or practice that is both religious and spiritual will be coded with the appropriate religious code.

Identifying Discussions of Cultural Worldviews: *Ethnicity*

Codes	Descriptions	Examples
Ethnic Identification (Code E1)	The client references his or her ethnic group or identification	C: "Since I am an African American, I feel like I have had to work hard to overcome certain stereotypes."
Ethnic Cultural Practice	The client discusses an	C: "I am excited to visit

(Code E2)	event or practice that he or she engages in because he or she is a member of a specific ethnic group	my family for our annual Chinese New Year celebration."
Vague Reference to Ethnicity (Code E3)	The client uses a generic word or term when referring to his or her ethnic group	C: "My people have been through so many struggles that continue to affect our behaviors."
Others' Ethnicity (Code E4)	The client discusses other ethnic populations in a neutral or positive manner	C: "I visited my friend, and she is Native American and makes really good traditional fry bread."
Ethnic Derogation (Code E5)	The client speaks negatively about an ethnic group or groups that are different from the client's ethnic identification	C: "Those people (referring to an ethnic group) are responsible for most of the crime in this country."
Ethnic Discussion Not Otherwise Specified (Code E6)	The client discusses ethnicity in a way that is not captured by any of the aforementioned codes	C: "I wish people could see past the color of a person's skin."

Identifying Discussions of Cultural Worldviews: *Political Affiliation*

Codes	Descriptions	Examples
Political Party or Identification (Code P1)	The client references his or her political party or identification	C: "As a libertarian, I think the government should be limited."
Political Action or Practice (Code P2)	The client discusses an event or practice that he or she engages in for political purposes	C: "I am planning to attend the governor's rally this weekend."
Vague Reference to Political Affiliation (Code P3)	The client uses a generic word or term when referring to his or her political affiliation	C: "All of us on the left are upset over the plan to decrease spending on education."
Others' Political Affiliation (Code P4)	The client discusses the political identification of others in a neutral or positive manner	C: "My dad is an independent so he doesn't really tend to have extreme political views."
Political Derogation (Code P5)	The client speaks negatively about the political parties or affiliations of others	C: "If it wasn't for the democrats trying to corrupt the values that we grew up with, this

		country would be in a better place."
Political Affiliation Discussion Not Otherwise Specified (Code P6)	The client discusses politics in a way that is not captured by any of the aforementioned codes	C: "I have been arguing with my wife a lot because I am very pro-life and she is pro-choice."

Identifying Discussions of Cultural Worldviews: *Nationality*

Codes	Descriptions	Examples
Nationality Identification (Code N1)	The client references his or her nationality	C: "I am proud to be an American and to have certain freedoms that people in other countries might not have."
Nationalistic Practice (Code N2)	The client discusses an event or practice that he or she engages in because he or she seems connected to a particular country	C: "I will visit my family in Mexico to celebrate Cinco De Mayo."
Vague Reference to Nationality (Code N3)	The client uses a generic word or term when referring to his or her nationality	C: "It will be nice to go home and spend time with some other Kiwis."
Others' Nationality (Code N4)	The client discusses other nationalities in a neutral or positive manner	C: "In general, I found the Canadians to be very polite and friendly."
Nationalistic Derogation (Code N5)	The client speaks negatively about nationalities that are different from the client's nationalistic identification	C: "After the terrorist attacks, I don't think we should let anyone from Afghanistan into our country."
Nationality Discussion Not Otherwise Specified (Code N6)	The client discusses nationality in a way that is not captured by any of the aforementioned codes	C: "I love watching the Olympics and seeing most of the world's countries come together in sport."

Identifying Discussions of Cultural Worldviews: *Other (Explicit)*

Codes	Descriptions	Examples
Geographic Region (Code OE1)	The client refers to a region within a country as a cultural characteristic	C: "I'm from the South, so I was raised to always hold the door for women."
Occupational Affiliation	The client refers to a job,	C: "Us psychologists

(Code OE2)	career, or occupation as a cultural characteristic	always seem to have a hard time avoiding treating our loved ones like clients."
Institutional Affiliation (Code OE3)	The client refers to an affiliation with and organized institution as a cultural characteristic	C: "All the students at State University are only in school for the parties."
Gender (Code OE4)	The client refers to gender as a cultural characteristic	C: "I was taught from a very early age that men are supposed to be strong and not cry."
Sexual Orientation (Code OE5)	The client refers to sexual orientation as a cultural characteristic	C: "Since I'm gay, I am expected to be more sensitive and effeminate."
Cultural Affiliation Not Otherwise Specified (Code OE6)	The client refers to any cultural characteristic not captured by any of the aforementioned codes as a way of seems consistent with the study's definition of a cultural worldview	C: "People on my planet think it's ridiculous that you earthlings feel the need to work 40 hours a week."

