The Relationship Between Graduate Counseling Students’ Meaning in Life and Their Crisis

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The Relationship Between Graduate Counseling Students’ Meaning in Life and Their Crisis Experiences

A Dissertation

Submitted to the Graduate Faculty of the
University of New Orleans
in partial fulfillment of the
requirements for the degree of

Doctor of Philosophy
in
Counselor Education

by

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August 2011
DEDICATION

In honor of my Dad, who was heard to say the following throughout my life:

There is a tide in the affairs of men.
Which, taken at the flood, leads on to fortune;
Omitted, all the voyage of their life
Is bound in shallows and in miseries.
On such a full sea are we now afloat,
And we must take the current when it serves,
Or lose our ventures.

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When this journey began, it was a solitary entrance into a Ph.D. program. I, alone, traveled to New Orleans to be interviewed by the faculty to earn the privilege of studying in the Counselor Education program of the University of New Orleans. In the process, my journey ended with a team of people who created the supports I needed to accomplish my goals. My gratitude extends to members of the Frankl Institute of Logotherapy, to counselor educators that paved a way to open the door for my study, to professionals who provided support and insight, and peers and friends of the UNO counseling program.

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Abstract

Viktor Frankl published *Man’s Search for Meaning* in 1946, documenting the horrors of the concentration camps. Based on his prison experience in the camps, Frankl (1984) believed that meaning in life could be found in suffering. The theoretical framework for this research study was based on Frankl’s theory of logotherapy, an extension of existentialism. In today’s society, we can find many parallels to Frankl’s descriptions of suffering in the natural and human-made disasters that have occurred such as the 1999 shooting at Columbine, the levee failure in 2005 following Hurricane Katrina, the floods in the spring of 2011 in the South, and in 2011 the earthquake, tsunami, and nuclear power failure in Japan. The purpose of the present study was to explore if graduate counseling students’ (GCS) meaning in life is related to their crisis experiences.

Data collection was completed electronically. Qualtrics™, a web-based service, was used to distribute the researcher-designed survey, *Graduate Counseling Student Crisis Experience Questionnaire (GCSCEQ)* and the *Purpose in Life (PIL)* test. Results of this study indicated that there was no relationship between meaning in life and overall experiences, number of experiences, or intensity of GCS’ crisis experiences. Additionally, results indicated that GCS’ crisis experiences and meaning in life are impacted by the category of their disaster experiences, the intensity of their experiences and their age.

Keywords: Frankl, meaning, suffering, crisis
Chapter 1

Introduction

In 1946, Viktor Frankl published *Man’s Search for Meaning*, documenting the horrors of the concentration camps. Based on his prison experience in the camps, Frankl believed meaning in life could be found in suffering. In today’s society, we can find many parallels to his descriptions of suffering in the natural and human-made disasters that have occurred such as the 1999 shooting at Columbine; the 2005 levee failure following Hurricane Katrina; the spring 2011 floods in the South; and the 2011 earthquake, tsunami, and nuclear power failure in Japan. Catastrophic disasters as these have impacted thousands of people, not only physically in loss of lives but also in loss of property, financial instability, and health issues including mental health. Using Frankl’s idea that meaning in life can be found in suffering, a defining question is: Can meaning in life be found in an individual’s crisis experience resulting from a disaster?

Presently, the effects of disasters on the mental health of people mark a new challenge for individuals who have experienced a disaster and the counseling professionals who provide crisis counseling with these clients (Dufrene & Dinkel, 2009). In recognition of this challenge, the Substance Abuse and Mental Health Services Administration’s (SAMHSA) proposed strategic initiatives for 2011-2014 indicate an emphasis on the effects of resulting trauma on individuals suffering from human-made and natural disasters. In addition, disaster and crisis mental health was the focus of the 2011 American Counseling Association’s (ACA) national conference. Various authors have described theories of disaster counseling, (Dass-Brailsford, 2010; Halpern & Tramontin, 2007; Herman, 1992; Janoff-Bulman, 1992; Myers & Wee, 2005; Ursano, Fullerton, & Norwood, 2003) approaches to crisis counseling, (Dufrene & Dinkel, 2009; James, 2008; Kanel, 2003; Lindeman, 1956; Norwood, Ursano, & Fullerton, 2000) and
differences in population reactions to crisis experiences and resulting trauma (Cerel, Jordan, & Duberstein, 2008; McFarlane & Van Hooff, 2010; Mellon, Papanikolau, & Prodromitis, 2009; Payne, Joseph, & Tudway, 2007; Rao, 2006; Shelby & Tredinnick, 1995; Wang et al., 2008). A few writers have addressed these experiences from an existential perspective (Jacobsen, 2006; Taliaferro et al., 2009), a perspective of meaning and counselors’ use of meaning in therapy (Carlson, 2003; Das, 1998; Estes, 1997; Wong, 1998), and a focus on specific populations such as students (Esping, 2010; Flowers, Whisenhunt, Shelton, Lokkesmoe, & Karger, 2010; Holmes & Hardin, 2009; Machuca, 2010; Stevens, Pfost, & Potts, 1990).

**Overview**

Frankl’s assumptions for his theory were an extension of existentialism (Brammer, 1985; Crumbaugh & Maholick, 1964; Frankl, 1966a; Schulenberg, 2004). Existentialists, including Frankl, believe that a universal facet of living is to experience suffering and that finding meaning in life has a critical impact on an individual (Archer & McCarthy, 2007; Hanly, 1979; Lantz, 1992; Prochaska & Norcross, 2007; Reinhardt, 1960; Yalom, 1980, 2002a, 2002b). While being imprisoned in a concentration camp, Frankl observed how prisoners found meaning in their lives and transcended their suffering (2000; Guttman, 1996). He believed that an individual’s search for meaning is a primary human motivation for behavior (Frankl 1954, 1962, 1986; Guttman 1996; Schulenberg, Hutzell, Nassif, & Rogina, 2008). Frankl (1984) viewed one’s search for meaning in suffering as a normal part of life.

In today’s world, an individual suffers when experiencing a disaster or crisis (Dass-Brailsford, 2010; Quarantelli & Dynes, 1972). The type or category of a disaster (natural or human-induced) can be predictive of the amount of suffering experienced by an individual (Herman, 1992; Janoff-Bulman, 1992; Jordan, 2010). According to James (2008) and Myers
and Wee (2005), reactions and emotions experienced during a disaster, crisis, or the resulting trauma occur within the context of disaster phases. The intensity of a crisis experience determines one’s suffering. Part of the healing process of suffering during the phases is to find meaning in life (Gerrity & Steinglass, 2003; North & Westerhaus, 2003; Raphael, 2003).

**Frankl and Disasters/Crises**

Existential theory.

Archer and McCarthy (2007) reported that the existential philosophy movement has been in existence since the 19th century. Existentialism, stemming from a philosophical concept, focuses on four existential levels. The four levels identify an individual’s existence of relating and connecting. The first level, *Umwelt*, means to connect to nature; the second level, *Mitwelt*, means to connect to others; *Eigenwelt*, the third level, means to connect to self; and finally the fourth level, *Uberwelt*, means to connect spiritually (Archer & McCarthy, 2007; Kotchen, 1960; Prochaska & Norcross, 2007). Existentialists also focus on four fundamental givens: (a) reality of death, which forces an awareness of finiteness; (b) freedom, which creates an anxiety of responsibility; (c) isolation, which results in an awareness of facing life alone; and (d) meaninglessness, which indicates that life has significance only if there is meaning (Archer & McCarthy, 2007; Prochaska & Norcross, 2007).

In addition to the existential levels and givens, a basic principle interwoven throughout existentialism is the principle of absurdity of life. Existentialists believe that the universe has no meaning, that life is absurd, and that each individual must find a particular meaning in life (Cooper, 2003). Each person’s struggle with absurdity of life or no meaning results in existential anxiety. Because suffering is a central theme in living and there is no meaning in life, all individuals experience existential anxiety (Archer & McCarthy, 2007). Anxiety, which
is triggered by a suffering experience, can result in an individual reassessing his or her life, thereby finding meaning.

Frankl and existentialism.

Beginning in the 1920s, Frankl’s life history reflects his emphasis on the importance of an individual’s search for meaning in life (Guttmann, 1996). In the 1930s as a medical doctor, psychologist, and psychiatrist, he developed his theory, logotherapy. At that time he chose the term logos, a Greek term for meaning, to indicate the spiritual aspect of the search for meaning (Frankl, 1984, 2000). In the 1940s during World War II, Frankl (1984) was imprisoned in a concentration camp. His survival and subsequent publications highlighted his experience in the camps and the importance he attached to a person’s search for meaning through suffering.

As an existentialist, Frankl stated that beyond the existential four levels there are three assumptions that an individual has in the world: (a) freedom of will, (b) will to meaning, and (c) meaning of life (Frankl, 1967b; Guttmann, 2000; Schulenberg, 2004). These three assumptions are fundamental to logotherapy. In addition to these assumptions, Frankl (2000) believed an individual could create meaning in life through an attitude of choosing which path to take towards understanding an experience of suffering. Frankl’s experience in the concentration camps resulted in his emphasis on the attitudinal way to create meaning.

Frankl also focused on the existentialists’ viewpoint of the Uberwelt level. The Uberwelt level refers to the spiritual dimension which is a universal human phenomenon (Crumbaugh, 1977; Frankl, 1954). An individual’s innate sense of spirituality is the motivating force for finding meaning in life (Frankl, 1954). Based on the concept of spirituality, Mattes (2005) agreed with Frankl that spirituality motivates an individual to discover meaning in life. He supported Frankl’s belief that spirituality was an essential element of being human. In
addition to embracing the Uberwelt or spiritual level of existentialism, Frankl (1967b, 1990) emphasized three of the existential givens as critical: (a) finiteness, (b) freedom, and (c) meaningfulness. The given of finiteness is a driving force behind an individual’s choices in life and provides meaning in life. The given of freedom is the source of one’s anxiety because of the responsibleness an individual experiences and the given of meaningfulness is the basis for existential despair and spiritual distress.

The existential principles of anxiety and suffering were critical to Frankl’s theory (1986). Existential anxiety manifests in neurotic behavior and existential fear can be hidden in phobic symptoms. An individual can control the existential fear of death by displacing that fear to anxiety. Frankl (1984) expanded the assumption of existential anxiety to include the need for meaning. He added the idea of suffering as critical to his theory and later extended that idea stating suffering is inescapable and undeniable for an individual. Suffering is a part of the tragic triad that includes guilt and death which is a universal experience. Starck and McGovern (1992) agreed that suffering could not be avoided.

Frankl (1984) chose to extend existentialism and expand his theory of logotherapy to include existential frustration and super-meaning. He felt his extensions were necessary to explain the spiritual aspects of an individual’s struggle to find meaning in life. He believed that industrialization brought on the origination of existential vacuum, a lack of meaning in one’s life. If an individual did not address his or her existential vacuum, existential frustration resulted in the first extension. To cope with existential frustration an individual might demonstrate depressive symptoms, or aggressive or addictive behaviors. Depression, aggression, or addiction can be the first signs of existential vacuum originating in apathy and/or boredom. The second extension for Frankl originated in the idea of meaning in life which he
expanded to the idea of super-meaning (Guttmann, 1996). Frankl (1984) believed that super-meaning is beyond the human world and exceeds an individual’s intellectual capabilities and spiritual resources.

**Terms and categories of disasters/crises.**

**Terms.**

Frankl (1986) saw suffering as an individual’s feeling of pain or enduring something unpleasant. An individual can endure suffering as a result of a disaster (Dass-Brailsford, 2010; Quarantelli & Dynes, 1972). According to Baum, Fleming, and Davidson (1983) as well as Halpern and Tramontin (2007), a disaster is an event that can impact an individual’s environment with catastrophic misfortune such as loss of life, loss of property, or loss of employment. A crisis experience can pervade the disaster and is intolerable for an individual or beyond the individual’s ability to cope (James, 2008). The trauma that follows a crisis experience can be the result of an individual’s inadequate coping skills (Dass-Brailsford, 2007; Halpern & Tramontin, 2007; Jordan, 2010). Research on the topic of disaster, crisis, and/or trauma experiences has viewed these experiences from an existentialism perspective (Jacobsen, 2006; Taliaferro et al., 2009) as well as Frankl’s perspective on meaning and counselors’ use of meaning in therapy (Carlson, 2003; Das, 1998; Estes, 1997; Wong, 1998). Additionally, research has been provided on specific populations of students in university settings (Esping, 2010; Holmes & Hardin, 2009; Stevens, Pfost, & Potts, 1990) including graduate counseling students (GCS) (Flowers et al., 2010; Machuca, 2010).

All three experiences, disaster, crisis, and trauma, provide possibilities for suffering. However, suffering can guard an individual from apathy and is an unavoidable, unchangeable, inescapable, and the greatest distress one might experience (Barnes, 1994; Frankl, 1986;
Guttmann, 1996; Hirsch, 1994; Lantz, 2000; Starck, 1978; Starck & Ulrich, 1985). While suffering can happen, growth can also occur as a result of a disaster, crisis, and the resulting trauma. According to Calhoun and Tedeschi (2006), post-traumatic growth is “an individual’s encounter and struggle with life trauma” which “can lead” to positive change (p. 4). The idea of post-traumatic growth is not new and current research has shown that growth has been documented as being tangible and observed by others (Courtois & Gold, 2009; Park, Cohen, & Murch, 1996; Shakespeare-Finch & Enders, 2008; Slaikeu, 1990). Growth is facilitated by an individual’s ability to self-transcend (Frankl, 1986). During the process of growth, an individual struggles with questions about meaning in life (Lantz, 1992; Schulenberg et al., 2008).

**Categories.**

To gain a perspective in understanding an individual’s crisis experience of disasters, several authors have differentiated types of disasters into two categories: (a) acts of God/naturally caused and (b) human induced/human-made (Courtois & Gold, 2009; Cunningham, 2003; Herman, 1992; Janoff-Bulman, 1992; Jordan, 2010; Norwood, Ursano, & Fullerton, 2000; Weisaeth & Tønnessen, 2003). The naturally caused category includes disasters and serious illnesses beyond human control (Janoff-Bulman, 1992). Beginning in the 19th century, an example of a naturally caused disaster was the Johnstown flood, in the 20th century examples included the San Francisco earthquake and “Billion Dollar Betsy,” and in the 21st century examples included the earthquake/tsunami in southern Asia and Hurricane Katrina (Courtois & Gold, 2009; Dass-Brailsford, 2010; Douglas, 2007; Jordan, 2010). In present day, examples of serious illnesses include cancer, heart disease, and diabetes in addition to the 2010 outbreak of cholera in Haiti. The origins of naturally caused disasters or illnesses are random and an individual is not directly responsible (Courtois & Gold, 2009; Janoff-Bulman, 1992).
Suffering experienced in a naturally caused disaster has no specific perpetrator to hold accountable and leaves an individual more likely questioning the rules governing the universe (Janoff-Bulman, 1992). Janoff-Bulman indicated that the questions an individual has about enduring suffering during natural disasters materialize in beliefs about meaning in life.

Human induced disasters originate from a human perspective and can be caused by an individual, group, or company (Janoff-Bulman, 1992; Jordan, 2010). In the 19th and 20th centuries, the Civil War and World War I were human induced disasters (Halpern & Tramontin, 2007). In the late 20th century, a human technological disaster was the Exxon Valdez oil spill. Another human induced disaster was the terrorism act of the Oklahoma City bombing (Baum et al., 1983; Dass-Brailsford, 2010; Myers & Wee, 2005; Pfefferbaum, 2003). In the 21st century, an example of a human induced disaster was the terrorist act on September 11th, 2001 and in 2010 another technological human induced disaster was the Gulf Coast oil spill (Dass-Brailsford, 2010; Myers & Wee, 2005; “Popular Mechanics’ Deepwater Horizon Ongoing Coverage,” 2010). According to Courtois and Gold (2009) as well as Janoff-Bulman (1992), an intentional or malicious human induced disaster has the extra layer of betrayal trauma as it is considered preventable, thus inducing an individual’s feelings of anger, rage, depression, helplessness, vulnerability, or mistrust (Flynn & Norwood, 2004; Halpern & Tramontin, 2007) and forces an individual to recognize the existence of evil (Janoff-Bulman, 1992).

A complication of the two categorical view of disasters can occur when disasters happen quickly one after the other. An example of multiple disasters in both categories occurred in 2005 when a natural disaster occurred and days later a human induced disaster occurred. Hurricane Katrina, a natural disaster, was followed three days later by the failure of the levees, a human
induced disaster (Dass-Brailsford, 2010; Halpern & Tramontin, 2007). These two disasters were viewed and nationally responded to as one disaster when in fact they were two separate disasters.

**Individual experiences.**

The reactions an individual might have during a disaster and crisis experience have been outlined in the research within the context of disaster phases (Myers & Wee, 2005). A model for depicting the phases used by James (2008) includes the emergency, inventory, honeymoon, avoidance, adaptation, disillusionment, anniversary, pathogenic to salutogenic shift, and restabilization/reconstruction phase. An individual may move through some or all of these phases, the phases may overlap, and the phases may not be linear. An individual’s healing during the phases will include finding meaning (Gerrity & Steinglass, 2003; North & Westerhaus, 2003; Raphael, 2003).

The intensity of exposure to a disaster is described as expanding circles around the center of impact (North & Westerhaus, 2003). An individual who had direct personal experience of a disaster, for example at the epicenter of the impact, would have the strongest intensity experience (Flynn & Norwood, 2004; Rao, 2006). Intensity is also described as the amount of traumatic stressors experienced by an individual (Norris et al., 2002a). The greater the intensity experienced, the larger the amount of traumatic stressors. For example, stressors can include injury to self or family, threat to life, separation from family, loss of property or finances, and relocation of residence (Fullerton, Ursano, Norwood, & Holloway, 2003; Halpern & Tramontin, 2007; Myers & Wee, 2005; Norris et al., 2002a; Norwood et al., 2000). Mediating factors such as social support, biological makeup, coping skills, and developmental history influence the degree of intensity perceived by an individual (Myers & Wee, 2005; Norris et al., 2002a; Prati & Pietrantoni, 2009).
**Significance of the Study**

Awareness of and research pertaining to disasters and individual crisis experiences are growing in the field of counseling. Presently, research studies on crisis experiences typically focus on one disaster and the resulting individual crisis, for example a study on 9/11 or Hurricane Katrina (Norris et al., 2002a). When studying only one particular disaster, there is no consideration of an individual’s crisis experience of multiple disasters. There are numerous empirical studies as well as literature on meaning in life with various populations (Ebersole & DePaola, 2001; Florian, 1989; Francis & Hills, 2008; Lantz, 1992; Lyon & Younger, 2001; Meier & Edwards, 1974; Molasso, 2006). Additionally, there is literature on meaning in life and crisis experiences (Hirsch, 1994; Park & Ai, 2006; Silver, Boon, & Stones, 1983; Wheeler, 2001); however, there are no studies on GCS’ meaning in life and their crisis experiences. The significance of the present study focused on GCS’ meaning in life and their crisis experiences. This study underscored the need for counselor educators to be aware that GCS have possibly experienced disasters and the impact that the crisis experiences have had on GCS. Other information of importance presented in this study was the number, the intensity, and the category of disaster GCS experienced.

**Purpose of the Study**

Using Frankl’s idea of meaning in life, this study explored GCS’ meaning in life related to their crisis experiences. The theoretical framework for this study was based on Frankl’s theory of logotherapy, a broadened version of existentialism. The purpose of the present study was to explore GCS’ meaning in life as measured by the *Purpose in Life* (PIL) test, the number of their crisis experiences, the intensity of their crisis experiences, and the category of their crisis experiences.
**General Research Question**

The main research question was:

Is GCS’ meaning in life related to their crisis experience(s)?

**Specific Research Questions**

The detailed research questions included:

1. Is there a significant relationship between GCS’ *PIL* scores and their experiences of a major crisis(es)?

2. Is there a significant relationship between GCS’ *PIL* scores and the number of their crisis experiences?

3. Is there a significant relationship between GCS’ *PIL* scores and the level of intensity of two or less of their crisis experiences?

4. Is there a significant relationship between GCS’ *PIL* scores and the level of their sense of meaning in their crisis experiences?

5. Are there group differences between GCS’ *PIL* scores and the category of their crisis experiences (i.e., natural or human induced or both)?

**Limitations**

There were limitations associated with the present study. One limitation was that participants’ responses were self-reported; thus, responses may have been influenced by social desirability bias (Slavin, 1992). A second limitation was the *PIL* had not been used to analyze relationships of multiple crisis experiences (S. Schulenberg, personal communication, June 20, 2009). A final limitation was the online format of data collection that has been associated with lower response rates (Granello, 2007).
Delimitations

Two delimitations were associated with the present study. The first delimitation was that the present study was delimited to the population of GCS within the United States. A second delimitation was the selection of disasters and individuals’ crisis experiences. Not all disasters and crisis experiences were listed. For example, divorce, house fire, and loss of a pet were not specifically listed.

Assumptions of the Study

An assumption of the present study was that GCS would accurately report meaning in life and their crisis experiences. Another assumption was that the PIL measured Frankl’s construct of meaning in life. A final assumption was that participants responded with honesty and genuineness.

Definition of Terms


Collective neurosis: the presence of existential vacuum for an entire generation (Frankl, 1984).

Crisis: a “direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one’s physical integrity; 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 close associate” (American Psychiatric Association, 2000, p. 463).

Disaster: a catastrophe of sudden misfortune resulting in loss of life or property with permanent changes to an environment or a community (Halpern & Tramontin, 2007).
**Existentialism:** a philosophy that was transformed into a theory of psychotherapy, in which existentialists claim finding meaning through existence is critical to the quality of life (Archer & McCarthy, 2007; Hanly, 1979; Prochaska & Norcross, 2007; Reinhardt, 1960; Reker, 2000; Yalom, 1980, 2002a; Zika & Chamberlain, 1992).