Identifying Discussions of Cultural Worldviews: *Other (Implicit)*

Codes	**Descriptions**	**Examples**
Physical Universe (Code OI1)	The client refers to a belief about the ontology or purpose of the physical universe or the cosmos	C: "I was walking outside on a clear night and felt very small as I looked up at the stars and thought about how we all started from the same cosmic event."
Communalism (Code OI2)	The client refers to a belief about the role of individuals in influencing to the welfare of others in society or the client's community	C: "It's my responsibility to succeed in as much as I can so I can honor my family."
Mortality (Code OI3)	The client refers to a belief about the afterlife or the spiritual soul after life on earth	C: "Even though she passed away, I know my mother is looking down on me from somewhere and she is proud of me."
Human Nature (Code OI4)	The client refers to a belief about the essence of human nature	C: "People are born good, and they learn evil ways from the world around them."

Meaning of Life (Code OI5)	The client refers to a belief about life's purpose or an explanation of the nature of the world	C: "I think life is just a series of random events, and I don't believe in destiny."
Implicit Cultural Worldview Not Otherwise Specified (Code OI6)	The client refers to any implicit cultural beliefs not captured by any of the aforementioned codes	C: "Any negative or evil energy in the world is originally created by kittens."

Coding Steps for Researcher-Participants

1. Watch the selected videotaped session containing a trauma discussion(s) and read the transcript entirely to make sure that the transcript is accurate. Familiarize yourself with the content and process of the session.

2. When coding, try to balance attention to details with an ability to think abstractly and see the bigger picture. It is also important to maintain focus by pacing yourself carefully. It is difficult to code accurately when you are rushed or code in binges. In the discussion meetings, it helps to present your questions and confusions and to agree with others only when the consensus makes sense. Coding requires an openness and flexibility but not acquiescence.

3. While coding and analyzing the data, the researchers should provide a detailed account of the analysis process so that the auditor can best assess the reliability of the study (Lincoln & Guba, 1985). This meticulous description of the research process, or audit trail, should include accounts of the decision processes regarding the research design and data collection procedures as well as the actions taken when analyzing and reporting the data. The following information should be included in the audit trail as recommended by Halpern (1983; as cited in Lincoln & Guba, 1985): raw data, products of data reduction and analysis (e.g. notes and qualitative summaries), data synthesis and reconstruction notes (e.g. definitions and themes of emerging categories), reports on literature supporting decisions, process notes (e.g. methodological notes and rationale), and trustworthiness notes.

4. Each of the researchers should also record their personal expectations and potential biases using a technique for qualitative research known as bracketing. Bracketing is used to minimize the influence of personal assumptions on the data collection and analysis processes by reflecting and recording potential foreseen biases (Ahern, 1999). As part of the bracketing process, the researchers should keep reflective journals which may include the following: (a) potential assumptions regarding demographic variables such as race, gender, age, and socioeconomic status; (b) his or her personal values that are thought to potentially interfere with objectivity; (c) issues regarding potential role conflict; (d) his or her interests in the data and the extent to which these interests may dispose him or her to

interpret findings favorably; and (e) personal feelings that may suggest a lack of neutrality (Ahern, 1999).

5. Depending on whether you are coding expressions of humor, social support, or cultural worldviews, familiarize yourself with the corresponding coding system(s). Then, begin the coding process, simultaneously reading the written session transcriptions and watching the corresponding session videotape.

6. Individually, read the transcript again in detail by looking at each statement (C1, C2, etc.) and write your coding impressions on the right hand column of the transcript sheet.

7. Meet with team of coders to discuss codes and determine inter-rater reliability. Codes that meet (66%) agreement will be chosen as final codes and recorded on data tracking sheet.

8. Provide auditor with final codes to determine whether the data reflective of the codes has been adequately captured by the coders. Also provide the auditor with audit trail materials and reflective journals (described in steps 3 and 4). The auditor will facilitate discussion with the coders regarding discrepancies that arise with the team's judgment and any potential biases that have been noted in reflective journals and will provide suggestions for changes.

9. Final codes will be entered into the Excel data-tracking sheet for further analysis.

ID # _____

CLIENT INFORMATION **ADULT FORM

THIS FORM IS INTENDED TO SAVE YOU AND YOUR INTAKE INTERVIEWER TIME AND IS IN THE INTEREST OF PROVIDING YOU WITH THE BEST SERVICE POSSIBLE. ALL INFORMATION ON THIS FORM IS CONSIDERED CONFIDENTIAL. IF YOU DO NOT WISH TO ANSWER A QUESTION, PLEASE WRITE "DO NOT CARE TO ANSWER" AFTER THE QUESTION.

TODAY'S DATE_____

FULL NAME_____

HOW WOULD YOU PREFER TO BE ADDRESSED?_____

REFERRED BY:_____

MAY WE CONTACT THIS REFERRAL SOURCE TO THANK THEM FOR THE REFERRAL? ☐ YES ☐ NO

IF YES, PLEASE PROVIDE CONTACT INFORMATION FOR THIS PERSON/AGENCY

_____

_____

Personal Data

ADDRESS:_____

_____

TELEPHONE (HOME): _____ BEST TIME TO CALL: _____ CAN WE LEAVE A MESSAGE ? ☐ Y ☐ N

(WORK): _____ BEST TIME TO CALL: _____ CAN WE LEAVE A MESSAGE ? ☐ Y ☐ N

AGE: _____ DATE OF BIRTH ____/___/_____

MARITAL STATUS:

☐MARRIED ☐SINGLE HOW LONG? _____

☐DIVORCED ☐COHABITATING PREVIOUS MARRIAGES? _____

☐SEPARATED ☐WIDOWED HOW LONG SINCE DIVORCE? _____

LIST BELOW THE PEOPLE LIVING WITH YOU:

NAME RELATIONSHIP AGE OCCUPATION

_____

_____

_____

_____

PERSON TO BE CONTACTED IN CASE OF EMERGENCY:
NAME: _____

ADDRESS: _____

TELEPHONE: _____

RELATIONSHIP TO YOU: _____

Medical History

CURRENT PHYSICIAN: _____

ADDRESS: _____

CURRENT MEDICAL PROBLEMS: _____

_____

MEDICATIONS BEING TAKEN: _____

_____

PREVIOUS HOSPITALIZATIONS (MEDICAL OR PSYCHIATRIC)

DATE

_____

_____

_____

OTHER SERIOUS ILLNESSES

DATE

_____

_____

_____

_____

PREVIOUS HISTORY OF MENTAL HEALTH CARE (PSYCHOLOGIST, PSYCHIATRIST, MARRIAGE COUNSELING, GROUP THERAPY, ETC.)

DATE

_____

_____

_____

Educational and Occupational History

HIGHEST LEVEL OF EDUCATION ATTAINED:

☐ ELEMENTARY/MIDDLE SCHOOL: LIST GRADE_____

☐ HIGH SCHOOL: LIST GRADE_____

☐ GED

☐ HS DIPLOMA

☐ VOCATIONAL TRAINING: LIST TRADE_____

☐ COLLEGE: LIST YEARS_____

☐ GRADUATE EDUCATION: LIST YEARS OR DEGREE EARNED_____

☐ CURRENTLY IN SCHOOL? SCHOOL/LOCATION:

_____

CURRENT AND PREVIOUS JOBS:

JOB TITLE EMPLOYER NAME & CITY DATES/DURATION

_____

_____

HOUSEHOLD INCOME:

☐ UNDER $10,000

☐ $11,000-30,000 OCCUPATION:_____

☐ $31,000-50,000

☐ $51,000-75,000

☐ OVER $75,000

Family Data

IS FATHER LIVING?

YES ☐ IF YES, CURRENT AGE: _____

RESIDENCE (CITY): _____ OCCUPATION: _____

HOW OFTEN DO YOU HAVE CONTACT? _____

NO ☐

IF NOT LIVING, HIS AGE AT DEATH: _____ YOUR AGE AT HIS DEATH: _____

CAUSE OF DEATH: _____

IS MOTHER LIVING?