**Existential frustration:** an advanced level, beyond existential vacuum, of the struggle with finding meaning within a world that is void in meaning (Crumbaugh & Maholick, 1964; Frankl, 1984; Schulenberg, 2004).

**Existential vacuum:** a void of meaning which manifests as a state of boredom (Crumbaugh, 1977; Frankl, 1984; Reker, 1977).

**Human induced/human-made:** the category of crisis that refers to a specific person, groups of people, or companies causing intentional harm to other individuals (Courtois & Gold, 2009; Janoff-Bulman, 1992, Jordan, 2010).

**Logotherapy:** a philosophy of life that attempts to bring spiritual realities into awareness (Frankl, 1954, 1986; Weisskopf-Joelson, 1975).

**Meaning in life:** an inborn drive or pull, which can be found or discovered, not fabricated (Crumbaugh & Maholick, 1963; Frankl, 1967a, 1984; Schulenberg, 2004; Yalom, 1980).

**Noetic dimension:** the capacity and tendency to search, find, and construct meaning in life and existence, consisting of two unique capacities: self-detachment and self-transcendence (Frankl, 1986; Guttmann, 1996; Lantz, 1992).

**Noö-dynamics:** the expression that represents the necessary tension between meaning and the search for meaning that Frankl believed was necessary for an individual to remain mentally healthy (Frankl, 1967b, 1984).
Noögenic neurosis: the unfulfilled search for meaning (Crumbaugh & Maholick, 1964; Frankl, 1984; Guttmann, 2000).

Post-traumatic growth: “the idea that an individual’s encounter and struggle with life trauma can lead” to positive change (Calhoun & Tedeschi, 2006, p. 4).

Purpose in life: an external manifestation of a sense of mission or overriding goal in life unique to each individual (Crumbaugh & Maholick, 1963; Frankl, 1986; Yalom, 1980).

Spirituality: a universal human phenomenon, the core of the personality and connection to others (Crumbaugh, 1977; Frankl, 1954).


Tragic triad: consists of three conditions that are an undeniable fact of human existence: pain, death, and guilt (Frankl, 1984).

Trauma: derived from the Greek word “wound” and compares to the psychic wounding that can potentially follow a traumatic episode (Dass-Brailsford, 2007, p. 2).
Chapter Two

Review of the Literature

The purpose of chapter two was to examine the literature regarding Viktor Frankl, his logotherapy theory, and research on disasters and crises. Frankl’s work was grounded in existentialism; thus, existential theory was also reviewed. The experience of suffering from an existential and logotherapy perspective was connected to the literature on disasters and crises. In the first section, Viktor Frankl’s professional development was discussed. Existential theory was reviewed in the second section of the chapter. Frankl’s perspective on existentialism and other researchers who have studied Frankl’s work was reviewed in the third section. In the fourth section, terms and related categories of disasters and crises were examined. The final section covered individuals’ crisis experiences associated with the intensity of their experiences and the post-traumatic growth that can occur.

Frankl’s Professional Development

In the 20th century, Viktor Frankl was a prominent existential thinker. He proposed that the term existential was used in three ways: (a) “existence itself,” (b) “meaning of existence,” and (c) “will to meaning” (Frankl, 1984, p. 106). He diverged from Freud’s deterministic notions with the search for meaning in life (Archer & McCarthy, 2007; Yalom, 1980). Frankl’s theory encompassed many existential ideals and is named logotherapy. Logotherapy is a philosophy of life that attempts to bring spiritual realities into awareness whereas psychoanalysis attempts to bring facts into awareness (Frankl, 1954, 1986; Weisskopf-Joelson, 1975). Frankl departed from the dimension of neurosis which stresses internal feelings about the past and focused instead on the meaning an individual could find in the future. He believed that despair over the value of life is not to be seen as a mental illness, but as existential distress and finding
meaning is a basic human motivation (Brammer, 1985; Frankl, 1984; Melton & Schulenberg, 2008; Schulenberg & Nassif, 2008; Silver et al., 1983; Starck, 2008).

In the early 1920s, Frankl was a high school student asserting his beliefs for the first time. Guttmann (1996) reported that in response to a teacher’s statement about human beings consisting of “nothing more than a machine with internal combustion,” Frankl claimed that humans have a higher meaning in life (p. 3). Frankl believed the search for higher meaning is the primary human motivation for behavior (1984; Reker, 1977; Schulenberg, 2003; Silver et al., 1983) and is the manifestation of the spiritual aspects of humans (Frankl, 1954, 1962, 1986; Guttmann, 1996; Schulenberg et al., 2008). He saw these spiritual aspects as the core of the personality, the Geist.

During the 1930s, Frankl was a medical doctor, a psychologist, and a psychiatrist in addition to being the director of the neurology department of the Rothschild Hospital in Vienna (Guttmann, 2000). At this time, Frankl (2000) named his theory logotherapy. Logotherapy was being developed as a branch of medicine. Schulenberg et al. (2008) reported that the use of logos, by Frankl, was intended to signify the spiritual aspect of the personality and the search for meaning in life. Frankl proposed that the spiritual dimension is comprised of two components; freedom and responsibility (Frankl, 1954, 1986; Guttmann, 1996, 2000; Starck, 2008). The first component, freedom, includes the ability for an individual to make decisions free from instinctual impulse, disposition, and/or environment. Freedom is interrelated with the second component, the ability to accept responsibility for choices an individual makes in life (Frankl, 1986; Guttmann, 2000). Responsibility includes the free will of an individual to choose how to respond in the moment (Melton & Schulenberg, 2008; Schulenberg & Melton, 2010). Responsibility implies a sense of obligation to an individual’s meaning in life and exists as long
as there is consciousness (Frankl, 1954, 1986). One’s choices are present in all actions (Guttmann, 1996, 2000).

When Frankl referred to his predecessors, Freud and Adler, he was quick to acknowledge the debt he owed to their influence. Frankl was fond of telling others that he was “like a dwarf standing on the shoulders of a giant” (Guttmann, 1996, p. 3). In his article published in 1938, *The Case for a Rehumanization of Psychotherapy*, Frankl made his first attempt to progress from Freud’s “depth psychology” to the spiritual aspect of his “height psychology” (Guttmann, 1996, p. 4). Freud’s depth psychology focused on the past and the underlying motivations for behaviors. Frankl (1966b) wrote that depth psychology places an emphasis on the pleasure principle. Instead, he believed the missing emphasis in psychology was the will to meaning (Crumbaugh & Maholick, 1963, 1981; Southwick, Gilmartin, Mcdonough, & Morrisey, 2006; Starck, 2008). According to Guttmann (1996), Frankl was a prophet trying to convince others of the importance of the search for meaning in life as a spiritual aspect of the personality referred to as the noetic dimension. Noetic is considered a “higher” or non-material meaning in life that encompasses the inspirational and aspirational aspects of the mind (Crumbaugh, 1977; Crumbaugh & Maholick, 1981; Frankl, 1967b; Schulenberg & Nassif, 2008; Starck, 2008).

During the 1940s, Frankl’s (1984) professional career was interrupted when he was imprisoned in a concentration camp. He observed firsthand how cruel life was in the camps. When he and his fellow prisoners arrived in the camps, after 2 minutes they received orders to undress, dropping everything they had to the floor. Allowed to keep only their underwear, belts, and shoelaces, they were whipped with a leather strap as they were herded into another room. Frankl described how they were shaved; every hair of their bodies removed and as they took showers the realization set in that they no longer had any possessions of their previous life. The
dehumanization of the prisoners continued daily including undernourishment with limited rations of bread and soup. Prisoners’ bodies started to look like “skeletons disguised with skin and rags” (Frankl, 1984, p. 42).

As a prisoner, Frankl’s experiences and observations in the camps permitted him to witness the corroboration of logotherapy. He saw how survival for some prisoners was possible through the ability to change their attitude and transcend the suffering with their search for meaning (Frankl, 1986, 2000; Guttmann, 1996; Southwick, et al., 2006). For example, Frankl (1984) wrote about two prisoners who were suicidal. These prisoners spoke of nothing to live for, yet Frankl was able to assist them in seeing that the future expected something from them. One prisoner had a son waiting in another country and the other prisoner was a scientist who needed to finish his books. Once they understood a reason for their existence, they were able to survive the suffering. Through their understanding, they were able to find meaning. These prisoners’ experiences added to Frankl’s conviction that meaning for man has survival value (Frankl, 1986; Guttmann, 1996).

In 1948, Frankl published The Unconscious God. During the process of writing the book, Frankl became convinced that he should widen the scope of logotherapy from a branch of medicine to other professions such as counseling (Frankl, 1990; Guttmann, 1996). He meant logotherapy to be a complement for the therapist, adding an additional component to the therapeutic process (Frankl, 1986). In the 1950s, Frankl continued his writings about his experiences in the concentration camps and published From Death-Camp to Existentialism: A Psychiatrist’s Path to a New Therapy. In this book, Frankl described his experiences and memories which related to the basic components of logotherapy. In 1955, Frankl published The Doctor and the Soul, describing the principles of logotherapy extensively.
In 1962, the book *From Death-Camp to Existentialism: A Psychiatrist’s Path to a New Therapy* was renamed *Man’s Search for Meaning*. In the 73rd English printing of *Man’s Search for Meaning*, Frankl (1984) interpreted his success as a sign of society’s misery, evidenced by hundreds of thousands of readers reaching for answers about their search for meaning. Frankl’s articles and books were originally published in German. *The Unconscious God*, first published in 1948, was later published with an English version in 1975. Frankl expanded the text in 1997 and published the same text under a new title: *Man’s Search for Ultimate Meaning*. Eventually, Frankl published over 30 books, hundreds of articles and chapters in books, and several of his books had been translated into over 30 languages before his death in 1997 (Guttmann, 2000; “Life and Work,” 2010; Yalom, 1980).

**Existential Theory**

Frankl’s assumptions were borne from existentialism, a prominent philosophy regarding an individual’s existence (Brammer, 1985; Crumbaugh & Maholick, 1964; Frankl, 1966a; Schulenberg, 2004). Archer and McCarthy (2007) reported that existential philosophy is a movement with a variety of theorists and philosophers that is several hundred years old. Husserl, Heidegger, Kierkegaard, Jaspers, Sartre, and Nietzsche were some of the philosophers who shaped existential philosophy (Archer & McCarthy, 2007; Molina, 1962; Prochaska & Norcross, 2007). Archer and McCarthy (2007) and Prochaska and Norcross (2007) wrote about how Bugental, Yalom, Binswanger, May, and other psychotherapists in the early to mid-1900s transformed existential philosophy into existentialism, a theory of psychotherapy. The theorists and philosophers of the existential movement believed that finding meaning through existence is critical to the impact on life (Hanly, 1979; Reinhardt, 1960; Reker, 2000; Yalom, 2002a, 2002b; Zika & Chamberlain, 1992). Existentialists have a sense that all areas of the psyche should be
balanced: emotional, physical, mental, behavioral, and spiritual (Hanly, 1979; Yalom, 2002a). An individual’s existence is an emerging, a becoming, and a process of being that is not fixed or characterized by particular traits (Prochaska & Norcross, 2007). Existence is best understood as being active in unison with the environment.

**Existential levels and givens.**

Existentialists propose there are four levels of existence in the world: *Umwelt, Mitwelt, Eigenwelt, and Uberwelt*. *Umwelt* means being-in-nature and refers to how an individual interacts with the physical and biological aspects of the world. *Mitwelt* refers to the social world, the world of persons, being-with-others. *Eigenwelt* refers to the own-world, the experience an individual has with oneself, being-for-onself. *Uberwelt* refers to the spiritual dimension, a connection with the metaphysical or abstract and is where an individual creates meaning (Archer & McCarthy, 2007; Kotchen, 1960; Prochaska & Norcross 2007).

Existentialists also believe that the existential concerns of life include four *givens*. The foundation of existentialism was created on these four givens of existence. The givens are interrelated, although presented individually (Archer & McCarthy, 2007; Cooper, 2003; Prochaska & Norcross 2007; Yalom, 1980). First, the given of the reality of death forces an awareness of the human condition of finiteness. Death creates a source of anxiety for all, as an end is certain. The given of the reality of death tends to be a source of lying, as an individual might attempt to deny awareness of the forthcoming physical end. Within the underpinnings of the first given, Yalom (1980) described four assumptions. These four assumptions provide a context for other existentialists to address the anxiety of death for an individual. The first assumption is that anxiety consumes a large amount of an individual’s energy. The second assumption is that the fear of death includes a constant source of anxiety. Third, a fear of death
for children needs to be dealt with developmentally and is possibly a maladaptive defense. Finally, an awareness of death can assist an individual in psychotherapy.

The second given of freedom explained by Yalom (1980) is “the absence of external structure” (p. 8). Freedom creates an anxiety that confronts an individual with the responsibility and the outcome of choices (Archer & McCarthy, 2007; Cooper, 2003; Prochaska & Norcross 2007; Yalom, 1980). Freedom provides an individual with the ability to create a life and to be responsible for resulting decisions. Responsibility is at the core of an individual’s freedom. Anxiety accompanies an individual’s responsibility, as he or she is alone with decisions. An individual is responsible for any serious mistakes and chooses how to see the world, thereby is responsible for his or her existence. For example, what one individual might see as beautiful, another might see as ugly. Another example would be if one individual decides a cause is important to devote time to while another individual decides to ignore the cause. All of these decisions are part of the responsibility of freedom. Some existentialists believe the given of freedom provides the most fundamental anxiety of existence for an individual (Yalom, 1980).

The third given is the ultimate concern of aloneness or existential isolation (Archer & McCarthy, 2007; Cooper, 2003; Prochaska & Norcross 2007; Yalom, 1980). No matter how many social connections or groups an individual joins, ultimately the choices an individual makes must be faced alone. Within the given of aloneness, Yalom (1980) described existential isolation as cutting across both interpersonal and intrapersonal isolation. Interpersonal refers to isolation from others. Intrapersonal manifests when an individual shuts off some part of self from awareness. The anxiety about being alone sometimes is the foundation for decisions made by an individual.
Finally, the fourth given is the concern of meaninglessness (Archer & McCarthy, 2007; Cooper, 2003; Prochaska & Norcross 2007; Yalom, 1980). The significance of a life ultimately rests on whether life has meaning. Creating a life worth living becomes a part of the anxiety of existence. An individual has a need for meaning in a universe that has no meaning. Yalom (1980) wrote that there were two statements regarding meaninglessness. First, an individual needs meaning. The second statement places an opposition to an individual’s need for meaning with the individual’s responsibility for choosing meaning.

**Existential basic principles.**

Bugental (1976) pointed out that an existential goal is to have more of life and less of death. One also has the need to achieve an existential goal. However, a world full of conflicting choices creates a challenge for an individual due to the universe having no meaning and an individual needs meaning. Existentialists describe this challenge as the absurdity of life (Cooper, 2003). Addressing the absurdity of life is foundational for existentialists through four basic principles: authenticity, anxiety, suffering, and pathological lying.

Authenticity refers to an individual as being: (a) open and aware to choices and opportunities; (b) open to one’s own ideals, values, and beliefs; and (c) open to all levels of existence (Archer & McCarthy, 2007; Cooper, 2003; Prochaska & Norcross, 2007). Cooper (2003) reflected that awareness of being authentic for an individual includes awareness and responsibility in the face of absurdity. An authentic life is the ultimate goal. Cooper (2003) wrote if an individual attempts to avoid negative feelings he or she will experience an inauthentic life. Existentialists believe that the negative feelings of existence need to be experienced.

Yalom (1980) wrote that the central source of anxiety for humans is the awareness of existential concerns. The drive for authenticity can result in anxiety (Prochaska & Norcross,
Another concern for existentialists that produces anxiety is the threat of meaninglessness. Existentialists believe that finding meaning in life is the only way to cope with the anxiety brought on by existence (Archer & McCarthy, 2007). The source of meaning, once found, transforms anxiety. Existentialism emphasizes meaning in life to assuage anxiety.

Major life events that cause suffering for an individual can bring about existential anxiety (Archer & McCarthy, 2007). A central theme of existentialism is that to live is to suffer and in surviving an experience, meaning can be found. An individual who is suffering might begin to reassess life. An existential goal would be to transform the suffering experience by finding meaning. Frankl described despair as suffering without meaning (2000; Hirsch, 1994). Suffering provides an opportunity for growth and maturation (Frankl, 1986; Starck, 1978).

Existentialists describe psychopathology as stemming from the need to lie. The only way for an individual to avoid nonbeing is to lie. The need to lie exists when the basis for illness leads to neurotic anxiety or as an inauthentic response to life (Prochaska & Norcross, 2007). Living an inauthentic life versus a false reaction to nonexistence is the difference between neurosis and an existential crisis (Prochaska & Norcross, 2007). Psychopathology develops when an individual acts on neurotic anxiety that can further develop into compulsive behaviors. Compulsive behaviors indicate that an individual has no will (Prochaska & Norcross, 2007). Once an individual moves to the level of having no will, an individual has objectified his or her choices.

An additional characteristic of psychopathology is an overemphasis on one existential level of being or one existential given. An overemphasis of any one level or given is characterized through lying. According to Prochaska and Norcross (2007), an example of lying at an overemphasis of a particular level is when an individual chooses to be anxious about family
members. If an individual feels a compulsion to check on family members, the compulsion to check is an overemphasis at the level *Mitwelt*, being with others. The compulsion to check on family members also addresses an individual’s fear of the existential given of aloneness. When family members are safe due to the compulsive checking, life is viewed as being controlled by the pathological lie of compulsively checking on the family. Prochaska and Norcross reported that the determining factor regarding whether lying is pathological rests in intentionality. The direction of intention that an individual chooses impacts one’s decisions. Meaning in life may be lost through lying. For example, one individual may see an advanced degree as the opportunity for earning potential, while another individual sees an advanced degree as gaining additional knowledge. The view an individual chooses will give meaning to one’s life. The solution to pathological lying is to live an authentic life.

**Existentialism and Frankl**

Many existential analysts were influenced by the thoughts of existential philosophers (Yalom, 1980), Frankl being one of these existential analysts. Frankl based his theory of logotherapy on seven critical principles of existentialism. He expanded the key idea of meaning and embraced four existential principles which included the Uberwelt level, suffering, anxiety, and three of the existential givens. Finally, he expanded two existential principles based on his own beliefs regarding existential frustration and super-meaning.

**Meaning.**

Based on the first principle of meaning, Frankl (1967b) described three assumptions that form an interconnected chain: (a) freedom of will, (b) will to meaning, and (c) meaning of life (Das, 1998; Guttmann, 2000; Schulenberg, 2004). The first assumption is the freedom of will: an individual is finite and existence will end at some point (Frankl, 1967b; Melton &
Schulenberg, 2008). An individual is free to decide on the nature of life. The freedom of will includes Frankl’s (1967b) belief that an individual makes choices. His opinion on self-detachment stemmed from the assumption of freedom. He believed an individual had the capacity to detach from the biological or psychological conditions and reflect on choices while in the space of the noölogical (Frankl, 1967b). According to Frankl (1986), the freedom to decide is the freedom of will. He believed that the freedom of will would unfold based on one’s destiny. Destiny provides the framework for an individual to display the act of freedom. The choices an individual makes, based on the freedom of will, lead to a personal direction in life. An individual’s life consists of the challenge between freedom and destiny. Lantz (1992) found the ability to detach allows an individual to make a choice and even change the choice of how to respond to any moment in life, thereby altering the direction of one’s life. Guttmann (2000) and Melton and Schulenberg (2008) reported that Frankl believed the freedom of will had limits based on the biological, psychological, or sociological conditions that impact an individual’s sense of freedom.

Frankl’s second assumption is the will to meaning. The second assumption is based on Frankl’s (1984) belief that the determination to find meaning was a primary motivational force for an individual. Crumbaugh and Maholick (1981) included Frankl’s premise that an individual desires a unique meaning in life in creating the Purpose in Life (PIL) test. Frankl (1967b) differentiated the will to meaning from a drive for meaning or a need for meaning. He felt that the will to meaning prompts an individual to seek something beyond oneself. Frankl (1960) contended that an individual experiences a meaning in life when committed to a cause greater than him or herself. With the use of the PIL, conflicting results about the impact of gender on meaning have been reported. Sheffield and Pearson (1974) found a general tendency for men to
have higher *PIL* scores. Molasso (2006) reported male college students showed a slightly lower sense of purpose than female college students. Crumbaugh and Maholick (1981), Meier and Edwards (1974), Reker and Cousins (1979), and Melton and Schulenberg (2007) found no significant differences in meaning by gender.

Frankl’s third assumption is meaning of life which includes the first two assumptions; freedom of will and will to meaning. The obligation an individual has to life is the responsibility to find meaning in life (Frankl, 1986; Melton & Schulenberg, 2008; Reker, 2000). Baiocco et al., (2009) found that for adolescents a strong attachment to parents was associated with higher levels of meaning in life. Yet, a normal part of adolescent development is to search for meaning. Walters and Klein (1980) studied over a thousand high school students, finding the *PIL* to be an excellent measure of an adolescent’s general attitude toward life. For an adolescent, search for meaning is a moment of spiritual distress. Similarly, when adults search for meaning, their search is not pathological; rather, the search is a spiritual distress (Frankl, 1986). Various studies have been completed to determine if age is correlated with the discovery of meaning in life. Meier and Edwards (1974) found significant differences with two age groups, 13 to 15 and 17 to 19, as their scores on the *PIL* were significantly lower than all other age groups. Yarnell (1971), Reker and Cousins (1979), and Molasso (2006) found no significant age differences in their studies with the *PIL*.

Frankl (1984) believed that an individual’s responsibility is to recognize that life asks for meaning. When life asks for meaning, an answer is a personal responsibility to life. The search for meaning can happen at any significant moment in life (Frankl, 1986). For Frankl (1967b), life could be made meaningful in a threefold way:
first, through *what we give* to life (in terms of our creative works); second, by *what we take* from the world (in terms of our experiencing values); and third, through *the stand we take* toward a fate we no longer can change (an incurable disease, an inoperable cancer, or the like) (p. 15).