YES ☐ IF YES, CURRENT AGE: _____

RESIDENCE (CITY): _____ OCCUPATION: _____

HOW OFTEN DO YOU HAVE CONTACT? _____

NO ☐

IF NOT LIVING, HER AGE AT DEATH: _____ YOUR AGE AT HER DEATH: _____

CAUSE OF DEATH: _____

BROTHERS AND SISTERS

NAME AGE OCCUPATION RESIDENCE CONTACT HOW OFTEN?

_____

_____

_____

LIST ANY OTHER PEOPLE YOU LIVED WITH FOR A SIGNIFICANT PERIOD DURING CHILDHOOD.

NAME RELATIONSHIP TO YOU STILL IN CONTACT?

_____

_____

THE FOLLOWING SECTION WILL HELP US UNDERSTAND YOUR NEEDS AND FACTORS THAT MAY IMPACT YOUR LIFE OR TREATMENT. BELOW IS A LIST OF EXPERIENCES WHICH MAY OCCUR IN FAMILIES. PLEASE READ EACH EXPERIENCE CAREFULLY. PLEASE INDICATE WHETHER ANY OF THESE EXPERIENCES HAVE HAPPENED TO YOU OR YOUR FAMILY. SOME OF THESE MAY HAVE BEEN TRUE AT ONE POINT FOR YOU OR IN YOUR FAMILY BUT NOT TRUE AT ANOITHER POINT. IF THE EXPERIENCE NEVER HAPPENED TO YOU OR SOMEONE IN YOUR FAMILY, PLEASE CHECK THE "NO" BOX. IF YOU ARE UNSURE WHETHER OR NOT THE EXPERIENCE OCCURRED FOR YOU OR IN YOUR FAMILY AT SOME TIME, PLEASE CHECK THE "UNSURE" BOX. IF THE EXPERIENCE HAPPENED TO YOU OR IN YOUR FAMILY AT ANY POINT, PLEASE CHECK THE "YES" BOX.

	SELF			**FAMILY**			
WHICH OF THE FOLLOWINIG HAVE FAMILY MEMBERS, ***INCLUDING YOURSELF***, STRUGGLED WITH:	NO- NEVER HAPPENED	UNSURE	YES- THIS HAPPENED	NO- NEVER HAPPENED	UNSURE	YES- THIS HAPPENED	PLEASE INDICATE WHICH FAMILY MEMBER(S)
SEPARATION/DIVORCE	☐	☐	☐	☐	☐	☐	_____
FREQUENT RE-LOCATION	☐	☐	☐	☐	☐	☐	_____
EXTENDED UNEMPLOYMENT	☐	☐	☐	☐	☐	☐	_____
ADOPTION	☐	☐	☐	☐	☐	☐	_____
FOSTER CARE	☐	☐	☐	☐	☐	☐	_____
MISCARRIAGE OR FERTILITY DIFFICULTIES	☐	☐	☐	☐	☐	☐	_____
FINANCIAL STRAIN OR INSTABILITY	☐	☐	☐	☐	☐	☐	_____
INADEQUATE ACCESS TO HEALTHCARE OR OTHER SERVICES	☐	☐	☐	☐	☐	☐	_____
DISCRIMINATION (INSULTS, HATE CRIMES, ETC.)	☐	☐	☐	☐	☐	☐	_____
DEATH AND LOSS	☐	☐	☐	☐	☐	☐	_____
ALCOHOL USE OR ABUSE	☐	☐	☐	☐	☐	☐	_____
DRUG USE OR ABUSE	☐	☐	☐	☐	☐	☐	_____
ADDICTIONS	☐	☐	☐	☐	☐	☐	_____
SEXUAL ABUSE	☐	☐	☐	☐	☐	☐	_____
PHYSICAL ABUSE	☐	☐	☐	☐	☐	☐	_____
EMOTIONAL ABUSE	☐	☐	☐	☐	☐	☐	_____
RAPE/SEXUAL ASSAULT	☐	☐	☐	☐	☐	☐	_____
HOSPITALIZATION FOR MEDICAL PROBLEMS	☐	☐	☐	☐	☐	☐	_____
HOSPITALIZATION FOR EMOTIONAL/PSYCHIATRIC PROBLEMS	☐	☐	☐	☐	☐	☐	
DIAGNOSED OR SUSPECTED MENTAL ILLNESS	☐	☐	☐	☐	☐	☐	_____

SUICIDAL THOUGHTS OR ATTEMPTS	☐	☐	☐	☐	☐	☐	
SELF HARM (CUTTING, BURNING)	☐	☐	☐	☐	☐	☐	
DEBILITATING ILLNESS, INJURY, OR DISABILITY	☐	☐	☐	☐	☐	☐	
PROBLEMS WITH LEARNING	☐	☐	☐	☐	☐	☐	
ACADEMIC PROBLEMS (DROP-OUT, TRUANCY)	☐	☐	☐	☐	☐	☐	
FREQUENT FIGHTS AND ARGUMENTS	☐	☐	☐	☐	☐	☐	
INVOLVEMENT IN LEGAL SYSTEM	☐	☐	☐	☐	☐	☐	
CRIMINAL ACTIVITY	☐	☐	☐	☐	☐	☐	
INCARCERATION	☐	☐	☐	☐	☐	☐	

Current Difficulties

PLEASE CHECK THE BOXES TO INDICATE WHICH OF THE FOLLOWING AREAS ARE CURRENT PROBLEMS FOR YOU AND REASONS FOR COUNSELING.

PLACE TWO CHECK MARKS TO INDICATE THE MOST IMPORTANT REASON(S).

- ☐ FEELING NERVOUS OR ANXIOUS
- ☐ UNDER PRESSURE & FEELING STRESSED
- ☐ NEEDING TO LEARN TO RELAX
- ☐ AFRAID OF BEING ON YOUR OWN
- ☐ FEELING ANGRY MUCH OF THE TIME
- ☐ DIFFICULTY EXPRESSING EMOTIONS
- ☐ FEELING INFERIOR TO OTHERS
- ☐ LACKING SELF CONFIDENCE
- ☐ FEELING DOWN OR UNHAPPY
- ☐ FEELING LONELY
- ☐ EXPERIENCING GUILTY FEELINGS
- ☐ FEELING DOWN ON YOURSELF
- ☐ THOUGHTS OF TAKING OWN LIFE
- ☐ CONCERNS ABOUT EMOTIONAL STABILITY
- ☐ FEELING CUT-OFF FROM YOUR EMOTIONS
- ☐ WONDERING "WHO AM I?"
- ☐ HAVING DIFFICULTY BEING HONEST/OPEN
- ☐ DIFFICULTY MAKING DECISIONS
- ☐ FEELING CONFUSED MUCH OF THE TIME
- ☐ DIFFICULTY CONTROLLING YOUR THOUGHTS
- ☐ BEING SUSPICIOUS OF OTHERS
- ☐ GETTING INTO TROUBLE
- ☐ DIFFICULTY WITH SCHOOL OR WORK
- ☐ CONCERNS ABOUT FINANCES
- ☐ TROUBLE COMMUNICATING SOMETIMES
- ☐ CONCERNS WITH WEIGHT OR BODY IMAGE
- ☐ FEELING PRESSURED BY OTHERS
- ☐ FEELING CONTROLLED/MANIPULATED
- ☐ PRE-MARITAL COUNSELING
- ☐ MARITAL PROBLEMS
- ☐ FAMILY DIFFICULTIES
- ☐ DIFFICULTIES WITH CHILDREN
- ☐ DIFFICULTY MAKING OR KEEPING FRIENDS
- ☐ BREAK-UP OF RELATIONSHIP
- ☐ DIFFICULTIES IN SEXUAL RELATIONSHIPS
- ☐ FEELING GUILTY ABOUT SEXUAL ACTIVITY
- ☐ FEELING CONFLICTED ABOUT ATTRACTION TO MEMBERS OF SAME SEX
- ☐ FEELINGS RELATED TO HAVING BEEN ABUSED OR ASSAULTED
- ☐ CONCERNS ABOUT PHYSICAL HEALTH
- ☐ DIFFICULTIES WITH WEIGHT CONTROL
- ☐ USE/ABUSE OF ALCOHOL OR DRUGS
- ☐ PROBLEMS ASSOCIATED WITH SEXUAL ORIENTATION
- ☐ CONCERNS ABOUT HEARING VOICES OR SEEING THINGS