Frankl (1984) categorized the three systems of values to the discovery of the meaning in life: (a) creative, (b) experiential, and (c) attitudinal. His first way of discovering meaning is by creating work or doing a deed through achievement. The second category, experiential, is a way of discovering meaning by experiencing a moment in life or experiencing someone. The third category, attitudinal, is a way of discovering meaning by choosing the attitude an individual takes toward suffering. For the third, when an individual is confronted with a fate that cannot be changed, what matters is to bear witness to the best of human potential.

Frankl broadened his opinion of meaning to other areas, meaning in work for one example. Frankl suggested that unique qualities, dependent on the individual, are expressed through the manner in which he or she works. Therefore, meaning in life requires an individual’s reaction through work (Finch, 2009; Frankl, 1986). Finch (2009) found that the state of concentration in the activity of work made the experience satisfying, not actually the work itself. Conversely, Frankl (1986) explored the absence of work which created a feeling of uselessness, life not having meaning. An unemployed individual experiences the emptiness of time as inner emptiness influencing the social, physical, and economic situation of the individual. He created the term “unemployment neurosis” to reflect how suffering from apathy, not depression (p. 121). Close (2006) found that life holds no meaning for an individual with unemployment neurosis. An unemployed apathetic individual would be indifferent and uninterested, thereby becoming incapable of accepting assistance. Frankl (1986) postulated that
reactions to unemployment are choices. He suggested that choices could be other activities to fulfill one’s meaning in life (Frankl, 1984). In the absence of work, other activities such as art and sports for example, could be used to provide meaning. These activities must present a challenge that provides active participation for an individual to fulfill meaning in life (Close, 2006; Frankl, 1984, 1986).

Meaning in love was another area that Frankl broadened his opinion from existentialism. In being loved, singularity and uniqueness are validated (Frankl, 1986). Love permits an individual to be open to the fullness of life. Frankl believed an individual has three layers and these layers are evident in the understanding of meaning in love. The first layer, being sexually disposed, concerns a person’s physical being. The second layer is an erotically disposed person. The erotically disposed person is interested in the psychic level of another person. Frankl differentiated these two layers by pointing out that an individual may be attracted to the physical traits, while another individual may be attracted to the psychic characteristics. The third layer is love. Loving an individual represents interacting with another individual on the spiritual level (Frankl, 1959). Isaacson and Shantell (2009) described how the spiritual level is the recognition of the uniquely irreplaceable characteristics of a partner. Love is the only way to understand the innermost core personality of another human being (Frankl, 1959, 1986). In loving others, an individual is attracted to the uniqueness of a person. The attraction to the spiritual core of a person exempts an individual from the transitoriness of other relationships.

**Uberwelt level.**

The *Uberwelt* level, the spiritual dimension, was embraced by Frankl. He did not emphasize the other existential levels of *Umwelt*, *Mitwelt*, and *Eigenwelt*. His focus on the *Uberwelt* level in logotherapy was to stress the spiritual aspect of the personality. Crumbaugh
(1977) described spirituality as a universal human phenomenon, the core of the personality and connection to others. Mattes (2005) reiterated that spirituality motivates an individual forward to find meaning in life and allows a person to transcend surroundings. Spirituality allows an individual to find wholeness and develop purpose (Davis, Kerr, & Kurpus, 2003; Kelly, 1995; Myers & Williard, 2003; Zika & Chamberlain, 1992). Spirituality can be viewed as a pervasive force that is a more subjective experience or as a powerful psychological change agent (Hickson, Housely, & Wags, 2000; Stanard, Sandhu, & Painter, 2000).

In contemporary literature, there is confusion between spirituality and religion. Stanard et al., (2000) indicated religion and spirituality are often used together and/or interchangeably, although there are significant differences in the two ideas. Different researchers define religion as a shared system of beliefs, principles, or doctrines that are institutionalized. The institutionalized set of beliefs or doctrines are related to a faith in and worship of a supernatural power or powers regarded as creator(s) and governor(s) of the universe (Love, 2001; Stanard et al., 2000). To Myers and Williard, (2003) religion is a public issue, often expressed through group religious participation. The group participation could be creedal and a ritual expression of spirituality that is associated with world religions and denominations (Kelly, 1995). For some, Molasso (2006) and Starck (2008) found that spirituality refers to a religious dimension, for others spirituality is not a religious dimension. Frankl’s (1986) assumption is that the aim of spirituality is to heal the soul while the aim of religion is to save the soul.

Frankl (1962) introduced the term noetic to define spirituality in comparison to religion. The term noetic means the capacity and tendency to search, find, and construct meaning in life and existence. Frankl was differentiating between spirituality and religion. Crumbaugh (1977) pointed out that Frankl’s use of noetic stresses the higher non-material side of life. The term
noetic was extended to consist of two unique capacities; self-detachment and self-transcendence (Frankl, 1967b, 1986; Guttmann, 1996; Lantz, 1992). The first capacity, self-detachment, refers to the ability to step away and observe self. The second capacity, self-transcendence, refers to the ability to rise beyond outward circumstances (Barnes, 1994; Guttmann, 1996; Lantz, 1992).

**Suffering.**

An additional existential principle that Frankl embraced was the view of suffering. He described suffering as a universal experience, a tragedy or a crisis without meaning (Guttmann, 2000; Hirsch, 1994; Lantz, 1992; Starck, 2008). Suffering is the unavoidable, unchangeable, inescapable, and greatest distress one might experience and is unique to an individual (Barnes, 1994; Frankl, 1986; Guttmann, 1996, 2000; Hirsch, 1994; Lantz, 2000; Starck, 1978; Starck & Ulrich, 1985). Starck and McGovern (1992) pointed out that an individual could not escape from suffering. Suffering is an inherent part of life and provides an opportunity to find meaning in life.

Frankl (1984) believed that the experience of suffering was an important, universal, human condition and described suffering as the tragic triad that includes: (a) pain in the form of suffering, (b) anxiety toward death, and (c) guilt as fallibility (Guttmann, 1996, 2000; Starck, 2008). Frankl (1984) reflected that an individual’s optimism in spite of the tragic triad is called “tragic optimism” (p. 139). He believed that an individual has a choice of how to respond to these three inescapable conditions. Barnes (1994) and Southwick et al., (2006) indicated that an individual has the capacity to make the best of any situation including a tragedy or crisis. Tragedy affects people differently and through a crisis and the resulting trauma an opportunity for growth can present (Barnes, 1994; Guttmann, 2000; Hirsch, 1994; Lantz, 2000; Park et al., 1996). The experience of suffering guards an individual against apathy which Frankl believed...
reminded an individual about being psychically alive. The tension present in suffering can create emotional awareness. Tension also provides a distance between an individual’s personality and the crisis and trauma that causes the suffering. Guttmann (1996) reported that when an individual endures a suffering experience, meaning should be elicited from the suffering experience. Finding meaning in suffering allows suffering to cease and an individual to transcend the experience (Frankl, 1986; Melton & Schulenberg, 2008; Schulenberg, 2003; Starck, 2008).

Frankl thought that meaning in suffering is achievable for all individuals. He believed that self-transcendence could bring meaning to a crisis or a tragedy (Frankl, 1966b, 1986). Starck and Ulrich (1985) found that responses to suffering are individualistic. The process of suffering allows a unique meaning to develop in one’s own life. During a suffering experience, movement is away from the experience and more inwardly towards one’s personality (Frankl, 1986). The tension created during the suffering raises emotional awareness and guards an individual against apathy, resulting in maturity and growth. Frankl (1984) believed that unnecessary suffering was masochistic.

An individual’s reaction to suffering includes the responsibility of the actualization of values (Frankl, 1986). During every single hour, an individual is required to choose a reaction to life. The choices made by an individual demonstrate personal values. The human potential is the ability to transform a personal tragedy into a triumph. An individual can change an attitude towards an unalterable fate by finding meaning in suffering. Destiny also provides events with opportunities to actualize one’s values. Only when an individual can no longer change the events, can actualization of the attitudinal value occur. Frankl felt when the attitudinal value is actualized suffering becomes meaningful. His experience in the concentration camps shaped his
views when he witnessed the ability of an individual to choose how to respond to events, thus finding meaning in life.

For Frankl, the human spirit can transcend any suffering regardless of severity or type (Guttmann, 1996). Guttmann (2000) reported that in logotherapy suffering could be distinguished in the following three types: (a) suffering associated with an unchangeable fate, (b) suffering as a result of an emotionally painful experience, and (c) suffering that arises out of the meaninglessness in one’s life. The first type of suffering, an unchangeable fate, might be illustrated in an individual who is diagnosed with cancer. The second type of suffering, the result of an emotionally painful experience, includes Frankl’s suffering as a prisoner in the concentration camps or a person’s crisis experiences. The third type of suffering, meaninglessness of one’s life, might be exemplified by an individual who is experiencing boredom and/or apathy.

**Anxiety.**

Frankl (1986) believed that the existential principle of anxiety is important. An individual controls one’s environment through the expression of anxiety and manifests anxiety through neurotic behavior (Frankl, 1975a, 1986). For example, a phobic symptom exhibited by an individual would hide the existential fear of death. The expression of anxiety becomes the focus for an individual, hiding the original fear of death and the guilt toward life. The reality of death as a source of anxiety forces an individual to ask about meaning in life. Frankl (1984) expanded the assumption of existential anxiety to include the need to create meaning.

**Givens.**

Frankl (1990) embraced three of the existential givens. He explained the existential given of reality of death or finiteness as transitoriness, the existential given of freedom as
responsibility, and the existential given of meaninglessness as existential despair and spiritual
distress. Frankl emphasized and expanded on the three givens to stress certain points he thought
were critical. The critical part of the existential given of reality of death is that life is finite and
will end. The finiteness of existence or reality of death is a driving force behind an individual’s
choices in life (Frankl, 1990). The reality of finiteness or transitoriness gives meaning to an
individual’s life. If an individual were immortal, he or she would experience no pressure or
anxiety. However, because life is transitory, an individual is pressured to find meaning (Frankl,
1967b, 1984, 1990). Frankl believed another critical part of the given is that the transitory nature
of life requires an individual to be responsible. Choices in life are transitory moments for which
an individual is responsible and in every moment an individual has the potential to make a choice
(Frankl, 1967b, 1984; Guttmann, 1996; Hirsch, 1994). Once an individual chooses, a transitory
moment becomes reality and is no longer vulnerable to being transitory. The event is then
permanently stored and manifests as a choice an individual makes, thus directing his or her life.

Frankl (1986) believed that responsibility arises out of the transitory nature of life and is
critical to existentialism. An individual is responsible for recognizing the temporariness and
singularity of life (Frankl, 1984, 1986; Guttmann, 1996). The sense that life is temporary
compels an individual to find a personal singular meaning, an authentic life and is the origin of
the responsibility to one’s temporary existence. Frankl stated that the responsibility an
individual expresses through making a choice results in the authentic nature of an individual’s
existence. Once an individual accepts the responsibility of the direction in life, satisfaction is the
result (Frankl, 1984; Guttmann, 1996).

The existential given of freedom, a critical part to Frankl’s theory, refers to an
individual’s responsibility to make choices. The given of freedom is a source of anxiety because
an individual alone is responsible for choices. A major tenet for existentialists and Frankl was
that he preferred to live in a world where an individual has the right to make choices. He
stressed that the wrong choice is better than not having a choice. Both existentialists and Frankl
affirmed that an individual is responsible for direction in life through choices. Frankl was fond
of stating, “Live as if you were living already for the second time and as if you had acted the first
time as wrongly as you are about to act now!” (Frankl, 1984, p. 114). He believed this quote
stimulated a sense of responsibleness and reminded an individual to consider the choices in life.
An individual needs to realize before the present becomes the past, actions can be changed and
thus confronted with the finiteness of existence and the finality of choices. Frankl referred to an
individual’s freedom throughout his work. Choices can be made at any moment and the
decisions result in self-determination (1984; Guttmann, 1996). An individual can give in to
circumstances or rise above a situation. The freedom to make a choice or not make a choice and
the ultimate responsibility for a decision or lack of a decision is up to an individual (Frankl,
2000).

The existential given of meaninglessness was the focus of logotherapy and a critical point
for Frankl. Frankl’s (2000) main focus in his work was described as a state of existential despair
and a spiritual distress. He stated meaninglessness was a worldwide phenomenon and is
exhibited through apathy and boredom. The opposite of meaninglessness is the discovery of
meaning in life and requires an individual to be patient, allowing meaning to dawn. Frankl
believed that meaning in life is an inborn drive or pull, something to be found or discovered, not
fabricated (Crumbaugh & Maholick, 1963; Frankl, 1967a, 1984; Schulenberg, 2004; Yalom,
1980). An inborn drive or pull is universal to all, yet unique to each individual and each moment
Frankl (1984, 2000; Starck, 1985). Frankl (1986) believed meaning in life could be approached many ways. One way to approach meaning is through religious beliefs, where meaning is found in the doctrine. For a non-religious individual a different approach is needed. He added that an individual would find meaning in life not within him or herself, but rather in the external world (Frankl, 1967a, 1984; Weisskopf-Joelson, 1975). The discovery of meaning in the world is an individual’s responsibility (Frankl, 1967a, 1967b, 1984, 1986; Meier & Edwards, 1974; Starck, 2008). In addition, when an individual focuses on the world, the more actualized an individual becomes. The actualization is a side effect of self-transcendence.

**Frankl’s expansions.**

While Frankl focused and elaborated on certain principles of existentialism, he also added to the key idea of meaning. He expanded on the search for meaning with existential frustration to explain the struggle an individual has with finding meaning. Existential frustration occurs when an individual experiences an existential vacuum. Frankl (1967b) used the terms, existential vacuum, existential frustration, and noögenic neurosis to describe a spiritual distress. The search for meaning needs a certain level of anguish for an individual. Frankl (1984) believed that man’s search for meaning creates tension rather than equilibrium and is a prerequisite of mental health. A dangerous misconception of mental health is to assume that equilibrium is needed (Frankl, 1967b, 1984). Instead, the striving for a freely chosen goal is what is needed. An individual needs a certain existential angst to remain mentally healthy. He called the struggle, noö-dynamics, an expression that represents the necessary tension between meaning and the search for meaning.

Existential frustration exists as a void in meaning and is a result of an individual’s inability to resolve an existential vacuum (Crumbaugh & Maholick, 1964; Frankl, 1966a;
Frankl (1967b) reported findings of a survey he completed with his students at the University of Vienna, concluding that students from more industrialized nations manifested higher levels of existential vacuum than students from non-industrialized nations. Another survey he completed, 20 years later, indicated only 25% of his European students reported experiencing existential vacuum, while 60% of his American students reported experiencing existential vacuum (Frankl, 1984). As industrialization developed, Frankl observed the two-fold loss of instincts and traditions that were no longer guiding the behaviors of an individual. Individuals were at a loss as to what they wanted to do and behaviors started to adjust to the wishes of others or to meet the condition of conforming to others (Frankl, 1967b, 1984). He believed that a widespread phenomenon existed, a form of nihilism, which was the presence of existential vacuum. As machinery came to replace human workers, the manifestation of existential vacuum increased. Melton and Schulenberg (2008) found that existential vacuum continued into the 21st century.

Existential vacuum manifests itself as a state of boredom (Crumbaugh, 1977; Reker, 1977) and indicates a need for meaning (Frankl, 1967b, 1984). Melton and Schulenberg (2008) reported that an individual’s search for meaning in life is apparent in the current “fast-paced society” (p. 31). Frankl (2000) referred to the unrequited search for meaning as the mass neurotic triad consisting of depression, addiction, and aggression. He discussed addiction to sex as a manifestation of the existential frustration and felt that sexual activity was being dehumanized (Frankl, 1978). The widespread occurrence of the triad is not understandable unless an existential vacuum is recognized (Frankl, 1975b, 1978, 1984; Molasso, 2006; Schulenberg, 2004). Frankl (1984) attempted to clarify that not all of the three behaviors are due to meaninglessness. For instance, not every case of suicide indicates the triad, but he could not
ignore the fact that suicide rates were rising over time indicating a trend towards meaninglessness (Frankl, 2000). An individual’s impulse to take his or her life can be overcome with some awareness of meaning (Frankl, 1984). Guttmann (2000) and Schulenberg (2004) agreed with Frankl’s beliefs.

For an individual, existential vacuum is present when there is an inability to discover, recognize, and accept meaning (Crumbaugh, 1977; Florian, 1989; Frankl, 1984; Guttmann, 2000; Melton & Schulenberg, 2007; Molasso, 2006; Reker, 1977; Schulenberg, 2004; Schulenberg et al., 2008). An individual’s unfulfilled search for meaning in life manifests under a variety of masks and guises that hide an existential vacuum. Frankl (1966b, 2000) saw that the unfulfilled search for meaning is vicariously compensated for by the Adlerian will to power or the Freudian will to pleasure. For example, an individual striving for superiority through achievement or seeking pleasure to avoid pain would be demonstrating impatience to find authentic meaning in life.

An individual might not be aware of his or her existential vacuum. If an existential vacuum is not addressed, the unfulfilled search for meaning might progress to a worse state of anguish. The progressed level of anguish, beyond existential vacuum and frustration, is a noögenic neurosis (Frankl, 1960, 1967b, 1984; Guttmann, 2000) and should not be confused with existential vacuum (Crumbaugh & Maholick, 1964). In 1964, Crumbaugh and Maholick studied the presence of the noögenic neurosis and concluded that their results were exploratory, but did support that the lack of meaning in life could develop into a noögenic neurosis. The noögenic neurosis is characterized by apathy, boredom, and lack of motivation (Frankl, 2000; Guttmann, 1996). Frankl (1954) believed a noögenic neurosis is a spiritual distress, not a mental disease.
The final existential principle that Frankl (1984) expanded was super-meaning. He believed in a world beyond the human world where an individual can find an ultimate meaning that exceeds any personal intellectual capacities (Guttmann, 1996). He also emphasized that making use of spiritual resources aids one’s process in finding the religious level, super-meaning (Frankl, 1984, 2000). An individual has the capacity to go beyond the endurance of existence and the meaninglessness of life resulting in being able to accept the nebulous and unrestricted nature of meaningfulness. Guttmann (1996, 2000) reported that Frankl felt there is an order to the world that is observed through nature and the cosmos. To witness the ultimate order, an individual needs to see something extraordinary, a beauty beyond words. The religious sense in each individual can pierce any of life’s circumstances and enable a search for ultimate meaning (Frankl, 2000). Guttmann (1996) reported that Frankl was not certain everyone could comprehend the religious level, as a result he emphasized that level is not measurable with scientific means. The religious level is a second stage called the unconscious logos; a spiritual unconscious and ultimate existential choices are made in the spiritual unconscious (Frankl, 2000). The continued search for meaning in the spiritual unconscious means an individual can continue to search for the human capability of self-transcendence to find meaning (Barnes, 1994; Frankl, 1966a, 1966b).

Terms and Categories of Disasters/Crises

Terms of disasters/crises.

During Frankl’s (1986) life, he referred to the impact of a painful, unavoidable situation as suffering or to suffer. A definition of to suffer is to feel pain or to endure something unpleasant. Frankl survived suffering in the concentration camps by choosing to self-transcend the pain he was forced to endure. He saw individuals choosing an attitude to self-transcend and
develop meaning for their lives (Frankl, 1984). Dass-Brailsford (2010) and Quarantelli and Dynes (1972) proposed an individual can endure suffering or pain as a result of a disaster or crisis. Historically, a disaster and a crisis have been described in the literature and these terms have been used interchangeably creating confusion and difficulty in differentiating what is a disaster in comparison to what is a crisis (Calhoun & Tedeschi, 2006; Dass-Brailsford, 2007). Confusion has continued with the use of the terms disaster and crisis; however, in more recent research the terms have been differentiated. In 2007, Halpern and Tramontin stated that a disaster could be described as a crisis, but not all crises are disasters. Dass-Brailsford (2007) further distinguished a crisis from trauma by stating that a crisis is a disruptive event for an individual whereas trauma is the result of that event.

According to Halpern and Tramontin (2007), disaster is defined as a catastrophe that changes an environment or community and impacts an individual within his or her community. A disaster is a catastrophe of sudden misfortune resulting in loss of life or property with permanent changes in an environment or a community (Baum et al., 1983; Halpern & Tramontin, 2007). A disaster can also reflect an event that has catastrophic consequences, especially if the disaster involves a negligent business or industry. Disasters are capable of causing extreme death and destruction with little notice (Dass-Brailsford, 2010). When a disaster impacts an individual a feeling of crisis pervades one’s experience (James, 2008). In comparison to a disaster a crisis has been defined over the years with slight variations. Historically in the 1960s, Caplan (1966) defined crisis as when an individual faces insurmountable obstacles to important life goals. In the ‘70s and ‘80s, the definition of crisis was expanded to include when an individual feels fear, shock, and/or distress and he or she is momentarily unable to respond (Brammer, 1985; Carkhuff & Berenson, 1977). In the ‘90s, Slaikeu (1990) added that crisis was
a temporary experience of being upset and disorganized with the potential for a radically positive or negative outcome. Janoff-Bulman (1992) included that a crisis experience happens when an individual’s world of expectations is disrupted. Kanel (2003, 2007) defined a crisis as having three aspects: (a) a precipitating event, (b) a feeling of distress based on perceptions, and (c) a failing of coping methods. In 2008, James defined crisis as the perception or experience an individual has that is intolerable or beyond his or her ability to cope or access resources. A clinical definition of crisis is found in the Diagnostic and Statistical Manual IV-TR (American Psychiatric Association, 2000) and defined as the direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one’s physical integrity; 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 close associate (p. 463).