ADDITIONAL CONCERNS (IF NOT COVERED ABOVE):

_____

Social/Cultural (Optional)

1. RELIGION/SPIRITUALITY: _____
2. ETHNICITY OR RACE: _____
3. DISABILITY STATUS? _____

APPENDIX E

Telephone Intake Form

APPENDIX F

Intake Evaluation Summary
Pepperdine Psychological and Educational Clinic
Intake Evaluation Summary

Client: _____ Intake Therapist: _____
Intake Date(s): _____ Date of Report: _____

I Identifying Information
(Name, age/D.O.B., gender, marital status, # of children, occupation/employment status, education, ethnicity, and current living arrangements)

II Presenting Problem/Current Condition
(Description of client's current difficulties, and why s/he is seeking help at this time; describe symptoms and impact on current functioning, including onset, frequency and duration)

III History of the Presenting Problem & History of Other Psychological Issues
(Trace development of present problem, including previous psychological treatment, hospitalizations, medication; discuss other significant psychological difficulties and prior treatment. Address history of substance abuse, suicidal ideation/attempts, & aggressive/violent behavior)

IV Psychosocial History

A Family History
(Family constellation, family of origin and current family, family dynamics, domestic violence/abuse; Include family psychiatric, medical and substance abuse history)

B Developmental History
(Note progression of development milestones, as well as particular strengths or areas of difficulty)

C Educational/Vocational History
(Highest grade completed, strengths/weaknesses, learning issues/interventions; Work history, including any work related difficulties)

D Social Support/Relationships
(Current social support network; Intimate relationships and their history, especially as related to presenting problem)

E Medical History
(When was client last seen by a doctor? Describe current/past medical conditions, injuries, medications,

procedures/surgeries)

F Cultural Factors and Role of Religion in the Client's Life
(Cultural group identification/identity, acculturation issues relevant to presenting problems/therapy)
(Religious affiliations, strength of commitment to and/or involvement in religion, view of spirituality and its role in emotional problems/suffering and intervention)

G Legal History
(Arrests, incarcerations, parole/probation, current lawsuits, child custody. Is the client court ordered into therapy?)

V Mental Status Evaluation

Hygiene & grooming:

Interpersonal presentation/behavioral observations:

Orientation (person, place, time, situation):

Speech (pitch, pace, tone):

Motor Activity (calm, restless, agitated, retarded):

Mood (euthymic, dysphoric, elevated, irritable, anxious):

Affect (appropriate/inappropriate to mood, labile, expansive, blunted, flat):

Thought Process (associations may be logical, tight & coherent, or loose & tangential):

Thought Content (appropriate; delusions; odd ideations):

Perceptual Disturbances (hallucinations):

Cognitive Functioning (intellectual functioning, fund of knowledge):

Concentration, Attention & Memory:

Judgment & Insight (intact, good, fair or poor/impaired):

VI Client Strengths
(Intelligence, personality, internal resources, coping skills, support system, talents and abilities, motivation, education/vocational skills, health)

VII Summary and Conceptualization

(Summarize your understanding of the client's central issues/symptoms, how these developed, and factors that maintain them. Present differential diagnosis, with justification for diagnosis given):

VIII DSM-IV TR Multiaxial Diagnosis

Axis I:
Axis II:
Axis III:
Axis IV:
Axis V: Global Assessment of Functioning (GAF) Scale:
Current GAF:
Highest GAF during the past year:

IX Client Goals

X Treatment Recommendations

Be as specific as possible. Note: suggested therapy modalities and frequency of contact, issues to be addressed, adjunctive services such as psychological testing or medication evaluation. Recommendations should be connected to presenting problem and diagnoses.

_____ _____

Intake Therapist Supervisor

_____

Date

APPENDIX G

Treatment Summary

APPENDIX H

Participant Selection Tracking Sheet

Research ID	Total # of Sessions	Exp of Trauma Phys/Psych (CIA; Intake; Tx Summary; Phone Intake)	Death/Loss; SA; PA; Rape/Sexual Assault; Illness/Injury/ Disability	I/C	Trauma Discussion Session #	Other Demographic Factors

APPENDIX I

Researcher Confidentiality Statement - Coder

As a research coder appointed by Susan Hall, J.D., Ph.D., I understand that I am expected to abide by specific principles and responsibilities to ensure effective and proper participation in the research.