Trauma, a result of a disaster or a crisis, is defined as the aftereffect an individual experiences (Halpern & Tramontin, 2007). Trauma is derived from the Greek word “wound” (Dass-Brailsford, 2007; Halpern & Tramontin, 2007; Jordan, 2010). The word, trauma, implies a physical injury and compares to the psychic wounding that can potentially follow a traumatic episode. It is a result of an emotionally destructive experience and is indiscriminate in whom it affects (Huang, 2010). The International Society for Traumatic Stress Studies website provides information that traumatic events, unfortunately common, are emotionally overwhelming and/or shocking situations (“What is Traumatic Stress,” 2010). Trauma can be the result of a crisis if the effect of the crisis includes hopelessness and helplessness or an individual’s coping skills are inadequate (Dass-Brailsford, 2007; Dufrene & Dinkel, 2009; Jordan, 2010).
Research on the topic of disaster, crisis, and/or trauma experiences has viewed these experiences from an existential perspective (Jacobsen, 2006; Taliaferro et al., 2009). A few studies provided descriptions of Frankl’s existential perspective on meaning and counselors’ use of his approach within counseling (Carlson, 2003; Das, 1998; Estes, 1997; Wong, 1998). Additional studies describe existential issues with college student populations (Esping, 2010; Holmes & Hardin, 2009; Stevens, Pfost, & Potts, 1990) and more recent studies focused on GCS trauma experiences (Flowers et al., 2010; Machuca, 2010). Flowers et al., indicated that GCS experienced a variety of events described as traumatic which included: (a) an unexpected death of family member or friend (46.9%), (b) an event resulting in feelings of fear, despair, or shock (37.9%), (c) an experience of a natural disaster (33.3%), (d) an attack with a weapon (5.3%), and (e) an experience that was frightful during military service (5.3%). In the second study with GCS, Machuca (2010) reported 21.7% experienced a natural disaster, 13.0% terrorist attacks, 12.3% wars, and 1.4% wildfires. Experiences that were more personal were 19.8% domestic violence, 20.0% death of a parent or spouse, and 28.2% abuse.

Suffering is present in all three experiences of a disaster, crisis, and trauma. Frankl (1986) believed that suffering guarded an individual from apathy. He saw suffering as a unique unavoidable, unchangeable, inescapable, and the greatest distress and pain one might experience (Barnes, 1994; Frankl, 1986; Guttmann, 1996; Hirsch, 1994; Lantz, 2000; Starck, 1978; Starck & Ulrich, 1985). DuPont and McGovern (1992) believed suffering requires meaning and without meaning an individual responds to pain as a physical reaction from a biological function. Suffering can create a state of tension that allows an individual to look beyond pain. Conversely, suffering, triggered by a perceived threat to a person, can be a state of severe distress that affects not just the body, but the whole person including an individual’s psychological wellness (Bulger,
The experience of suffering is viewed by Van Eys (1992) and Starck (1992) as a burden, an affliction, subjective to an individual’s perspective.

The ability of an individual to self-transcend and to respond to the spiritual facilitates change during a suffering experienced (Frankl, 1967b) in a disaster or a crisis (Halpern & Tramontin, 2007). Jacobsen (2006) observed that the change that occurs during a crisis comes from an individual being open to the lowest level of existence. This opening aligns with the existentialists’ idea of the anxiety of death. In a disaster or crisis, anxiety of death can be reframed as suffering that can inspire growth. Regardless of one’s life situation, existentialists believe an individual in crisis is one who has feelings of anxiety, estrangement, despair, or similar emotions that raise questions about meaning (Reinhardt, 1960). As an individual struggles with the questions about meaning experienced during a disaster, crisis or the resulting trauma, growth can occur (Lantz, 1992; Schulenberg et al., 2008). Lantz (1992) wrote that Frankl was one of the first psychotherapists to have recognized that pain experienced in trauma includes an opportunity to make meaning of one’s experience.

**Categories of disasters/crises.**

While disasters have occurred since before recorded history, describing life-changing events as a crisis did not start to occur until the 20th century (Dass-Brailsford, 2010). In contrast, there is an inconsistent record of actual traumatic incidents, yet trauma was mentioned in ancient literature and philosophy (Calhoun & Tedeschi, 2006; Courtois & Gold, 2009). Dass-Brailsford (2007) reported that the earliest records of trauma originated in Sumeria, 4,000 years ago with the death of King Urnamma and the destruction of the city Ur. In the late 19th century, independently, Pierre Janet and Sigmund Freud linked the symptoms of women’s hysteria to the
psychological trauma of sexual assault (Courtois & Gold, 2009; Dass-Brailsford, 2007; Halpern & Tramontin, 2007; Herman, 1992). Unfortunately, Freud’s fear of losing public monetary support resulted in the recanting of his findings as he realized the pervasiveness of trauma within the public (Dass-Brailsford, 2007; Herman, 1992). Freud’s recantation contributed to the sporadic nature of documenting post-traumatic experiences.

Throughout the literature disasters are differentiated into two categories: (a) acts of God/naturally caused and (b) human induced/human-made (Courtois & Gold, 2009; Cunningham, 2003; Herman, 1992; Janoff-Bulman, 1992; Jordan, 2010; Norwood et al, 2000; Weisaeth & Tønnessen, 2003). The term, naturally caused, refers to disasters and serious illnesses beyond human control (Janoff-Bulman, 1992). In the 19th century, a natural disaster reported by Dass-Brailsford (2010), is the Johnstown Flood in Pennsylvania that killed 2,200 people and cost $10 million in damage. Early in the 20th century, the Great San Francisco Earthquake occurred, lasting approximately a minute, but the resulting fire lasted four days. There was a loss of over 3,000 people and a cost of $400 million. In 1965, “Billion Dollar Betsy” came across the Gulf of Mexico slamming into Grand Isle south of New Orleans, earning that nickname, the first natural disaster to cost a billion dollars in estimated damages (p. 4).

In the 21st century, other examples of naturally caused disasters include the earthquake and tsunami in Southern Asia in 2004, Hurricane Katrina in New Orleans in 2005, floods in Tennessee in 2010, and cholera in Haiti in 2010 (Courtois & Gold, 2009; Douglas, 2007; Jordan, 2010). Examples of serious illnesses include cancer, heart disease, and diabetes. In all of these naturally caused disasters, an individual is not directly responsible and the origin is random (Courtois & Gold, 2009; Janoff-Bulman, 1992). According to Janoff-Bulman, without a specific perpetrator to hold accountable for the suffering experienced by a naturally caused disaster, an
individual is more likely to question one’s crisis experience and the rules governing the universe. Questions about why one must endure suffering appear, most noticeably, in an individual’s beliefs about meaning in life. Janoff-Bulman reported that an individual who survives a natural disaster could develop concerns about randomness and chance. In addition, an individual can doubt his or her autonomy and personal strength and develop the feeling that the world is a harmful place.

The category of human induced refers to disasters originating from a human (Jordan, 2010). In the 19th century, the Civil War occurred and in the 20th century, World War I, which are both examples of human induced disasters (Halpern & Tramontin, 2007). Alexander, (2010) as well as Halpern and Tramontin (2007), wrote about soldiers experiencing shock and trauma of military warfare. According to Alexander (2010), soldiers’ trauma records were destroyed; however, some sporadic reports were found. In the reports, terms and descriptions of soldiers’ crisis experiences and the resulting trauma were unclear and sometimes described as “shell shock” (Dass-Brailsford, 2007, p. 4). Public awareness increased and the demand for study and documentation of crisis and trauma experiences resulted. The label, post-traumatic stress, emerged as the most common description of trauma symptoms (Courtois & Gold, 2009; Dass-Brailsford, 2007; Herman, 1992).

In the late 20th century, a human induced technological disaster occurred: the Exxon Valdez struck a reef and spilled over 10 million gallons of oil into Prince William Sound, Alaska (Baum et al., 1983; Dass-Brailsford, 2010). This human induced disaster raised attention to the loss of natural resources as well as economic and cultural loss with over $5 billion in disciplinary fees. In 1995, the Oklahoma City bombing introduced terrorism to the United States killing 168 and injuring 853 individuals with shock waves felt over a 40,000 square feet area (Myers & Wee,
2005; Pfefferbaum, 2003). Many children died or were injured in the day care center located in the Alfred P. Murrah Federal Building, and many children lost one or more parents in the blast (Myers & Wee, 2005; Pfefferbaum, 2003). Beyond the physical devastation, the emotional impact was felt in neighboring towns and counties.

According to Ursano, Fullerton, and Norwood (2003), terrorism seeks to threaten by inducing extreme fear for political, ideological, or theological goals. Terrorism is particularly traumatic due to certain characteristics, including: (a) lack of warning and familiarity, (b) concerns with undetected weapons, (c) deficient government responses, (d) abrupt changes of reality, (e) fear for personal safety and security, and (f) mass fatalities (Myers & Wee, 2005). As the 21st century started, what will be forever known as 9/11 happened with the terrorism attack of American Airlines Flight 11 and United Airlines Flight 175 crashing into the World Trade Towers. Minutes later American Flight 77 crashed into the Pentagon, adding to this human induced disaster (Grieger, et al., 2003). After the terrorist attacks, over 3,000 lives were lost and over $38 billion in damages were incurred (Dass-Brailsford, 2010; Myers & Wee, 2005).

Oldham, (2003) a psychiatrist, reported his feelings of disbelief, denial, shock, and outrage occurred as he watched the World Trade Towers being attacked. Subsequently, he witnessed feelings of grief, fear, and devastation. Terrorist attacks added a new level to the understanding of disaster, crisis, trauma, and suffering.

The most recent human induced technological disaster occurred in 2010 with the Deepwater Horizon drilling rig exploding in the Gulf Coast, killing 11 and injuring 17 (“Popular Mechanics’ Deepwater Horizon Ongoing Coverage,” 2010). The explosion was one of the largest environmental disasters in American history, leaking 4.9 million barrels of oil for months and contaminating 665 miles of coastline (Repanich, 2010). Recently, BP contributed $52
million toward a fund for mental health and substance abuse support through SAMHSA and the four states most affected (Blank, 2010).

Human induced disasters such as wars, terrorist attacks, and oil spills are caused by an individual, group, or company (Janoff-Bulman, 1992). When the intent is malicious, a consequence of the human induced disaster is betrayal trauma (Courtois & Gold, 2009; Janoff-Bulman, 1992). Some human induced disasters are human error or accidental and do not include betrayal trauma. However, when there is intentional harm, the harm inflicted by an individual adds greater psychological damage to the individual who experiences betrayal trauma (Courtois & Gold, 2009). According to Flynn and Norwood (2004) and Halpern and Tramontin (2007), a human induced experience is considered preventable, thus inducing feelings of anger, rage, depression, helplessness, vulnerability, and mistrust. The effects of betrayal trauma force an individual who suffers the intentional harm to recognize the existence of evil (Janoff-Bulman, 1992). Trusting others and self becomes difficult as an individual begins to question core beliefs (Halpern & Tramontin, 2007; Janoff-Bulman, 1992).

A complication of the two categorical view of disasters can occur when disasters happen quickly one after the other. An example of multiple disasters in both categories occurred in 2005 when a natural disaster happened and days later a human induced disaster occurred. The nation saw these disasters as one disaster; however, Hurricane Katrina was a natural disaster followed three days later by the failure of the levees, a human induced disaster (Dass-Brailsford, 2010; Halpern & Tramontin, 2007). Katrina and the levee failure had a death toll of over 1,800 people, as well as thousands of individuals missing and displaced across the United States with damages over $80 billion dollars (Dass-Brailsford, 2010). Another complication is disasters that once would have been categorized as natural are being seen as human induced (Weisaeth &
Tønnessen, 2003). For example, the 1989 earthquake in San Francisco resulted in loss of lives due to collapsing highways. Determining if damage caused by the earthquake is natural or the damage is due to poor construction by humans is unclear, thus deciding what category to label the disaster is a challenge (Myers & Wee, 2005; Weisaeth & Tønnessen, 2003).

A movement began in the 20th century to respond to people who experienced a disaster and the resulting crisis. In 1902, the first suicide hotline was established in San Francisco (Dass-Brailsford, 2010). In 1906, a suicide prevention center was established in New York City (Dass-Brailsford, 2007). In 1942, the Cocoanut Grove fire, the largest single building fire ever to occur in the United States, resulted in the launching of crisis services (Dass-Brailsford, 2010) by Lindeman and Caplan and contributed to the foundation of crisis intervention services (Halpern & Tramontin, 2007; James, 2008; Kanel, 2007; Slaikeu, 1990). Together, they established the Wellesley Project, a community mental health program (Kanel, 2007). Caplan’s focus was on early interventions to promote positive growth from crises and minimize risks. In the 1960s, his interest in early intervention resulted in assisting the suicide prevention movement. Simultaneously, the federal mental health movement was evolving. In 1963, Congress passed the Community Mental Health Centers Act requiring programs to provide crisis intervention services (Dass-Brailsford, 2010; Kanel, 2007; Slaikeu, 1990). Consequently, to evaluate programs for federal funding, documentation and research of crisis services started to appear. This evolution of events in the 1900s contributed to the acceptance of post-traumatic stress disorder. In 1980, the 3rd edition of the *Diagnostic and Statistical Manual* recognized post-traumatic stress disorder (PTSD) as a clinical diagnosis (Courtois & Gold, 2009; Dass-Brailsford, 2007; Herman, 1992).
Individual Experiences

Intensity.

After a disaster and a crisis experience, in the first few minutes and hours an individual will feel stress, fear, and shock (James, 2008; Myers & Wee, 2005). Myers and Wee (2005) added that an individual will experience increased pulse, rapid breathing, tremors, sweating, or chills. Reactions will vary for each individual, influenced by what is seen, heard, felt, thought, feared, or lost. Individuals will behave adaptively and move to protect themselves and their loved ones or might experience behavioral or emotional readjustment concerns (James, 2008; “Phases of Traumatic Stress Reactions in a Disaster”, 2007). The healing process will begin when an individual moves toward making meaning of any personal crisis experience. A new understanding through meaning allows an individual to gain a perspective of the course of life and results in a new existential or spiritual understanding (Gerrity & Steinglass, 2003; North & Westerhaus, 2003; Raphael, 2003).

Myers and Wee (2005) described the evolution of emotions for an individual in the framework of disaster phases. Various researchers have offered different models of the disaster phases (Flynn & Norwood, 2004; Myers & Wee, 2005; “Phases of Traumatic Stress Reactions in a Disaster”, 2007; Rao, 2006). A model commonly used to depict the phases was proposed by James (2008). According to James, the phases of disaster include the emergency, inventory, honeymoon, avoidance, adaptation, disillusionment, anniversary, pathogenic to salutogenic shift, and restabilization/reconstruction phase.

In the emergency phase, an individual might experience confusion, numbness, guilt, fear, and/or disbelief. He or she will leap into action to save property and regain control. There is typically a high physical and emotional energy level, in addition to great morale (James, 2008;
Quarantelli & Dynes, 1972). An individual might perseverate on the event and gain relief from talking about anxieties. Finding family is critical during the emergency phase. Based on the magnitude of the disaster, problem solving and priority setting skills are often compromised (James, 2008). The emergency phase occurs within the first few hours and transitions into the inventory phase within the first few days. During the inventory phase, an individual will engage in seeking information to determine if loved ones are safe or injured and to find them. After loved ones have been found, an individual will check on homes and places of employment. During this phase, an individual will typically become frustrated if unable to find loved ones or angry at authorities if not allowed back in neighborhoods to check on property (James, 2008).

The inventory phase will transition into the honeymoon phase within the first few days, during which an individual will display a collective attitude of working together with others (James, 2008). A community pulls together and optimism will be shared with a belief that full recovery will be obtained. There is typically a great deal of media coverage and political attention, with an outpouring from the public of donations contributing to the sense of hope for rebuilding. An individual will share with others in the community a strong sense of surviving a horrendous experience and a sense of relief that the worst is over. Images and thoughts are still dominating an individual’s focus and coping skills contribute to the individual’s ability to manage this disaster phase. Physical and psychological support systems are important at this time. Energy begins to wane as bureaucratic complexities and temporary housing adds to frustrations (Flynn & Norwood, 2004; James, 2008; Myers & Wee, 2005; Rao, 2006). This phase might last from a week to three months and as media and political attention start to wane and people stop talking about the disaster the adaptation phase begins.
In the adaptation phase, an individual’s response depends on the resiliency of the community and the perception of wellness over sickness or pathology. Stress is ever-present and severe stress can occur, but an individual can recover and grow from the disaster (James, 2008). The adaptation phase may begin within the first month depending on how quickly an individual is adjusting to the crisis experience. While in the disillusionment phase, an individual’s adrenaline runs down and shock wears off. Fear, anxiety, and a sense of vulnerability to a recurring disaster sets in. Bureaucratic red tape, regulations, hassles, delays, and disappointments with government and insurance can occur. Family stress leads to disruption of intimacy and support with the possibility of domestic violence. An individual can succumb to fatigue, while emotional and physical exhaustion sets in. This phase may begin several days or weeks after the disaster and may last for years.

Next is the anniversary phase (James, 2008; Myers & Wee, 2005). For one individual, trauma can be resolved, whereas for another individual the need to process and seek help may occur. An individual who has moved on might greet an individual who needs to process with anger and disapproval. The pathogenic to salutogenic shift occurs typically around the first anniversary. An individual who has mourned losses and started to rebuild is seen as making a healthy, positive growth decision. If an individual remains traumatized, he or she may be seen as making an unwholesome, debilitating decision (James, 2008). As time passes, the restabilization/reconstruction phase occurs, when an individual chooses to live in the same place or to rebuild in a new place. The rebuilding of a home is not the only rebuilding that occurs; an individual must also rebuild his or her emotional and psychological self (James, 2008; Myers & Wee, 2005).
Disaster phases have been used to assist with research findings, yet there are some limitations (Neal, 1997). One of the limitations is that moods for an individual or the collective community move in any direction along the phases determined by events or reminders of the crisis (James, 2008; Myers & Wee, 2005). Also, phases are not linear and may overlap. Another challenge is that an individual might be in more than one phase at the same time and might move through the phases at a different rate of speed than another individual. A final limitation is that the phases are based on chronological time; however, an individual’s crisis experience is emotionally based.

In contrast to James’ disaster phase perspective is North and Westerhaus’s (2003) description of the intensity of an individual’s exposure. They described an individual’s experience of disaster exposure as circles within circles expanding around the center of impact called the epicenter. Intensity is determined by the individual’s distance from the impact of a disaster. For example, an individual in the epicenter would be someone who was injured or fled for his or her life from the World Trade Towers or the Pentagon and would have suffered the most. In comparison, Norris et al. (2002a) described the intensity of a disaster exposure as the amount of traumatic stressors an individual experiences. The more traumatic stressors experienced, the greater the intensity of an individual’s suffering (Fullerton et al, 2003; Halpern & Tramontin, 2007; Myers & Wee, 2005; Norwood et al., 2000). The determination of traumatic stressors an individual can experience include injury to self or family, threat of life, separation from family, loss of property or finances, and relocation of residence (Flynn & Norwood, 2004; Rao, 2006). Norris, Friedman, and Watson, (2002b) found that a mediating factor impacting traumatic stressors is one’s external source of social support. Myers and Wee (2005) described additional mediating factors that impact the amount of stressors an individual experiences which
include one’s biological makeup, developmental history, repertoire of coping skills, ability to manage previous crisis experiences, previous disaster preparedness, amount of social support, and capacity to address recovery tasks. In a meta-analysis conducted by Prati and Pietrantoni (2009), the authors indicated that positive changes after trauma would be promoted with “interventions aimed at increasing optimism, social support, and specific coping strategies” (p. 379).

Post-traumatic growth.

Every individual has a unique response to a crisis and the resulting trauma can vary depending on the individual (Hirsch, 1994) in conjunction with a complex array of factors that influence each individual’s reaction (Schulenberg, Dellinger, et al., 2008; Schulenberg, et al., 2008). An individual may be resilient or become physically sick and psychologically distressed while both may result in post-traumatic growth. Calhoun and Tedeschi (2006) proposed that post-traumatic growth is “an individual’s encounter and struggle with life trauma” which “can lead” to positive change (p. 4). Post-traumatic growth is a process that is demonstrated by a person’s positive movement beyond the typical coping in life. In post-traumatic growth, an individual is transformed by the crisis and his or her beliefs are strengthened (Calhoun, Cann, Tedeschi, & McMillan, 2000; Cryder, Kilmer, Tedeschi, & Calhoun, 2006; Shakespeare-Finch, & Enders, 2008; Tedeschi, & Calhoun, 1996). Cryder et al., (2006) reported post-traumatic growth involves positive change and transforms an individual through the struggle of a trauma.

The idea of post-traumatic growth is not new. In ancient and contemporary religious thinking, there was the belief that there are possibilities for growth from suffering and crisis (Calhoun & Tedeschi, 2006; Prati & Pietrantoni, 2009). In the 20th century, major pioneers, such as Caplan, Dohrenwend, Frankl, Maslow, and Yalom, believed that there can be growth from a
suffering experience (Calhoun & Tedeschi, 2006). Currently, research also has shown that a crisis experience can result in growth and the changes have been documented as being tangible and observed by others (Courtois & Gold, 2009; Park, et al., 1996; Shakespeare-Finch & Enders, 2008; Slaikeu, 1990). Crisis intervention literature encompasses and emphasizes the idea that growth can occur for an individual (Cadell, Regehr, & Hemsworth, 2003; Calhoun & Tedeschi, 2004; Cryder et al., 2006; Friborg, Barlaug, Martinussen, Rosenvinge, & Hjemdal, 2005; Schulenberg, et al., 2008; Shakespeare-Finch & Enders, 2008). Post-traumatic growth and resilience have become established terms describing the positive facets of an individual’s struggle with a crisis or traumatic event (Cadell, et al., 2003; Calhoun, et al., 2000; Calhoun & Tedeschi, 2004; Cryder, et al., 2006; Shakespeare-Finch & Enders, 2008).
Chapter 3

Methodology

Introduction

The sections of this chapter include the research questions, participants, instrumentation, data collection, and methods. In the first and second section are the general and specific research questions. The third section includes descriptions of the sample for the present study. In the fourth section, instrumentation, a description is provided of the researcher-designed survey Graduate Counseling Student Crisis Experience Questionnaire (GCSCEQ) and the Purpose in Life (PIL) test. In the fifth section, the data collection procedures are outlined. Finally in the methods section, the variables and data analysis procedures are presented.