I understand that coders must be sensitive to working with highly confidential material and act with appropriate discretion. Although participant numbers are used as the only method of subject identification, coders may hear names or other identifying information during the course of observing videotapes. I understand that I am prohibited from discussing any information seen or heard in the videotapes or audiotapes except with other coders and researchers involved with the study. In addition, I will only speak to research staff about information on the videotapes in a confidential environment and never in a public location. I will limit such disclosures to the minimum information that is necessary and sufficient for the purposes of communication. I also understand that coders may not discuss participant-related or other confidential material even after their involvement with the research is complete. I will also not remove any material related to the study from the office(s) of Dr. Hall or the Pepperdine Applied Research Center. In the highly unlikely event that I recognize one or more people on a videotape, I will stop the videotape immediately and inform Dr. Hall.

I will commit to _____ hours per week (to be specified by Dr. Hall) and attend all relevant coding meetings. First, I will learn a coding system so that I can use it reliably. Then, I will observe tapes and code them for research purposes. Due to the intensity of training, I agree to remain a coder on the research project for _____ months (to be specified by Dr. Hall).

I have been appointed by Susan Hall, J.D., Ph.D., to code videotaped and/or audiotaped material related to research at Pepperdine University, Graduate School of Education and psychology. The expectations of this position have been explained to me by Dr. Hall or a research assistant working with her. I understand the expectations outlined above, and agree to abide by them.

Coder Signature: _____

Date: _____

Witness Signature: _____

Date: _____

APPENDIX J

Research Assistant Confidentiality Agreement – Transcriber

As a research assistant (RA) appointed by Susan Hall, J.D., Ph.D. and co-supervised by her dissertation students, Rebecca Dragosits, Ed.M., Celine Crespi-Hunt, M.A., and Christopher Ogle, M.A., I understand that I am expected to abide by specific principles and responsibilities to ensure effective and proper participation in the research program designed to investigate trauma disclosure in psychotherapy.

I understand that RAs must be sensitive to human subjects issues involved with working with highly confidential material and act with appropriate discretion. Although participant numbers are used as the only method of subject identification, RAs may hear names or other identifying information during the course of observing videotapes. I understand that I am strictly prohibited from discussing any information seen or heard in the videotapes, audiotapes or transcripts except with others involved with the study. In addition, I will only speak to research staff about information on the videotapes in a confidential environment and never in a public location. I will limit such disclosures to the minimum information that is necessary and sufficient for the purposes of communication. I also understand that RAs may not discuss participant-related or other confidential material even after their involvement with the research is complete. I will also not remove any material related to the study from the office(s) of Dr. Hall or the Pepperdine Applied Research Center or clinic. In the highly unlikely event that I recognize one or more people on a videotape, I will stop the videotape immediately and inform Dr. Hall.

I will commit to _____ hours per week and attend all relevant coding meetings. First, I will complete human subjects and HIPAA training required by Pepperdine University's Graduate and Professional Schools Institutional Review Board, and submit my certificates of completion to Dr. Hall. Subsequently, I will learn a transcription procedure and/or coding system so that I can use it reliably. Then, I will observe and transcribe tapes and/or code them for research purposes. Due to the intensity of training, I agree to remain a RA on the research project for _____ months.

By signing this Confidentiality Agreement, you are stating your commitment to upholding research participants' privacy and confidentiality and your RA responsibilities, which involves a commitment to maintaining professional demeanor and adhering to the highest ethical standards. The expectations of my position as a RA with the Pepperdine Applied Research Center at Pepperdine University, Graduate School of Education and Psychology has been explained to me by Dr. Hall, her dissertation student(s), or another research assistant working with her. Should I have any questions whatsoever regarding my position and its expectations; I agree to discuss these with Dr. Hall. I understand the expectations outlined above, and agree to abide by them.

Printed Transcriber Name:_____

Transcriber Signature:_____

Date:_____

Witness Signature:_____

Date:_____

APPENDIX K

Health Insurance Portability and Accountability Act Certification

UCLA Health System

Certificate of Completion

This is to certify that

Christopher Ogle

_____

has completed the
HIPAA Training
on

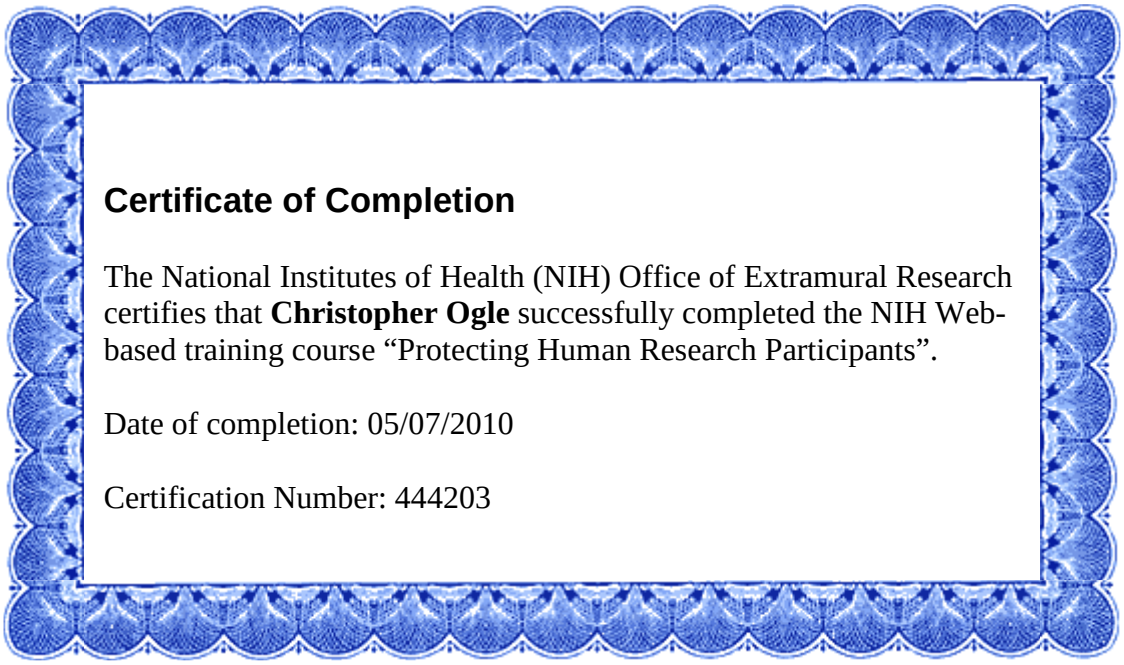
Wednesday, July 07, 2010

_____

Reference No: 108013

APPENDIX L

Protecting Human Research Participants Certification



Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Christopher Ogle** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 05/07/2010

Certification Number: 444203

APPENDIX M

IRB Exemption Notice

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

December 9, 2011

Christopher Ogle

Protocol #: P1111D08
Project Title: Expressions of Cultural Worldviews in Psychotherapy with Clients Who Have Experienced Trauma: A Qualitative Study from a Terror Management Theory Perspective

Dear Mr. Ogle:

Thank you for submitting your application, Expressions of Cultural Worldviews in Psychotherapy with Clients Who Have Experienced Trauma: A Qualitative Study from a Terror Management Theory Perspective, for exempt review to Pepperdine University's Graduate and Professional Schools Institutional Review Board (GPS IRB). The IRB appreciates the work you and your faculty advisor, Dr. Susan Hall, have done on the proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations (45 CFR 46 - http://www.nihtraining.com/ohsrsite/guidelines/45cfr46.html) that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(4) states:

> (b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:
>
> **Category (4) of 45 CFR 46.101**, research, involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Jean Kang, CIP
Manager, GPS IRB & Dissertation Support
Pepperdine University
Graduate School of Education & Psychology
6100 Center Dr. 5th Floor
Los Angeles, CA 90045
jean.kang@pepperdine.edu
W: 310-568-5753
F: 310-568-5755

cc: Dr. Lee Kats, Associate Provost for Research & Assistant Dean of Research, Seaver College
Ms. Alexandra Roosa, Director Research and Sponsored Programs
Dr. Yuying Tsong, Interim Chair, Graduate and Professional Schools IRB
Ms. Jean Kang, Manager, Graduate and Professional Schools IRB
Dr. Susan Hall
Ms. Cheryl Saunders