General Research Question

The main research question was:

Is GCS’ meaning in life related to their crisis experience(s)?

Specific Research Questions

The detailed research questions included:

1. Is there a significant relationship between GCS’ PIL scores and their experiences of a major crisis(es)?

2. Is there a significant relationship between GCS’ PIL scores and the number of their crisis experiences?

3. Is there a significant relationship between GCS’ PIL scores and the level of intensity of two or less of their crisis experiences?

4. Is there a significant relationship between GCS’ PIL scores and the level of their sense of meaning in their crisis experiences?
5. Are there group differences between GCS’ PIL scores and the category of their crisis experiences (i.e., natural, human induced, or both)?

Participants

Graduate counseling students (GCS) served as the sample for the present study. Three listservs were utilized to contact coordinators and invite students’ participation: American College Counselor Association (ACCA-L), COUNSQRAD and CESNET. In addition to the listservs, 415 program coordinators throughout the United States were contacted individually through email correspondence to recruit participation. Criteria for inclusion in the present study were that participants were currently enrolled in a master’s, post-master’s, or doctoral level counseling program and lived in the United States.

Instrumentation

A web-based data collection method was created for the present study that included a researcher-designed survey entitled *Graduate Counseling Student Crisis Experience Questionnaire (GCSCEQ)* (see Appendix A) and the PIL (see Appendix B). The GCSCEQ included two sections. The first section consisted of questions to gather demographic information and the second section included questions that address participants’ crisis experience(s).

**Survey section I: Demographic information.**

The first section of the GCSCEQ addressed demographic information and requested participants to indicate their age, sex, ethnicity, current student status, university or college, counseling specialization track, and program’s accreditation (see Appendix A). For item 1, participants were asked to select an age range as indicated by 11 ranges including under 25, 26-30, 31-35, 36-40, 41-45, 46-50, 51-55, 56-60, 61-65, 66-70, and 71+. For item 2, participants
were asked to indicate their sex as female or male. Ethnicity was asked in item 3 as indicated by African American, Asian/Asian American, European American, Hispanic/Latino/a, Middle Eastern, Native American, Pacific Islander, and Bi/Multiethnic, and Other. If participants selected Other, a text box was provided for a description. For item 4, participants were asked to indicate their current student status as master’s level, post-master’s level (not doctoral), and doctoral level. For item 5, participants were asked to specify the university or college they attend. For item 6, participants were asked to specify their counseling specialization track by choosing from the following selections: career counseling, Christian counseling, college counseling, community/clinical mental health counseling, counselor education and supervision, counseling psychology, gerontological counseling, marital, couple, and family counseling/therapy, mental health counseling, pastoral counseling, rehabilitation counseling, school counseling, school psychology, and student affairs. For item 7, participants were asked to indicate their program’s accreditation by selecting CACREP, CORE, Unsure, or Other. If participants selected Other, a text box was provided for specification.

Survey section II: Crisis experience(s).

The second section of the GCSCEQ addressed crisis experiences (see Appendix A). Participants were asked to respond to item number 8 regarding overall experience of a major crisis or crises by rating the level of intensity of their experiences. A Likert-type format was used for item 8 where 1 = No impact, 2 = Minimal, 3 = Moderate, 4 = Strong, 5 = Destructive, 6 = Disastrous, and 7 = Catastrophic. For item 9, participants were asked to respond to 12 statements of specific crisis experiences including Acts of Terrorism, Death of a Significant Person at the Hands of a Human, Death of a Significant Person by a Natural Cause or Serious Illness, Earthquake, Economic Downturn, Flood, Hurricane, Levee Failure, Oil Spill, Personal,
School/Work Shooting, and Wildfire. The list of 12 experiences was chosen based on the Modified Mercalli Intensity Scale for Earthquakes from the Federal Emergency Management Agency (FEMA) website (“The Disaster Area,” 2010) and on the importance of impact and representation of a variety of disaster types. If participants indicated that they had experienced any of these crises, they were asked to rate their experience at the time of each of the crises. The Likert-type format that was used in item 8 was used for item 9. For item 10, participants were asked if a crisis not listed on the GCSCEQ was experienced and to describe the additional crisis. For item 11, participants were asked to rate their crisis experience described in item 10 using the Likert-type format that was used in items 8 and 9. After further investigation of the literature the disaster types were identified as aligned with one of two categories: (a) acts of God/naturally caused or (b) human induced/human-made (Courtois & Gold, 2009; Cunningham, 2003; Herman, 1992; Janoff-Bulman, 1992; Jordan, 2010).

For item 12, participants were asked to indicate how much time had elapsed since their most recent crisis experience. Participants were provided with a drop down box of the following selections which included: (a) less than 1 week (1-6 days), (b) less than 1 month (7-29 days), (c) 1 to 3.9 months, (d) 4 to 6.9 months, (e) 7 to 11.9 months, (f) 1 year (12-23 months), (g) 2 years (24-35 months), (h) 3 to 5 years, (i) 6 to 10 years, and (j) more than 10 years. In item 13, participants were asked to rate their sense of meaning in life as a result of their crisis experiences with a Likert scale (None, Very little, A little, Somewhat, Clear, Very Clear, and Definite). If participants indicated they found meaning, in item 14 participants were asked to describe their sense of meaning in life in a text box provided. Also for item 15, a Likert scale question, participants were asked to respond if their crisis experiences influenced their decisions to enter the counseling profession. The Likert scale used for item 15 was Very probably not, Probably
not, Possibly, Not sure, Probably, Very probably, and Definitely. For items 16 and 17, participants were asked to indicate if they received crisis intervention services or counseling services after their crisis experiences. Crisis intervention services were differentiated from counseling services by the length of a session, (i.e., 15 minutes to 2 hours versus 50-minute sessions) and the length of receiving counseling, (i.e., one to three sessions versus on a regular basis). For item 16, the Likert scale used was 0 (none), 1, 2, 3, 4, 5, 6 and above representing the number of crisis intervention sessions received. For item 17, the Likert scale used was 0 (none), 1-3, 4-6, 7-10, 11-15, 16-20, 21 and above representing the number of counseling sessions received.

In section II, items 18 through 20 were based on Frankl’s (1984) “mass neurotic syndrome” of depression, aggression, and addiction (p. 143) with a Likert scale which included Never, Very rarely, Rarely, Occasionally, Frequently, Very frequently, and Always. For items 18 through 20, participants were asked to indicate any past and/or current personal experiences with depression, aggression, and addiction. For item 18, participants were asked if they had a history of depression prior to their crisis experiences. In the second item embedded in item 18 participants were asked to indicate if they were currently depressed with the same Likert options. Depression was indicated with examples such as sadness, no energy, and no initiative. For item 19, participants were asked if they had a history of aggression prior to their crisis experiences. In the second item embedded in item 19, participants were asked to indicate if they were currently aggressive. Aggression was indicated with examples such as physically, verbally, and quick to anger. For item 20, participants were asked if they had a history of addiction prior to their crisis experience. The Likert scale that was used included Never, Very rarely, Rarely, Occasionally, Frequently, Very frequently, and Always. In the second item embedded in item 20, participants
were asked to indicate if they were currently addicted. Addiction was indicated with examples such as substances, alcohol, shopping, and gambling.

*Purpose in Life (PIL) test.*

Crumbaugh and Maholick (1964) developed an attitude scale entitled the *Purpose in Life (PIL)* test to quantify and qualify existential vacuum based on existential literature, particularly Frankl’s logotherapy. The *PIL* is designed to assess the degree to which an individual lacks a sense of meaning by detecting existential vacuum (Chamberlain & Zika, 1988; Crumbaugh & Maholick, 1981; Walters & Klein, 1980). The presence of existential vacuum indicates that an individual has failed to find meaning in life (Crumbaugh & Maholick, 1981; Reker, 2000; Schulenberg et al., 2008; Yalom, 1980; Yarnell, 1971). Existential vacuum manifests itself as a state of boredom and indicates a need for meaning (Crumbaugh, 1977; Frankl, 1975b, 1978, 1984; Reker, 1977).

*Structure of the PIL.*

The *PIL* is divided into three parts; Sections A, B, and C (Crumbaugh & Maholick, 1981). Section A is a 20-item attitudinal scale and is the only section that is objectively scored (Crumbaugh, 1968; Crumbaugh & Maholick, 1964, 1981). Section B consists of 13 incomplete sentences (Crumbaugh & Maholick, 1981). Section C directs a participant to write a biographical paragraph about goals, ambitions, future plans, and progress toward achieving these goals. Section A is typically used for research purposes, whereas sections B and C are used for clinical purposes. Only Section A was utilized for the present study (see Appendix B).

Research conducted on Section A will be described. The first study on the *PIL* was a pilot study using 25 items with a sample of 225 participants divided into five groups to assess the existential concept of meaning in life by detecting existential vacuum (Crumbaugh & Maholick,
The results of the pilot study supported the premise that if meaning in life is not found, an existential vacuum is present and existential frustration can result. After the pilot study was completed, half of the 25 items were discarded and rewritten resulting in a total of 22 items. In 1968, Crumbaugh conducted another study on the PIL to gather further quantitative data using the previous pilot study’s 225 participants in addition to 926 new participants for a total of 1,151. According to Crumbaugh, participants were divided into four “normal” groups and six psychiatric patient groups (p. 75). Based on the results of the second study, two items were removed from the 22 items resulting in the final version of the PIL with 20 items.

A Likert-type format is used for the 20 items with response choices ranging from 1 = low purpose expressions and 7 = high purpose expressions (Florian, 1989); the neutral point resides at 4 (Crumbaugh & Maholick, 1964). The directions instruct participants to “note that the numbers always extend from one extreme feeling to its opposite kind of feeling” (Crumbaugh & Maholick, PIL, p.1 Form A, See Appendix B). All 20 items have different anchor points based on each individual item. For example, question 1 asks participants to rate their responses to the item “I am usually . . .” where the Likert options are: 1 = Completely bored, 4 = Neutral, and 7 = Exuberant, enthusiastic. The sums of the Likert scores for the 20 items comprise the total score with a range of 20 to 140 (Crumbaugh, 1968, 1977; Crumbaugh & Maholick, 1964; Reker & Cousins, 1979). Scores also include three categories: (a) scores of 113 and above suggest definite purpose and meaning in life, (b) scores between 92 and 112 indicate indefinite purpose and meaning in life, and (c) scores 91 and below indicate a lack of purpose and meaning in life (Bechtel, 1994; Bolt, 1975; Crumbaugh & Maholick, 1964, 1981).
Validity and reliability of the PIL.

Validity and reliability are key characteristics of an instrument. An instrument’s validity can be described as the degree to which the instrument measures the construct it purports to measure (Gay, 1996). Reliability is concerned with the consistency of what is measured across administrations (Granello, 2007). According to Crumbaugh and Maholick (1964), the PIL is a valid and reliable instrument for the measurement of meaning in life (Reker, 2000) and has been used in over 200 doctoral dissertations, master’s theses, and empirical research studies (Guttmann, 1996; Molasso, 2006; Yalom, 1980). One method used to establish validity of the PIL by Crumbaugh and Maholick, (1964) was by distinguishing differences between PIL mean scores of both genders for patient and non-patient populations with a mean range of 99 to 119. A partial concurrent validation resulted in an $r$ value of .27. They also established reliability with a Pearson $r$ of .81, corrected with Spearman-Brown of .90.

Further validation was conducted in 1968 when Crumbaugh conducted a cross-validation study on the PIL. Concurrent validity was established with therapists’ ratings of outpatients’ scores on the PIL resulting in a $r$ of .38 ($n = 50$) as well as the ministers’ ratings of their parishioners on the Ministers Rating Scale resulting in a $r$ of .47 ($n = 120$). Meier and Edwards (1974) completed a criterion validity study using the Frankl Questionnaire that resulted in a correlation coefficient of $r = .56$. Concurrent validity for the PIL was established by Reker, (1977) who conducted a study with correlations of the PIL and Life at Present with a resulting correlation coefficient of $r = .45$ and the PIL and Life in the Future with a resulting correlation coefficient of $r = .54$.

Crumbaugh, (1968) after conducting a split-half analysis, reported a reliability coefficient of $r = .85$, corrected by the Spearman-Brown formula to $r = .92$. Meier and Edwards (1974)
reported a reliability coefficient of .83 after completing a test-retest analysis. Reker (1977) found a coefficient identical to that of Crumbaugh for a split-half reliability analysis he completed with inmates (r = .85, corrected to r = .92). In addition, Reker (1977) completed a test-retest reliability analysis with a coefficient correlation of .68. Schulenberg et al., (2008) reported the PIL had ample evidence of reliability. Coefficient alphas were often reported in the .80s (Melton & Schulenberg, 2008; Schulenberg, 2004). Reker (2000) indicated the psychometric properties of the PIL were favorable based on an analysis of various studies. Routine reports of internal consistency and temporal stability reliabilities ranged from high .70s to the low .90s (Crumbaugh, 1968; Crumbaugh & Maholick, 1981; Meier & Edwards, 1974; Reker, 1977; Zika & Chamberlain, 1992).

When Chamberlain and Zika (1988) completed a comparison study of the PIL with the Life Regard Index (LRI) and the Sense of Coherence (SOC) scale, they provided additional psychometric properties through a factor analysis. Their 188 participants completed all three instruments. The inter-correlation matrix between the PIL, the LRI sub-scales, and the SOC sub-scales was subjected to a principal axis analysis that resulted in a one-factor solution of life meaning accounting for 64% of the variance. All the measures had high loadings on the factor suggesting a general meaning in life dimension underlying the measures. Their findings provided an indication that the PIL does measure meaning in life.

Data Collection

Data collection for the present study was completed electronically. Qualtrics™, a web-based service, was used for the creation of the GCSCEQ. Participants were asked to complete the GCSCEQ and the PIL. Permission to use the PIL was obtained from Dr. Barnes, the President of the Frankl Institute of Logotherapy and publisher of the PIL (see Appendix C).
Participants were contacted via an email message through three professional listservs: ACCA-L, COUNSGRAD, and CESNET (see Appendix D). An active web link was included in the email correspondence directing participants to the GCSCEQ and the PIL. Approximately one week after the initial email message, a second request for participation was sent to participants (see Appendix E). A Google and Bing search was completed by the researcher to identify colleges and universities in the United States which offered counseling programs. In addition to the three listservs, a total of 415 program coordinators were sent an email to recruit students (see Appendix F). A reminder email was sent to coordinators approximately one week later (see Appendix G). All emails to the listservs and program coordinators were sent at the same time. Approval for the present study was obtained from the University of New Orleans Institutional Review Board (IRB) (see Appendix H).

Methods

To analyze the research questions, the data analysis procedures included Pearson r correlations and one-way analysis of variance (ANOVA). The PASW Statistics 18.0 (formerly SPSS) software package was used to analyze the data.

Variables.

The independent variables associated with this study were participants’ perceptions of their crisis experiences consisting of the following: (a) overall intensity level of a crisis experience (i.e., no impact, minimal, moderate, strong, destructive, disastrous, or catastrophic); (b) out of 13 crisis experiences provided, the number of crises experienced; (c) crisis intensity levels (i.e., no impact, minimal, moderate, strong, destructive, disastrous, or catastrophic); (d) perceptions of finding meaning in crises; and (e) categories of crisis (i.e., natural, human induced, or both). The dependent variable of the study was the participants’ scores on the PIL.
Data analysis procedures.

Research question 1. Is there a significant relationship between GCS’ PIL scores and their experiences of a major crisis(es)?

Data analysis. The Pearson’s r correlation was used to determine if there was a significant relationship between participants’ PIL scores and the experience of a major crisis or crises. Participants’ PIL scores and responses to item 8 from Section II of the GCSCEQ were used for data analysis. An alpha level of .01 was used to minimize the potential for a Type I error.

Research question 2. Is there a significant relationship between GCS’ PIL scores and the number of their crisis experiences?

Data analysis. The Pearson’s r correlation was used to determine if there was a significant relationship between participants’ PIL scores and the number of their crisis experiences. Participants’ PIL scores and responses to items 9 (i.e., grid of 12 crises) and 11 (i.e., crisis not listed in the grid) from Section II of the GCSCEQ were used for data analysis. The total number of each participant’s responses was added across the 13 crisis experiences. For example for items 9 and 11, if a participant chose 1 of the 13 crisis experiences, the total was one. If a participant chose 5 of the 13 crisis experiences, the total was five. An alpha level of .01 was used to minimize the potential for a Type I error.

Research question 3. Is there a significant relationship between GCS’ PIL scores and the level of intensity of two or less of their crisis experiences?

Data analysis. Pearson’s r correlations were used to determine if there were statistically significant relationships between GCS’ PIL scores and the intensity level (i.e., No impact, Minimal, Moderate, Strong, Destructive, Disastrous, or Catastrophic) of two or less of their
crisis experiences (i.e., Acts of Terrorism, Death of a Significant Person at the Hands of a Human, Death of a Significant Person by a Natural Cause or Serious Illness, Earthquake, Economic Downturn, Flood, Hurricane, Levee Failure, Oil Spill, Personal, School/Work Shooting, Wildfire, an Additional Crisis). Participants’ PIL scores and responses to items 9 (i.e., grid of 12 various crises) and 11 (i.e., intensity level of crisis not listed in the grid) from Section II of the GCSCEQ were used for data analysis. The Likert responses were limited to the total of the two most severe intensity responses per participant to maintain accuracy of the strength of the intensity level experienced. An alpha level of .01 was used to minimize the potential for a Type I error.

**Research question 4.** Is there a significant relationship between GCS’ PIL scores and the level of their sense of meaning in their crisis experiences?

**Data analysis.** Pearson’s r correlations were used to determine if there were statistically significant relationships between GCS’ PIL scores and the level of sense of meaning in crisis experience. Participants’ PIL scores and responses to item 13 of Section II of the GCSCEQ were used for data analysis. An alpha level of .01 was used to minimize the potential for a Type I error.

**Research question 5.** Are there group differences between GCS’ PIL scores and the category of their crisis experiences (i.e., natural, human induced, or both)?

**Data analysis.** A one-way analysis of variance was used to determine if significant differences existed between participants’ PIL scores and the category of crises. Participants’ PIL scores and responses to item 9 of Section II of the GCSCEQ (i.e., grid of 12 crises) were used for data analysis. Categories were derived from the specific types of disasters for item 9. Post-hoc analysis was conducted for differences in the three groups.
CHAPTER 4

RESULTS

The purpose of this study was to explore the relationship between graduate counseling students’ (GCS) meaning in life and their crisis experiences. The variables that were examined included the following: meaning in life and overall, number, intensity, and category of crisis experiences. The Graduate Counseling Student Crisis Experience Questionnaire (GCSCEQ) and the Purpose in Life (PIL) test were used to collect data. PASW Statistics 18.0 was used to conduct the statistical analyses.

Sample Characteristics

There were a total of 811 responses to the GCSCEQ and the PIL. The criterion for inclusion in the data analysis was that participants who completed the GCSCEQ through item 11 and item 13 and the PIL were included in the final sample. A total of 633 responses were included in the final database for a 78.1% completion rate. The demographic information collected with the GCSCEQ included age, sex, ethnicity, current student status, university or college, counseling track, and program accreditation.

For age, the two largest groups of participants were in the 25 and under age range, 29.9% \( (n = 189) \) and the 26-30 age range, 30.5% \( (n = 193) \). The remaining participants’ age ranges included: 31-35 age range, 13.0% \( (n = 82) \); 36-40 age range, 6.6% \( (n = 42) \); 41-45 age range, 7.4% \( (n = 47) \); 46-50 age range, 5.8% \( (n = 37) \); and 51 and older age range, 6.8% \( (n = 43) \). In the original GCSCEQ, there were five separate age ranges for the 51-55, 56-60, 61-65, 66-70, and 71 and older ranges. Because of the limited number of participants in each of the five age ranges, the ranges were collapsed into one age range of 51 and older (see Table 1).
Table 1

*Frequencies of Participants’ Age Ranges (n = 633)*

<table>
<thead>
<tr>
<th>Age</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 25</td>
<td>189</td>
<td>29.9</td>
</tr>
<tr>
<td>26-30</td>
<td>193</td>
<td>30.5</td>
</tr>
<tr>
<td>31-35</td>
<td>82</td>
<td>13.0</td>
</tr>
<tr>
<td>36-40</td>
<td>42</td>
<td>6.6</td>
</tr>
<tr>
<td>41-45</td>
<td>47</td>
<td>7.4</td>
</tr>
<tr>
<td>46-50</td>
<td>37</td>
<td>5.8</td>
</tr>
<tr>
<td>51 and older</td>
<td>43</td>
<td>6.8</td>
</tr>
</tbody>
</table>

Of the 633 participants asked to identify their sex, the majority were female, 86.3% (n = 546), 13.6% (n = 86) were male, and 0.2% (n = 1) did not answer (see Table 2).

Table 2

*Frequencies of Participants’ Sex (n = 633)*

<table>
<thead>
<tr>
<th>Sex</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>546</td>
<td>86.3</td>
</tr>
<tr>
<td>Male</td>
<td>86</td>
<td>13.6</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.2</td>
</tr>
</tbody>
</table>

*Note.* Missing = number of participants choosing not to answer.

For ethnicity, participants indicated European American as the largest ethnic group at 69.8% (n = 442); followed by African American, 9.3% (n = 59); Other, 9.3% (n = 59); Hispanic/Latino/a, 4.7% (n = 30); Bi/Multiethnic, 3.6% (n = 23); Asian/Asian American, 1.9% (n = 12); Middle Eastern, 0.5% (n = 3); Native American, 0.5% (n = 3); and Pacific Islander, 0.2% (n = 1). One (0.2%) participant did not respond (see Table 3).
Table 3

Frequencies of Participants’ Ethnicity (n = 633)

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>European American</td>
<td>442</td>
<td>69.8</td>
</tr>
<tr>
<td>African American</td>
<td>59</td>
<td>9.3</td>
</tr>
<tr>
<td>Other</td>
<td>59</td>
<td>9.3</td>
</tr>
<tr>
<td>Hispanic/Latino/a</td>
<td>30</td>
<td>4.7</td>
</tr>
<tr>
<td>Bi/Multiethnic</td>
<td>23</td>
<td>3.6</td>
</tr>
<tr>
<td>Asian/Asian American</td>
<td>12</td>
<td>1.9</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>3</td>
<td>.5</td>
</tr>
<tr>
<td>Native American</td>
<td>3</td>
<td>.5</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.2</td>
</tr>
</tbody>
</table>

*Note.* Missing = number of participants choosing not to answer.

For the Other category, responses included: Caucasian, 4.1% (n = 25); White, 2.4% (n = 15); American, 0.4% (n = 2); Icelandic, 0.4% (n = 2); African American/Asian American, 0.2% (n = 1); Black/African origin, 0.2% (n = 1); Black – not African American, 0.2% (n = 1); Caucasian/Mexican, 0.2% (n = 1); Human, 0.2% (n = 1); English/Italian, 0.2% (n = 1); mutt - mix of almost everywhere, 0.2% (n = 1); and unknown - mother is Dutch/Irish, 0.2% (n = 1). For seven (0.4%) responses of Other however, there were no written responses (see Table 4).
Table 4

Frequencies of Participants’ Written Responses to Other under Ethnicity (n = 59)

<table>
<thead>
<tr>
<th>Selection of Other</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>25</td>
<td>4.1</td>
</tr>
<tr>
<td>White</td>
<td>15</td>
<td>2.4</td>
</tr>
<tr>
<td>American</td>
<td>2</td>
<td>.4</td>
</tr>
<tr>
<td>Icelandic</td>
<td>2</td>
<td>.4</td>
</tr>
<tr>
<td>African American/Asian American</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Black/African origin</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Black – not African American</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Caucasian/Mexican</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Human</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>English/Italian</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Mutt – Mix of almost everywhere</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Unknown – Mother is Dutch/Irish</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Missing</td>
<td>7</td>
<td>.4</td>
</tr>
</tbody>
</table>

Note. Missing = number of participants choosing not to write in a descriptor.

For current student status, the largest number of participants indicated master’s level, 76.5% (n = 484) followed by doctoral level, 17.5% (n = 111) and post-master’s level (not doctoral), 5.8% (n = 37). One (0.2%) participant did not answer and was described as missing (see Table 5).

Table 5

Frequencies of Participants’ Current Student Status (n = 633)

<table>
<thead>
<tr>
<th>Current Student Status</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master's level</td>
<td>484</td>
<td>76.5</td>
</tr>
<tr>
<td>Doctoral level</td>
<td>111</td>
<td>17.5</td>
</tr>
<tr>
<td>Post-master's level (not doctoral)</td>
<td>37</td>
<td>5.8</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.2</td>
</tr>
</tbody>
</table>

Note. Missing = number of participants choosing not to answer.

Participants indicated the university or college they were currently attending. The largest number of participants indicated University of North Texas, 5.1% (n = 38) and the second largest group was University of New Orleans, 5.0% (n = 31). The third and fourth largest groups were Eastern Michigan University, 3.8% (n = 23) and Virginia Commonwealth University, 3.6% (n =
22). The fifth, sixth, and seventh largest groups were Southeastern Louisiana University, 3.4% \((n = 21)\), Marshall University, 3.2% \((n = 20)\), and University of Missouri-Kansas City, 3.0% \((n = 19)\). The eighth largest group was University of Colorado – Denver, 2.9% \((n = 18)\). Next, there were two universities, Ball State University and Mercer University with 2.8% each \((n = 17)\). The next two largest groups were William Paterson University, 2.2% \((n = 14)\) and Northern Illinois University, 2.2% \((n = 13)\). Auburn University included 1.9% \((n = 12)\) participants. Texas A&M University – Corpus Christi were 2.2% \((n = 12)\) and The College of New Jersey were 2.1% \((n = 12)\). There were three groups with 11 participants each: Argosy University (1.9%), George Fox University (1.8%), and Shippensburg University (1.8%). There were three groups with nine participants in each group: Holy Family University (1.4%), Lehigh University (1.5%), and Radford University (1.4%). Three universities had eight participants each: DePaul University (1.3%), Freed-Hardeman University (1.3%), and Fresno Pacific University Biblical Seminary (1.4%). Four groups had seven participants each: Albany State University (1.1%), Alfred Adler Graduate School (1.2%), Florida State University (1.1%), and Northern Arizona University (1.1%). Nine universities had six participants each: Colorado State University (1.0%), Jacksonville State University (0.9%), Minnesota State University – Moorhead (0.9%), Mississippi State University (1.0%), Nicholls State University (1.1%), The College of Saint Rose (1.0%), University of Kentucky (1.0%), University of Saint Mary (1.1%), and Winona State University (1.0%). Nine universities had five participants each: Capella University (0.8%), Centenary College (0.8%), Florida Gulf Coast University (0.8%), Indiana State University (0.8%) University of Florida (0.8%), University of Maine (0.8%), University of North Dakota (0.8%), University of Tennessee (0.9%), and Xavier University of Louisiana (0.8%). Four universities had four participants each: Old Dominion University (0.6%), San Francisco State University (0.6%),
University of Kansas (0.7%), and University of San Diego (0.6%). Fourteen universities had three participants each: Barry University (0.5%), Brigham Young University (0.5%), Central Michigan University (0.5%), George Mason University (0.5%), Kent State University (0.5%), Liberty University (0.5%), Loyola Marymount University (0.5%), Oakland University (0.5%), University of Great Falls (0.5%), University of Medicine and Dentistry (0.6%), University of North Carolina – Greensboro (0.5%), University of Phoenix (0.5%), University of the Cumberlands (0.5%), and University of Virginia (0.5%). Thirteen universities had two participants each: Antioch University New England (0.3%), Central Washington University (0.3%), College of Education (0.4%), Emporia State University (0.3%), Evangel University (0.4%), Lindsey Wilson (0.3%), NAU North Phoenix (0.4%), NC State University (0.4%), Ohio University (0.3%), Texas A&M – Commerce (0.4%), The University of Iowa (0.4%), University of Missouri – St. Louis (0.4%), and University of Wyoming (0.3%). The remaining 45 universities had one (0.2%) participant each: Alvernia University, Amberton University, Bowie State University, Bradley University, Cambridge College, Clemson, Cleveland State University, Geneva College, Georgia State University, Grand Canyon University, Grand Valley State University, Harding University, Idaho State University, Johns Hopkins University, Kansas University, Keene State University, Loyola University – New Orleans, Lynchburg College, National Louis University, New Jersey City University, New Mexico State University, North Dakota State University, Northern State University, OSU, Plymouth State University, Providence College, San Jose State University, Slippery Rock University, Texas A&M International University, Texas State University, Texas Tech University, George Washington University, Troy University, University of Cincinnati, University of Houston, University of Illinois – Springfield, University of Memphis, University of Mississippi, University of Nebraska – Omaha, University
of North Carolina – Charlotte, University of Pittsburgh, University of Rochester, Washington State University, Wayne State University, and Western Michigan (see Appendix I). In some cases, percentages sum to more than 100% because of rounding in PASW.

For the counseling track, the largest group of participants indicated school counseling, 27.5% \((n =174)\). Additional counseling tracks included: community/clinical mental health, 23.1% \((n =146)\); mental health, 12.5% \((n =79)\); counseling psychology, 10.9% \((n =69)\); counselor education and supervision, 8.5% \((n =54)\); marital, couple, and family, 5.7% \((n =36)\); college, 3.9% \((n =25)\); student affairs, 2.7% \((n =17)\); rehabilitation, 2.0% \((n =13)\); school psychology, 1.1% \((n =7)\); addictions, 0.6% \((n =4)\); career, 0.5% \((n =3)\); Christian, 0.5% \((n =3)\); and gerontological, 0.3% \((n =2)\). One participant (0.2%) chose not to answer (see Table 6).

Table 6

<table>
<thead>
<tr>
<th>Counseling Track</th>
<th>(f)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>174</td>
<td>27.5</td>
</tr>
<tr>
<td>Community/clinical mental health</td>
<td>146</td>
<td>23.1</td>
</tr>
<tr>
<td>Mental health</td>
<td>79</td>
<td>12.5</td>
</tr>
<tr>
<td>Counseling psychology</td>
<td>69</td>
<td>10.9</td>
</tr>
<tr>
<td>Counselor education and supervision</td>
<td>54</td>
<td>8.5</td>
</tr>
<tr>
<td>Marital, couple, and family</td>
<td>36</td>
<td>5.7</td>
</tr>
<tr>
<td>College</td>
<td>25</td>
<td>3.9</td>
</tr>
<tr>
<td>Student affairs</td>
<td>17</td>
<td>2.7</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>13</td>
<td>2.0</td>
</tr>
<tr>
<td>School psychology</td>
<td>7</td>
<td>1.1</td>
</tr>
<tr>
<td>Addictions</td>
<td>4</td>
<td>.6</td>
</tr>
<tr>
<td>Career</td>
<td>3</td>
<td>.5</td>
</tr>
<tr>
<td>Christian</td>
<td>3</td>
<td>.5</td>
</tr>
<tr>
<td>Gerontological</td>
<td>2</td>
<td>.3</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.2</td>
</tr>
</tbody>
</table>

*Note. Missing = number of participants choosing not to answer.*

Participants indicated their program accreditation. CACREP was the largest accreditation reported, 69.2% \((n =438)\). The second largest group of participants indicated they were unsure,
22.3% \((n = 141)\). The category of Other was selected by 6.3% \((n = 40)\) and CORE accreditation was selected by 1.9% \((n = 12)\). Two participants (0.3%) did not respond (see Table 7).

Table 7

Frequencies of Participants’ Program Accreditation \((n = 633)\)

<table>
<thead>
<tr>
<th>Program Accreditation</th>
<th>(f)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CACREP</td>
<td>438</td>
<td>69.2</td>
</tr>
<tr>
<td>Unsure</td>
<td>141</td>
<td>22.3</td>
</tr>
<tr>
<td>Other</td>
<td>40</td>
<td>6.3</td>
</tr>
<tr>
<td>CORE</td>
<td>12</td>
<td>1.9</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>.3</td>
</tr>
</tbody>
</table>

Note. Missing = number of participants choosing not to answer.

Participants’ responses to the Other category for program accreditation reflected a variety of answers not specific to a counseling education program (i.e., regional, professional). The largest group of participants indicated American Psychological Association at 3.8% \((n = 23)\). Of the participants who indicated their program was in the process of CACREP accreditation or a regional accreditation, each had 0.6% \((n = 3)\). Participants indicated Southern Association of Colleges and Schools accreditation as 0.4% \((n = 2)\). All other responses were only once (0.2%) which included Council of Social Work Education, Middle States Association, National Council for Accreditation of Teacher Education, New England Association of Schools and Colleges, Pupil Personnel Services, not accredited, and Western Association of Schools and Colleges, Association of Theological Schools. Two participants (0.4%) did not elaborate on their Other accreditation (see Table 8). In some cases, percentages sum to more than 100% because of rounding in PASW.
Table 8

Frequencies of Participants’ Program Accreditation – Written Responses to Other (n = 40)

<table>
<thead>
<tr>
<th>Accreditation Selection of Other</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Psychological Association</td>
<td>23</td>
<td>3.8</td>
</tr>
<tr>
<td>Accreditation in process</td>
<td>3</td>
<td>.6</td>
</tr>
<tr>
<td>Regional accreditation</td>
<td>3</td>
<td>.6</td>
</tr>
<tr>
<td>Southern Association of Colleges and Schools</td>
<td>2</td>
<td>.4</td>
</tr>
<tr>
<td>Council of Social Work Education</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Middle States Association</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>National Council for Accreditation of Teacher Education</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>New England Association of Schools and Colleges</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Pupil Personnel Services</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Not accredited</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Western Association of Schools and Colleges, Association of Theological Schools</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>.4</td>
</tr>
</tbody>
</table>

Note. Missing = number of participants choosing not to answer.

Research Questions

Research Question 1

Is there a significant relationship between GCS’ PIL scores and their experiences of major crisis(es)?

Data from participant responses to item 8 from Survey Section II of the GCSCEQ were used to rate the level of overall experiences of a major crisis or crises. The following Likert scale was used: 1 = No impact, 2 = Minimal, 3 = Moderate, 4 = Strong, 5 = Destructive, 6 = Disastrous, 7 = Catastrophic. Pearson r was used to analyze the relationship between GCS’ PIL scores and their overall crisis experiences with an alpha level of p < .01. The results indicated no significant relationship between participants’ PIL scores and their overall crisis experiences (r = -.009, r^2 = .000081, p = .832). Means and standard deviations were computed for PIL scores (M = 109.27, SD = 13.71) and overall crisis experiences (M = 3.94, SD = 1.41).
Research Question 2

Is there a significant relationship between GCS’ PIL scores and the number of their crisis experiences?

Data from participant responses to items 9 (i.e., grid of 12 crises) and 11, (i.e., crisis not listed in the grid) from Survey Section II of the GCSCEQ were used to total the number of crisis experiences based on the 13 available crisis experiences. Total scores could range from 1 to 13. Pearson $r$ was used to analyze the relationship between GCS’ PIL scores and their total number of crisis experiences with $p < .01$ alpha level. The results indicated no significant relationship between participants’ PIL scores and their total number of crisis experiences ($r = -.048$, $r^2 = .0023$, $p = .228$). Means and standard deviations were computed for PIL scores ($M = 109.27$, $SD = 13.71$) and the total number of crisis experiences ($M = 4.96$, $SD = 4.11$).

Research Question 3

Is there a significant relationship between GCS’ PIL scores and the level of intensity of two or less of their crisis experiences?

Data from participant responses to items 9 (i.e., grid of 12 specific crises) and 11 (i.e., intensity level of crisis not listed in the grid) from Survey Section II of the GCSCEQ were used to total the level of intensity of two or less of the 13 crisis experiences. The following Likert scale was used for the intensity levels: 1 = No impact, 2 = Minimal, 3 = Moderate, 4 = Strong, 5 = Destructive, 6 = Disastrous, 7 = Catastrophic. Participants’ total level of intensity scores could range from 1 to 14. Pearson $r$ was used to analyze the relationship between GCS’ PIL scores and the intensity level of two or less experiences with $p < .01$ alpha level. The results indicated no significant relationship between participants’ PIL scores and the intensity level of two or less experiences ($r = -.010$, $r^2 = .0001$, $p = .792$). Means and standard deviations were computed for
PIL scores ($M = 109.27$, $SD = 13.71$) and the intensity level of two or less experiences ($M = 7.65$, $SD = 3.11$).

**Research Question 4**

Is there a significant relationship between GCS’ PIL scores and the level of their sense of meaning in their crisis experience(s)?

Data from participant responses to item 13 from Survey Section II of the GCSCEQ were used to rate their sense of meaning in life as a result of their crisis experiences. The following Likert scale was used: 1 = *None*, 2 = *Very little*, 3 = *A little*, 4 = *Somewhat*, 5 = *Clear*, 6 = *Very clear*, 7 = *Definite*. Pearson $r$ was used to analyze the relationship between GCS’ PIL scores and their sense of meaning in life as a result of crisis experiences with $p < .01$ alpha level. The results indicated there was a significant relationship between GCS’ PIL scores and their sense of meaning in life as a response to their crisis experiences with a medium effect size ($r = .449$, $r^2 = .202$, $p = .000$). Participants’ PIL scores were associated with perceptions of their sense of meaning in life. Means and standard deviations were computed for PIL scores ($M = 109.27$, $SD = 13.71$) and their sense of meaning in life ($M = 5.09$, $SD = 1.26$).

**Research Question 5**

Are there group differences between GCS’ PIL scores and the category of their crisis experience(s) (i.e., natural, human induced, or both)?

Data from participant responses from Survey Section II, item 9 of the GCSCEQ (i.e., grid of 12 crises) were used to determine the category of crisis experiences. The 12 crises were used to identify three categories: (a) human induced, (b) naturally caused, or (c) both categories. A one-way analysis of variance (ANOVA) was conducted to investigate differences between the crisis categories. The ANOVA resulted in a statistically significant difference, $F(2, 595) = 2.87$,
\[ p = .057, \eta^2 = .010 \] with a small effect size. Levene’s test for homogeneity of variance was not significant \( (p = .076) \). According to Mertler and Vannatta (2005), non-significance for the Levene test indicates equal variances of the sample and appropriateness for post hoc analysis.

The Least Significant Differences (LSD) post hoc test was conducted to investigate the significant differences between the three crisis categories. Participants’ mean PIL scores who experienced naturally caused crises \( (M = 112.81, SD = 11.92) \) were significantly higher than participants who experienced human induced crises \( (M = 108.18, SD = 15.75), p = .044 \).

Additionally, participants’ mean PIL scores who experienced naturally caused crises \( (M = 112.81, SD = 11.92) \) were significantly higher than participants’ who experienced both crisis categories \( (M = 108.79, SD = 13.69), p = .022 \). Participants’ mean PIL scores who experienced human induced \( (M = 108.18, SD = 15.75) \) were not significantly higher than participants who experienced both categories of crises \( (M = 108.79, SD = 13.69), p = .727 \).

**Additional Research Results**

Additional results were found for group differences based on age which were included in two additional research questions. For the added research question 6, results indicated differences in GCS’ PIL scores based on age. For the added research question 7, results indicated differences in GCS’ crisis experiences based on age. The results for both questions are provided in the next two sections.

**Research Question 6**

Are there group differences between GCS’ PIL scores and age?

Data from participant responses to demographic item 1 from Survey Section I of the GCSCEQ were used to determine participants’ age ranges. There were seven age ranges: under 25, 26-30, 31-35, 36-40, 41-45, 46-50, and 51 and older. An ANOVA was conducted to
investigate differences between the seven age ranges with $p < .02$ alpha level. The ANOVA resulted in a statistically significant difference, $F(6, 626) = 4.62, p = .000, \eta^2 = .042$ with a small effect size (see Table 9). Levene’s test for homogeneity of variance was not significant ($p = .517$). According to Mertler and Vannatta (2005), non-significance for the Levene test indicates equal variances of the sample.

Table 9

*ANOVA for GCS’ PIL Scores by Age (n = 633)*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>$p$</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>5031.211</td>
<td>6</td>
<td>838.535</td>
<td>4.62</td>
<td>.000</td>
<td>.042</td>
</tr>
<tr>
<td>Within Groups</td>
<td>113707.595</td>
<td>626</td>
<td>181.642</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>118738.806</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. $p < .02$*

The LSD post hoc test was conducted to investigate the significant differences between the seven age ranges with $< .01$ alpha level. Participants’ mean PIL scores for 41-45 year olds ($M = 113.34, SD = 15.09$) were significantly higher than participants’ under 25 years old ($M = 106.92, SD = 14.01, p = .004$) and 36-40 years old ($M = 105.36, SD = 12.34, p = .005$). Participants’ mean PIL scores for 46-50 years old ($M = 115.73, SD = 12.40$) were significantly higher than participants under 25 years old ($M = 106.92, SD = 14.01, p = .000$), 26-30 years old ($M = 108.73, SD = 13.23, p = .004$), and 36-40 years old ($M = 105.36, SD = 12.34, p = .001$). Participants’ mean PIL scores for 51 and older ($M = 113.74, SD = 12.60$) were significantly higher than participants under 25 ($M = 106.92, SD = 14.01, p = .003$) and 36-40 years old ($M = 105.36, SD = 12.34, p = .004$). Participants’ PIL score means for the remaining age ranges were not significant. For participants’ PIL scores, means, standard deviations, number of participants and alpha levels for each age range are displayed in Table 10.
Table 10

LSD Comparisons for PIL Scores by Age

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Comparison Age Range</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-45</td>
<td>under 25</td>
<td>113.34</td>
<td>15.09</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36-40</td>
<td>105.36</td>
<td>12.34</td>
<td>42</td>
<td>.005</td>
</tr>
<tr>
<td>46-50</td>
<td>under 25</td>
<td>115.73</td>
<td>12.40</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26-30</td>
<td>108.73</td>
<td>13.23</td>
<td>193</td>
<td>.004</td>
</tr>
<tr>
<td></td>
<td>36-40</td>
<td>105.36</td>
<td>12.34</td>
<td>42</td>
<td>.001</td>
</tr>
<tr>
<td>51 and older</td>
<td>under 25</td>
<td>113.74</td>
<td>12.60</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36-40</td>
<td>105.36</td>
<td>12.34</td>
<td>193</td>
<td>.004</td>
</tr>
</tbody>
</table>

Note. p < .01

Research Question 7

Are there group differences between GCS’ crisis experiences and age?

Data from participant responses to demographic item 1 from Survey Section I of the GCSCEQ were used to determine age ranges and items 8 and 9 in Survey Section II of the GCSCEQ were used to determine their overall crisis experience(s), intensity level of two or less crisis experiences, and 12 crisis experiences. An ANOVA was conducted to determine group differences at < .02 alpha level.

Overall crisis experiences.

An ANOVA was conducted to investigate differences between participants’ overall crisis experience(s) and the seven age ranges. The ANOVA resulted in a statistically significant difference, $F(6, 571) = 4.18$, $p = .000$, $\eta^2 = .042$ with a small effect size (see Table 11). Levene’s test for homogeneity of variance was not significant ($p = .090$). According to Mertler and Vannatta (2005), non-significance for the Levene test indicates equal variances of the sample.
Table 11

ANOVA for Overall Crisis Experiences by Age (n = 578)

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>48.589</td>
<td>6</td>
<td>8.098</td>
<td>4.18</td>
<td>.000</td>
<td>.042</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1105.639</td>
<td>571</td>
<td>1.936</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1154.228</td>
<td>577</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. p < .02

The LSD post hoc test was conducted to investigate the significant differences between the seven age ranges with < .01 alpha level. The means for participants’ overall crisis experiences for 41-45 years old (M = 4.38, SD = 1.19) were significantly higher than participants under 25 years old (M = 3.66, SD = 1.45, p = .002). Participants’ overall crisis experiences means for 46-50 years old (M = 4.47, SD = 1.42) were significantly higher than participants under 25 years old (M = 3.66, SD = 1.45, p = .002) and 31-35 years old (M = 3.72, SD = 1.40, p = .009). Additionally, means for participants’ overall crisis experiences for 51 and older (M = 4.40, SD = 1.62) were significantly higher than participants under 25 years olds (M = 3.66, SD = 1.45, p = .002). Participants overall crisis experiences’ means for the remaining age ranges were not significant. For overall crisis experiences, means, standard deviations, number of participants and alpha levels for each age range are displayed in Table 12.

Table 12

LSD Comparisons for Overall Crisis Experiences by Age

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Comparison Age Range</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-45</td>
<td>under 25</td>
<td>4.38</td>
<td>1.19</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>46-50</td>
<td>under 25</td>
<td>3.66</td>
<td>1.45</td>
<td>166</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>31-35</td>
<td>3.72</td>
<td>1.40</td>
<td>72</td>
<td>.009</td>
</tr>
<tr>
<td>51 and older</td>
<td>under 25</td>
<td>4.40</td>
<td>1.62</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.66</td>
<td>1.45</td>
<td>166</td>
<td>.002</td>
</tr>
</tbody>
</table>

Note. p < .01
Intensity levels of two or less crisis experiences.

An ANOVA was conducted to investigate differences between the participants’ intensity levels of two or less crisis experiences and the seven age ranges. The ANOVA resulted in a statistically significant difference, $F(6, 626) = 6.32, p = .000, \eta^2 = .057$ with a small effect size (see Table 13). Levene’s test for homogeneity of variance was not significant ($p = .631$).

According to Mertler and Vannatta (2005), non-significance for the Levene test indicates equal variances of the sample.

Table 13

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>$p$</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>349.364</td>
<td>6</td>
<td>58.227</td>
<td>6.32</td>
<td>.000</td>
<td>.057</td>
</tr>
<tr>
<td>Within Groups</td>
<td>5770.175</td>
<td>626</td>
<td>9.218</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6119.539</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: p < .01*

The LSD post hoc test was conducted to investigate the significant differences between the seven age ranges with $< .01$ alpha level. Participants’ mean intensity level of crisis experiences for 41-45 years old ($M = 8.98, SD = 2.84$) were significantly higher than participants under 25 ($M = 7.23, SD = 2.95, p = .000$), 26-30 years old ($M = 7.21, SD = 3.28, p = .000$), and 31-35 years old ($M = 7.23, SD = 3.12, p = .002$). Participants’ mean intensity level of crisis experiences for 46-50 years old ($M = 9.11, SD = 2.40$) were significantly higher than participants under 25 ($M = 7.23, SD = 2.95, p = .001$), 26-30 years old ($M = 7.21, SD = 3.28, p = .001$), and 31-35 years old ($M = 7.23, SD = 3.12, p = .002$). Participants’ mean intensity level of crisis experiences for 51 and older ($M = 9.09, SD = 2.85$) were significantly higher than participants under 25 ($M = 7.23, SD = 2.95, p = .000$), 26-30 years old ($M = 7.21, SD = 3.28, p = .000$), and 31-35 years old ($M = 7.23, SD = 3.12, p = .001$). Participants’ remaining age ranges were not
significant. For participants’ overall intensity level crisis experiences, means, standard deviations, number of participants for each age range and alpha levels are displayed in Table 14.

Table 14

LSD Comparisons for Intensity Level for Two or Less Crisis Experiences by Age

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Comparison Age Range</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-45</td>
<td>Under 25</td>
<td>8.98</td>
<td>2.84</td>
<td>47</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>26-30</td>
<td>7.23</td>
<td>2.95</td>
<td>189</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>31-35</td>
<td>7.23</td>
<td>3.12</td>
<td>193</td>
<td>.002</td>
</tr>
<tr>
<td>46-50</td>
<td>Under 25</td>
<td>9.11</td>
<td>2.40</td>
<td>37</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>26-30</td>
<td>7.21</td>
<td>3.28</td>
<td>193</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>31-35</td>
<td>7.23</td>
<td>3.12</td>
<td>82</td>
<td>.002</td>
</tr>
<tr>
<td>51 and older</td>
<td>Under 25</td>
<td>9.09</td>
<td>2.85</td>
<td>43</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>26-30</td>
<td>7.21</td>
<td>3.28</td>
<td>193</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>31-35</td>
<td>7.23</td>
<td>3.12</td>
<td>82</td>
<td>.001</td>
</tr>
</tbody>
</table>

*Note. p < .01*

Twelve crisis experiences.

ANOVA were conducted to investigate differences between participants’ 12 crisis experiences and seven age ranges with < .02 alpha level. Four out of the 12 crisis experiences resulted in significant differences: death of a significant person/natural cause, earthquake, economic downturn, and personal (i.e., partner violence, child abuse and/or neglect).

For participants’ death of a significant person/natural cause crisis experiences, an ANOVA was conducted to investigate differences between participants’ crisis experiences of a death of a significant person/natural cause and the seven age ranges. The ANOVA resulted in a statistically significant difference, $F(6, 492) = 3.24, p = .004, \eta^2 = .038$ with a small effect size (see Table 15). Levene’s test for homogeneity of variance was not significant ($p = .369$).
According to Mertler and Vannatta (2005), non-significance for the Levene test indicates equal variances of the sample.

Table 15

**ANOVA for Death of a Significant Person/Natural Cause Experiences by Age (n = 499)**

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>33.710</td>
<td>6</td>
<td>5.618</td>
<td>3.243</td>
<td>.004</td>
<td>.038</td>
</tr>
<tr>
<td>Within Groups</td>
<td>852.390</td>
<td>492</td>
<td>1.732</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>886.100</td>
<td>498</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. p < .01*

The LSD post hoc test was conducted to investigate the significant differences between the seven age ranges with < .01 alpha level. Participants’ mean scores for death of a significant person/natural cause for 51 and older ($M = 4.25, SD = 1.44$) were significantly higher than participants under 25 years old ($M = 3.47, SD = 1.33, p = .001$) and 31-35 years old ($M = 3.37, SD = 1.17, p = .002$). Participants remaining age ranges were not significant. For participants’ death of a significant person/natural cause experiences, means, standard deviations, number of participants for each age range and alpha levels are displayed in Table 16.

Table 16

**LSD Comparisons for Death of a Significant Person/Natural Cause Experiences by Age**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Comparison Age Range</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>51 and older</td>
<td>Under 25</td>
<td>3.47</td>
<td>1.33</td>
<td>160</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>31-35</td>
<td>3.37</td>
<td>1.17</td>
<td>59</td>
<td>.002</td>
</tr>
</tbody>
</table>

*Note. p < .01*

An ANOVA was conducted to investigate differences between participants’ earthquake experiences and the seven age ranges. The ANOVA resulted in a statistically significant difference, $F(6, 193) = 3.51, p = .003, η² = .098$ with a small effect size (see Table 17). Levene’s
The Levene test for homogeneity of variance was not significant ($p = .105$). According to Mertler and Vannatta (2005), non-significance for the Levene test indicates equal variances of the sample.

Table 17

ANOVA for Earthquake Experiences by Age ($n = 200$)

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>$p$</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>17.320</td>
<td>6</td>
<td>2.887</td>
<td>3.514</td>
<td>.003</td>
<td>.098</td>
</tr>
<tr>
<td>Within Groups</td>
<td>158.555</td>
<td>193</td>
<td>.822</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>175.875</td>
<td>199</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. $p < .01$*

The LSD post hoc test was conducted to investigate the significant differences between the seven age ranges with $< .01$ alpha level. Participants’ mean scores for earthquake experiences for 46-50 years old ($M = 2.58$, $SD = 1.44$) were significantly higher than participants’ under 25 years old ($M = 1.40$, $SD = .99$, $p = .000$), 26-30 years old ($M = 1.43$, $SD = .74$, $p = .000$), 31-35 years old ($M = 1.31$, $SD = 1.01$, $p = .000$), 36-40 years old ($M = 1.17$, $SD = .39$, $p = .000$), 41-45 years old ($M = 1.60$, $SD = .83$, $p = .006$), and 51 and older ($M = 1.50$, $SD = .67$, $p = .004$).

Participants’ remaining age ranges were not significant. For participants’ earthquake experiences, means, standard deviations, number of participants for each age range and alpha levels are displayed in Table 18.
An ANOVA was conducted to investigate differences between participants’ economic downturn experiences and the seven age ranges. The ANOVA resulted in a statistically significant difference, \( F(6, 371) = 5.04, p = .000, \eta^2 = .075 \) with a small effect size (see Table 19). Levene’s test for homogeneity of variance was not significant \( (p = .907) \). According to Mertler and Vannatta (2005), non-significance for the Levene test indicates equal variances of the sample.

The LSD post hoc test was conducted to investigate the significant differences between the seven age ranges with < .01 alpha level. Participants’ mean scores for economic downturn experiences for 31-35 years old \( (M = 3.43, SD = 1.10) \) were significantly higher than participants under 25 years old \( (M = 2.83, SD = 1.21, p = .006) \). Participants mean scores for economic downturn experiences for 36-40 years old \( (M = 3.58, SD = 1.21) \) were significantly higher than...
participants under 25 years old ($M = 2.83, SD = 1.21, p = .004$). Additionally, participants’ mean scores for economic downturn experiences for 41-45 years old ($M = 3.85, SD = 1.44$) were significantly higher than participants under 25 ($M = 2.83, SD = 1.21, p = .000$) and 26-30 years old ($M = 3.01, SD = 1.28, p = .001$). Finally, participants’ mean scores for economic downturn experiences for 51 and older ($M = 3.68, SD = 1.39$) were significantly higher than participants under 25 ($M = 2.83, SD = 1.21, p = .002$). Participants’ remaining age ranges were not significant. For participants’ economic downturn experiences, means, standard deviations, number of participants for each age range and alpha levels are displayed in Table 20.

Table 20

*LSD Comparisons for Economic Downturn Experiences by Age*

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Comparison Age Range</th>
<th>$M$</th>
<th>$SD$</th>
<th>$n$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-35</td>
<td>under 25</td>
<td>3.43</td>
<td>1.10</td>
<td>49</td>
<td>.006</td>
</tr>
<tr>
<td>36-40</td>
<td>under 25</td>
<td>2.83</td>
<td>1.21</td>
<td>109</td>
<td>.004</td>
</tr>
<tr>
<td>41-45</td>
<td>under 25</td>
<td>2.83</td>
<td>1.21</td>
<td>33</td>
<td>.000</td>
</tr>
<tr>
<td>41-45</td>
<td>26-30</td>
<td>3.01</td>
<td>1.28</td>
<td>108</td>
<td>.001</td>
</tr>
<tr>
<td>51 and older</td>
<td>under 25</td>
<td>3.68</td>
<td>1.39</td>
<td>28</td>
<td>.002</td>
</tr>
</tbody>
</table>

*Note. $p < .01$*

An ANOVA was conducted to investigate differences between the seven age ranges and personal experiences. The ANOVA resulted in a statistically significant difference, $F(6, 337) = 2.58, p = .019, \eta^2 = .044$ with a small effect size (see Table 21). Levene’s test for homogeneity of variance was not significant ($p = .835$). According to Mertler and Vannatta (2005), non-significance for the Levene test indicates equal variances of the sample.
Table 21

ANOVA for Personal Experiences by Age (n = 344)

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>46.646</td>
<td>6</td>
<td>7.774</td>
<td>2.58</td>
<td>.019</td>
<td>.044</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1015.668</td>
<td>337</td>
<td>3.014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1062.314</td>
<td>343</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. p < .02

The LSD post hoc test was conducted to investigate the significant differences between the seven age ranges with < .01 alpha level. Participants’ mean scores in personal experiences for 46-50 years old (M = 4.61, SD = 1.85) were significantly higher than participants’ mean scores for under 25 (M = 3.41, SD = 1.76, p = .007). Participants’ remaining age ranges were not significant. For participants’ personal experiences, means, standard deviations, number of participants in each age range, and alpha levels are displayed in Table 22.

Table 22

LSD Comparisons for Personal Experiences by Age

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Comparison Age Range</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>46-50</td>
<td>under 25</td>
<td>4.61</td>
<td>1.85</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.41</td>
<td>1.76</td>
<td>101</td>
<td>.007</td>
</tr>
</tbody>
</table>

Note. p < .01

For the remaining six crisis experiences, two (i.e., flood and wildfire) resulted in ANOVA significant differences; however, the Levene test for homogeneity of variance was violated. According to Cann (2009), when the Levene test is violated the Welch and Brown-Forsythe should be conducted for additional significance for possible Type I Error. For flood, both the Welch and Brown-Forsythe resulted in no significant differences (F = .119 and .088, respectively). For wildfire, both the Welch and Brown-Forsythe could not be conducted because at least one group had zero variance. Both the flood (n = 170) and wildfire (n = 144) had small
participant numbers indicating the possibility there were not enough participants in each of the age ranges for evaluation. The remaining six crisis experiences (i.e., acts of terrorism, \( n = 210 \), death of a significant person/human cause \( n = 249 \), hurricane \( n = 207 \), levee failure \( n = 151 \), oil spill \( n = 154 \), and school/work shooting \( n = 149 \) resulted in no ANOVA significant differences.

**Summary**

The results presented in this chapter included frequencies of the demographics and data analysis of the research questions. The first three research questions for GCS’ PIL scores and overall, number, and level of intensity of crisis experiences resulted in no significant results. Research question four was significant for GCS’ PIL scores and their sense of meaning in life. Research question five was significant for GCS’ PIL scores for crisis categories (i.e., natural caused, human induced, or both). Post hoc results indicated that participants who experienced naturally caused crises had higher PIL scores than participants who experienced human induced category and both categories.

Research question six indicated a significant difference between GCS’ PIL scores for age with seven post hoc significant age range differences. Research question seven indicated significant differences between GCS’ overall crisis experiences as well as intensity level of experiences for age. There were four significant age range differences for overall crisis experiences and nine age range differences for intensity level of experiences. For the 12 specific crisis experiences, four crisis experiences (i.e., death of a significant person/natural cause, earthquake, economic downturn, and personal) showed significant differences. Post hoc tests indicated the following: (a) death of a significant person/natural cause crises indicated two age range differences, (b) earthquake crises indicated six age range differences, (c) economic
downturn crises indicated five age range differences, and (d) personal crises indicated one age range difference.
CHAPTER FIVE

DISCUSSION

The purpose of this study was to explore if graduate counseling students’ (GCS) meaning in life was related to their crisis experiences. The theoretical framework for this study was based on Frankl’s theory of logotherapy. Frankl (1984, 1986) believed that the discovery of meaning in life is a personal responsibility and occurs through suffering. In this study, participants were assessed regarding their meaning in life and were surveyed on their overall crisis experiences, number, category, and intensity of crisis experiences. Meaning in life was assessed with the use of the *Purpose in Life (PIL)* test. Additionally, based on participants’ age, meaning in life and crisis experiences were examined. Chapter 5 includes discussion of the research findings, limitations of the study, implications for counseling students and counselor educators, and recommendations for future research.

**Discussion of the Research Findings**

The literature indicated that suffering, an inherent part of life, cannot be avoided (Barnes, 1994; Frankl, 1986; Guttmann, 1996, 2000; Starck & McGovern, 1992). Suffering provides an opportunity to find meaning in life (Guttmann, 2000; Hirsch, 1994; Lantz, 1992; Starck, 2008). According to Dass-Brailsford (2010) and Quarantelli and Dynes (1972), suffering can be the result of a crisis experience. Post-traumatic growth can also be exhibited as positive facets of a crisis experience (Cadell, et al., 2003; Calhoun, et al., 2000; Calhoun & Tedeschi, 2004; Cryder, et al., 2006; Shakespeare-Finch & Enders, 2008). In this study, the *PIL* test was used to measure participants’ meaning in life. Crisis experiences were used as a measure of suffering which included master’s, post-master’s, and doctoral level students from across the United States.
Non-significant relationships and the PIL.

For this study, participants’ overall crisis experiences on average were moderate to strong. PIL scores were not related to overall crisis experiences. The results for the number of crisis experiences were five on average; however, participants’ number of experiences was not related to their PIL scores. Finally, participants rated, on average, their intensity as strong for two or less crisis experiences; similarly, their PIL scores did not relate to their intensity levels.

Sense of meaning and the PIL.

When asked if participants believed they had a sense of meaning in their lives, responses indicated on average a clear to very clear sense of meaning. Additionally, participants’ PIL scores were related to their sense of meaning. The literature indicated survivors of crisis experiences begin to heal when meaning is discovered (DuPont & McGovern, 1992; Gerrity & Steinglass, 2003; North & Westerhaus, 2003; Raphael, 2003). Frankl (1967b) believed that self-transcendence allows meaning to occur. In general, for the present study, the results suggest that participants perceived that they found meaning through their crisis experiences.

Additionally, the results indicated consistency in self-perceptions of their sense of meaning and their PIL scores. According to Gay (1996), a strong correlation between two instruments can provide validity. Similar to previous research studies which provided validity for the PIL with other instruments (Crumbaugh, 1968; Meier & Edwards, 1974; Reker, 1977), a possible interpretation of the present study’s correlation between participants’ perceived sense of meaning and PIL scores is that added validity for the PIL has been established.

Category of crisis experiences and the PIL.

Additional results for this study included participants’ responses to crisis experiences based on researchers’ differentiation of two disaster categories: (a) naturally caused and (b)
human induced (Courtois & Gold, 2009; Cunningham, 2003; Herman, 1992; Janoff-Bulman, 1992; Jordan, 2010; Norwood et al, 2000; Weisaeth & Tønnessen, 2003). The results indicated that participants’ PIL scores on average for naturally caused experiences were higher than PIL scores for human induced experiences or both category experiences. According to Courtois and Gold (2009) as well as Janoff-Bulman (1992), the origins of naturally caused disasters are random with no specific perpetrator to hold accountable. A naturally caused crisis can produce fear of randomness and chance. Janoff-Bulman (1992) pointed out that surviving a naturally caused disaster or crisis results in questioning of the rules that govern the universe which can materialize into meaning in life. Frankl (1984) agreed that meaning could be found when confronted with a hopeless situation such as a crisis, transforming that crisis into a meaning in life. In this study, it appears that participants with high PIL scores and who experienced naturally caused crises questioned life, resulting in their meaning in life.

In contrast, participants who experienced human induced or both categories of disasters had lower PIL scores. Throughout the literature, references to the human induced category indicated that survivors believed these disasters were preventable, thereby inducing feelings of anger and depression (Flynn & Norwood, 2004; Halpern & Tramontin, 2007). A compound of a human induced crisis is betrayal trauma which could create mistrust in self or others (Halpern & Tramontin 2007). One possible explanation of the results of this study is that participants who experienced human induced disasters could be angry, depressed or mistrustful and have not found meaning in their lives as indicated by their low PIL scores. An explanation for the results of crisis experiences in both categories may have been that the human induced category complicates the experience of a naturally caused category, thus resulting in similar reactions to when the impact was only from a human induced experience. Another possible explanation for
participants in both categories is that fear of randomness and chance from the naturally caused disasters combined with mistrust of self or others from the human induced disasters may have hindered healing and discovery of meaning in life.

**Age differences.**

Although Yarnell (1971), Reker and Cousins (1979), and Molasso (2006) found no age differences in their studies with the *PIL*, Meier and Edwards (1974) did find significant differences in age groups. Considering the inconsistency of findings in these four studies, additional analyses were performed for the present study to determine if there were differences based on age. First, results for participants’ meaning in life and age differences were examined. Additionally, participants’ overall crisis experiences and intensity of their experiences showed variations based on age. Finally, there were age group differences with specific types of crises. The results of age differences and participants’ crisis experiences are described in the following four subsections.

**Meaning in life and age.**

Participants’ *PIL* scores were analyzed for differences in age groups using Crumbaugh and Maholick’s (1964, 1981) score categories: (a) 91 and below - lack of meaning and purpose, (b) between 92 and 112 - indefinite meaning and purpose, and (c) 113 and above - definite meaning and purpose. In the present study, average *PIL* scores were in the indefinite meaning in life category. In all, participants older than 40 scored a definite meaning in life and 40 and younger scored an indefinite meaning in life. According to Frankl (1984), an indefinite sense of meaning could indicate a presence of existential vacuum. During the Industrial Revolution, Frankl (1967b) believed that industrialization contributed to the loss of instincts and traditions resulting in loss of meaning. He felt, as the modernization of machinery continued to dominate
the world, existential vacuum would occur in society (Frankl, 1984, 2000). In this study, participants who experienced crises and were older than 40 (i.e., grew up during the Industrial Revolution) had high PIL scores indicating meaning in their lives. Based on Frankl (1986) and Starck’s (1978) beliefs that suffering provides a growth opportunity, one interpretation for the findings of this study is that participants older than 40 have grown from their experiences and have found meaning. Additionally, these results may mean that after surviving crisis experiences meaning could be found during the Industrial Revolution.

In comparison to participants older than 40, participants who were 40 and younger had lower PIL scores which indicated an indefinite meaning in life. As referred to earlier, an indefinite meaning in life can indicate an existential vacuum. Melton and Schulenberg (2008) corroborated Frankl’s idea that in a fast-paced society such as today, existential vacuum is still present. The 21st century continues to be fast-paced with a time of global anxiety, economic crisis, joblessness, climate change, and pollution with an increase in addiction, depression, and aggression resulting in loss of meaning for many individuals in today’s society (Dreyfuss, 2011; Krasko, 2007; Van Pelt, 2010). Frankl (2000) referred to the increase of addiction, depression, and aggression as the mass neurotic triad that stems from existential vacuum. From the Industrial Revolution to the Information Age, the 40 and younger participants have been growing up with an influx of devices that have resulted in withdrawing into social networking websites, text messaging, and video games (Dreyfuss, 2011). This population has been inundated with the proliferation of cell phones, laptops, walkmans, MP3 players (1990 Technology, 2011; Bellis, 2011; Inventions of the 1970’s, 2011). During the Information Age, there has also been a need to adapt to Yahoo, Google, Amazon, Kindle, and Ebay (1990 Technology, 2011; Dreyfuss, 2011) in a world Frankl (1984) would describe as a search for information to compensate for
existential vacuum. The results of participants 40 and younger may indicate that their meaning is lost in a search for information and the addiction for technology during the Information Age.

**Overall experience and age.**

Participants’ overall ratings of crisis experiences were examined for group differences by age. Intensity ratings for overall crisis experiences ranged from no impact to catastrophic with an average intensity rating of moderate to strong. Within two specific groups, intensity ratings for participants older than 40 (i.e., middle aged and older populations) were strong to destructive whereas the ratings for participants in the younger than 40 (i.e., young adult) group were moderate to strong. Research has shown that middle-aged adults are adversely affected by disaster and crisis experiences (Halpern & Tramontin, 2007; Norris et al., 2002a). In addition, the crisis literature indicated that older populations are considered to be a vulnerable population (Cherry, Allen, & Galea, 2010; Halpern & Tramontin, 2007; James, 2008) and can be part of family units that include adults, children, and extended family with responsibilities to family, home, career, financial stability, social relationships, and community activities (Myers & Wee, 2005). In comparison, younger adults are affected by the phases of disaster such as typical reactions of shock, numbness, guilt, anger, crying, and anxiety as are most survivors (Dass-Brailsford, 2010). In this study, an explanation for the differences in these two groups may be the adverse affects and vulnerability of older adults as the research suggests as older adults have more intense crisis experiences. Younger adults seem to have strong reactions but more classic responses as survivors.

**Intensity level and age.**

Participants’ ratings of intensity of two or less crisis experiences were analyzed for differences in age groups. Ratings of intensity experiences ranged from no impact to
catastrophic. The average intensity rating was strong. For two specific groups, participants older than 40 rated their intensity as destructive and 40 and younger rated their intensity as strong. The literature indicated that the exposure to experiences, traumatic stressors, and mediating factors can be contributors to survivors’ intensity of crisis experiences (Fullerton et al., 2003; Halpern & Tramontin, 2007; Myers & Wee, 2005; Norris et al., 2002a; Norris, Friedman, & Watson, 2002b; North & Westerhaus, 2003; Norwood et al., 2000). A possible reason for the differences in intensity experiences of the two groups is that middle aged and older populations (i.e., both groups > 40) may have had more exposure and traumatic stressors. By comparison, younger adults (i.e., 40 and <) may have had more mediating factors, hence their less intense perceptions of crisis experiences. An additional result was ratings of overall crisis experiences were consistent with intensity ratings of two or less specific types of crisis experiences. Whether participants rated all of their crisis experiences (i.e., overall) or rated each specific crisis experience, they consistently reported their experiences as moderate to strong.

**Four crisis experiences (two natural and two human induced) and age.**

Intensity ratings of specific crisis experiences were examined for differences in groups by age. Results indicated that the death of a significant person that was naturally caused, as well as an earthquake, an economic downturn, and a personal crisis experience resulted in intensity ratings across the choices from no impact to catastrophic. A meta-analysis by Norris et al., (2002a) found that all disaster and crisis experiences cause an immediate threat; however, human induced are overrepresented in the research as being capable of severe impairment for survivors. For this study, there were age differences for four crisis experiences. Inconsistent with Norris’ study, two crises were naturally caused and two crises were human induced.
**Death of a significant person/naturally caused.**

For the death of a significant person that was naturally caused, intensity ratings for participants older than 50 were on average strong to destructive. In comparison, intensity ratings for participants 25 and younger and those in their early 30s were on average moderate to strong. McBride and Johnson (2005) pointed out that a loss of a significant person was extremely common and yet intimately personal with unique reactions. Frankl (1967b) believed acceptance of the finiteness of existence was a condition of mental health. According to Yalom (1980), the struggle of an individual with the existential concept of finiteness and the loss of a significant person could result in denial and a struggle with anxiety. In this study, adults older than 50 may have had more intense experiences resulting in denial and anxiety than did younger adults.

**Earthquake/naturally caused.**

Participants in the upper 40s rated their intensity of an earthquake on average as minimal to moderate. In comparison, participants in the remaining six age ranges rated their intensity on average as no impact to minimal. Halpern and Tramontin (2007) reported that earthquakes can be one of the most destructive natural disasters. Earthquakes are the only natural disaster that regularly produces secondary disasters (i.e., floods, fires, collapsing buildings) and personal anxiety or terror due to the aftershocks. In this study, participants’ ratings of intensity were overall lower for earthquakes than other types of disasters. There were differences in this study, but they were in low ranges of intensity. Information on the FEMA website indicated that within the United States since 1954 there have been 24 earthquakes (Disaster Search Results, 2011). Since 1970, the age range of the 40 and younger survivors of this study, there have been 20 earthquakes with only seven in the last ten years. Although, the literature reports that earthquakes are the most destructive disaster, it would appear that the infrequency of earthquakes
in recent American history or the small number of participants in the present study resulted in perceptions of minimal impact of earthquakes.

*Economic downturn/human induced.*

Participants older than 30 rated their intensity of the economic downturn on average as moderate to strong in comparison to participants 25 and younger who rated their intensity on average as minimal to moderate. Financial analysts, have worked to understand, in hindsight, the great recession based on their understandings of the great depression (Almunia, Benetrix, Eichengreen, O’Rourke, & Rua, 2010; Livingston, 2009); meanwhile, our country is still recovering from the recession with slow growth in productivity and a high jobless rate (Harding, 2010). Jayson (2009) stated that young adults have responded to the recession with some optimism and rethinking the concept of consumption, yet Taylor and Morin (2009) believed that most adults have been impacted by loss of jobs, loss of retirement savings, loss of purchasing power, or loss of paid services. Results of this study appear to align with the perspectives of both Jayson and Taylor and Morin in that adults older than 30 are being impacted more intensely by the recession than adults 25 and younger.

*Personal (i.e., partner violence, child abuse and/or neglect)/human induced.*

For participants in the upper 40s, intensity ratings on average ranged from strong to destructive for their personal crisis experiences. The 25 and younger group’s intensity ratings were on average moderate to strong. Recent literature indicated that intimate partner violence, child abuse, and sexual abuse are becoming a national crisis and a significant public health concern in the United States with women reporting more intimate partner violence than men (Gratz, Paulson, Jakupcak, & Tull, 2009; Tjaden & Thoennes, 2000; Townsend, 2008). Participants in this study were mostly female. Additionally, the average onset of a midlife crisis
is 46 years old and some women experience midlife with a loss of purpose in their lives (Womens Midlife Crisis Treatment Issues, 2008). Although participants in this study were predominantly women, men also experience partner violence and midlife crises (O’Neill, 2003; Tjaden & Thoennes, 2000). One possible consideration in the results of this study is that the upper-40 group could be experiencing a midlife crisis influencing the intensity ratings of their personal experiences.

Generally, in this study, human induced crisis experiences appeared to have more impact than naturally caused experiences. In the two human induced experiences, participants rated their intensity as strong to destructive with minimal variability, in comparison to the two naturally caused experiences which were rated as moderate to destructive with more variability.

Limitations

Limitations presented in chapter 1 are reviewed in this section. Limitations included participants’ responses may have been influenced by social desirability bias and the online format of data collection (Granello, 2007; Slavin, 1992). Participants may have rated their crisis experiences on the Graduate Counseling Student Crisis Experience Questionnaire (GCSCEQ) based on social desirability. Also, the online format required participants to have access to the internet. Another limitation was that the PIL had not been used in previous research to analyze relationships of multiple crisis experiences, (S. Schulenberg, personal communication, June 20th, 2009); nevertheless, the PIL has validity and reliability from previous studies completed by Crumbaugh and Maholick (1964), Crumbaugh (1968), Meier and Edwards (1974), Reker (1977, 2000), Melton and Schulenberg (2008), Schulenberg (2004), and Zika and Chamberlain (1992). A final limitation was construction of the researcher-designed survey, the GCSCEQ; however, the survey was based on types of disaster from the FEMA website (www.FEMA.gov). For
thoroughness, an additional list on the FEMA website of types of disasters was accessed (i.e., declared disaster list) to determine which disasters had occurred the most frequently in recent history (Disaster Search Results, 2011). The selection of the developed list for the GCSCEQ limited the participants’ choices; however, an open-ended question was included in the survey.

**Implications**

This was an exploratory research study of GCS’ meaning in life and their crisis experiences. The implications of this study focused on specific areas for counseling students and counselor educators when working with counseling students.

**Implications for GCS**

According to Dufrene and Dinkel (2009), emotions are extreme when responding to crisis situations and can result in countertransference or misinterpretation of events for crisis intervention workers with unresolved crisis experiences. When helping others is not a time to address crisis workers own personal needs. Monitoring one’s own trauma experience and attending to self-care are necessary when providing crisis intervention (Dass-Brailsford, 2010; Dufrene & Dinkel, 2009). An implication for GCS who may one day be crisis intervention workers is to be knowledgeable of the impact that their own crisis experiences can have on their abilities to be crisis counselors. According to CACREP (2009) and Halpern and Tramontin (2007), it is important that students learn to be knowledgeable about self-care and vicarious trauma when working in disaster situations. Additionally, GCS should be aware that human induced disasters could create more anger for survivors as well as themselves if they had a history of experiencing a human induced disaster. Knowing that survivors who experienced human induced disasters experience more focused anger on a particular person or group in addition to betrayal trauma, (Flynn & Norwood, 2004; Halpern & Tramontin, 2007; Janoff-
Bulman, 1992), counselors need to be alert to survivors’ anger as well as their own self-care when working in crisis settings.

Based on the demographic variable of age, the results of this study provide counseling students information about survivors’ crisis experiences. Younger participants in this study did not have clear meaning and purpose in their lives and may have experienced existential vacuum. As proposed by Melton and Schulenberg (2008), existential vacuum is still present in today’s fast-paced society, which may be reflected in this study. Older participants indicated experiences that were more intense and reported meaning and purpose in their lives. Additionally, results of the study indicated that survivors’ naturally caused crisis experiences may have fostered the development of meaning in life and resolution of their crisis experiences. Participants who experienced human induced or both categories may still be angry or depressed (Halpern & Tramontin, 2007).

Results of this study suggest that specific types of crisis experiences provide information regarding counseling students. Participants who experienced the two naturally caused disasters (death of a significant person/natural cause and earthquake) had more variability in their intensity ratings than others who had experienced human induced disasters (economic downturn and personal crisis). The specific crisis of death of a significant person/natural cause, as McBride and Johnson (2005) suggested, is a common experience as this study’s population reflected with 80% of participants having experienced this crisis. By contrast, only 32% of the study population experienced an earthquake. An implication is that GCS need to be mindful that losing someone by a naturally caused death is the most common and intense crisis experience. Even though there were a small number of survivors of an earthquake experience in this study, GCS also need to be aware that the experiences were intense for the upper 40s population. For
the two specific types of human induced crises, there was approximately 57% for each type of crisis. For the economic downturn crisis, participants 30 and older had an intense experience whereas for the personal crisis, the upper 40s seemed to be the only group impacted intensely.

**Implications for counselor educators**

Counselor educators may benefit from understanding what impacts students in crisis experiences, to better prepare students for future work. Generally what has been shown in the present study is that counselor educators need to be aware that students are impacted by category of disasters, by their age, and by specific types of crisis experiences.

A mental health curriculum is urgently needed to inform GCS about disasters and crises (Courtois & Gold, 2009). Awareness of crises is growing and the chances are increasing that students impacted by crisis experiences are in classrooms. An implication, as noted by CACREP (2009) and Courtois and Gold (2009), is that counseling curricula should address crisis experiences from a developmental perspective inclusive of age and types of disasters as well as crisis experiences.

In addition, the need is increasing for crisis intervention workers to attend to the needs of survivors. Understanding the results of this study may aid counselor educators in teaching counseling students about survivors of crisis. The results indicated that older survivors had more intense experiences than younger survivors; counselor educators should be aware that older survivors react more intensely to their experiences. In addition, understanding that older survivors are more likely to discover meaning in life through their experiences could aid crisis intervention workers when assisting survivors. Counselor educators might develop specific course work or infuse information related to survivors’ age and crisis experiences across the curriculum to address survivors’ issues.
In this study, the Information Age may have impacted participants’ development of meaning in life, resulting in lower PIL scores. If the collective neurosis (Frankl, 1984) of the Information Age is indeed impacting future students, Estes (1997) and Kelly (1994) suggested that students would benefit from enhancing their preparation by studying logotherapy and spiritual issues. Another suggestion would be to recognize that the ASERVIC spiritual competencies (ASERVIC, 2009) confirm that spiritual issues such as meaning in life as described by Frankl (1984) are important to counselors in assisting survivors as well as their own awareness.

**Recommendations for Future Research**

This study explored a new area of disaster mental health, GCS’ meaning in life and their crisis experiences, using a quantitative design. A similar methodological study would add to the present research by asking questions regarding student reasons for choosing a counseling degree program based on their meaning in life and their crisis experiences. Future research would also be useful on whether licensed professional counselors’ meaning in life is related to their crisis experiences. Using a qualitative design, future research could provide descriptive reflections of GCS’ crisis experiences as they are related to their meaning in life. Scholarly research such as described would provide counselor educators detailed information on student as well as practitioner crisis experiences and the impact of the crisis experiences.

Another perspective related to specific variables in the present study would be for future researchers to select one type of crisis experience to study, such as an earthquake or personal crisis experience. This would allow for recruitment of a larger sample than in the present study to be analyzed on the specific types of experiences. Additionally, future research would benefit from more clarification regarding students who have experienced multiple major disasters.
including both human induced and naturally caused crises. Finally, future research could investigate the impact of the Information Age on counseling professionals’ meaning in life and how it is impacting future counselors.

Conclusions

The results of this study provided details regarding GCS’ meaning in life and crisis experiences. First, there was no relationship between meaning in life and overall experiences, number of experiences, or intensity of GCS’ crisis experiences. In general for age differences, GCS older than 40 had higher meaning in life than GCS 40 and younger. Additional analysis regarding the differences in meaning in life and crisis experiences was completed with category of experiences, age, and intensity with age. Categories of experiences reflected that students who experienced naturally caused crises had higher meaning in life than students who experienced human induced crises or both categories. Results with respect to age reflected that Frankl’s (1984) concept of existential vacuum seemed to be present, with the indefinite PIL scores of GCS 40 and under indicating a possible addiction to technology resulting from the Information Age. Finally, results regarding intensity and age reflected that intensity was rated as stronger by students older than 40 regardless of the category of crisis experiences. In conclusion, with major disasters as well as personal crises occurring on a regular basis, it seems that GCS’ crisis experiences and meaning in life are being impacted by the category of their disaster experiences, the intensity of their experiences, and their age.
References


Appendix A

Graduate Counseling Student Crisis Experience Questionnaire (GCSCEQ)
Survey Section 1: Demographic Information

1) Age
   - ☐ under 25
   - ☐ 26-30
   - ☐ 31-35
   - ☐ 36-40
   - ☐ 41-45
   - ☐ 46-50
   - ☐ 51-55
   - ☐ 56-60
   - ☐ 61-65
   - ☐ 66-70
   - ☐ 71+

2) Sex
   - ☐ Female
   - ☐ Male

3) Ethnicity
   - ☐ African American
   - ☐ Asian/Asian American
   - ☐ European American
   - ☐ Hispanic/Latino/a
   - ☐ Middle Eastern
   - ☐ Native American
   - ☐ Pacific Islander
   - ☐ Bi/Multiethnic
   - ☐ Other

   If you selected “Other”, please specify your ethnicity
   Insert text box ____________________________

4) Current Student Status
   - ☐ Master’s level
   - ☐ Post-master’s level (not doctoral)
   - ☐ Doctoral level

5) Please specify what University or College you attend

6) Please specify your counseling track (i.e. discipline, emphasis area)
   - ☐ career counseling
   - ☐ Christian counseling
   - ☐ college counseling
☐ community/clinical mental health counseling
☐ counselor education and supervision
☐ counseling psychology
☐ gerontological counseling
☐ marital, couple, and family counseling/therapy
☐ mental health counseling
☐ pastoral counseling
☐ rehabilitation counseling
☐ school counseling
☐ school psychology
☐ student affairs

7) Indicate your program’s accreditation
☐ CACREP
☐ CORE
☐ Unsure
☐ Other

If you selected “Other”, please specify your accreditation

Survey Section II: Crisis Experience(s)

8) If you have personally experienced a major crisis or crises (not through media or vicariously), please rate the level of your experience(s) using the scale provided.

No impact Minimal Moderate Strong Destructive Disastrous Catastrophic

9) If you personally experienced any of the following specific crises described in items 7 through 18 below, please rate the level of your experience at the time of the crisis using the scale provided. Rate only the items you experienced. If you have not experienced a crisis listed in an item, skip to the next item. When considering each item, “personally experiencing a crisis” does not include viewing the crisis through media outlets, vicariously experiencing a crisis through helping, or hearing recollections from survivors of a crisis.

<table>
<thead>
<tr>
<th>Crisis Description</th>
<th>No impact</th>
<th>Minimal</th>
<th>Moderate</th>
<th>Strong</th>
<th>Destructive</th>
<th>Disastrous</th>
<th>Catastrophic</th>
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<td>Acts of Terrorism</td>
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<td>Death of a Significant</td>
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<td>of a human (Ex: suicide,</td>
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<td>Event Type</td>
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<td>Moderate</td>
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<td>Catastrophic</td>
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<td>Death of a Significant Person by a natural cause or serious illness (Ex: terminal/ life-threatening illness, old age)</td>
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<td>Earthquake(s) (Ex: CA, American Samoa, HI)</td>
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<td>Economic Downturn (Ex: loss of job, loss of property, financial impact on decisions)</td>
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<td>Flood(s) (Ex: TN, AR, WV, SD)</td>
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<td>Hurricane(s) (Ex: Katrina, Rita, Gustav, Ike)</td>
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<td>Levee Failure (Ex: water damage, house flood, business flood)</td>
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<td>Oil Spill (Ex: Gulf Coast/BP, AK/Exxon Valdez, FL/Bouchard, TX/Megaborg)</td>
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<td>Personal (Ex: partner violence, child abuse and/or neglect)</td>
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<td>School/Work Shooting(s) (Ex: Columbine, VT, NIU, MN, OR, Tucson)</td>
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<td>Wildfire(s) (Ex: AZ, HI, CA)</td>
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</table>

10) If you have personally experienced a crisis not listed, please describe. (insert text box)

11) Please rate the level of the crisis you described in the previous question.

<table>
<thead>
<tr>
<th>No impact</th>
<th>Minimal</th>
<th>Moderate</th>
<th>Strong</th>
<th>Destructive</th>
<th>Disastrous</th>
<th>Catastrophic</th>
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12) How much time has elapsed since your most recent crisis experience?
   Drop down box provided with the following choices:
   Less than 1 week (1-6 days),
   Less than 1 month (7-29 days),
   1-3.9 months,
   4-6.9 months,
   7-11.9 months,
1 year (12-23 months),
2 years (24-35 months),
3-5 years,
6-10 years,
More than 10 years.

13) As a result of your crisis experience(s), how would you rate your sense of meaning?

None  Very little  A little  Somewhat  Clear  Very clear  Definite

14) Please describe your sense of meaning in life.  (insert text box)

15) Did your crisis experience(s) influence your decision to go into the counseling profession?

Very probably  Probably not  Possibly  Not sure  Probably  Very probably  Definitely

16) After any one particular crisis experience, how many sessions did you receive of “crisis intervention services” (Ex: 15 minutes – 2 hours; 1-3 sessions)?

0 (none)  1  2  3  4  5  6 and above

17) After your crisis experience(s), how many “counseling” sessions did you receive (Ex: 50 minute sessions on a regular basis) from a mental health professional?

0 (none)  1 - 3  4-6  7-10  11-15  16-20  21 and above

18) Depression symptoms

<table>
<thead>
<tr>
<th>Prior to your crisis experience(s), did you have a history of depression (Ex: sadness, no energy, no initiative)?</th>
<th>Never</th>
<th>Very rarely</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Very frequently</th>
<th>Always</th>
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<tbody>
<tr>
<td>Are you depressed now?</td>
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123
19) Aggression symptoms

<table>
<thead>
<tr>
<th>Prior to your crisis experience(s), did you have a history of aggression (Ex: physically, verbally, quick to anger)?</th>
<th>Never</th>
<th>Very rarely</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Very frequently</th>
<th>Always</th>
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<tbody>
<tr>
<td>Are you aggressive now?</td>
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</table>

20) Addiction symptoms

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<thead>
<tr>
<th>Prior to your crisis experience(s), did you have a history of addiction (Ex: substances, alcohol, shopping, gambling)?</th>
<th>Never</th>
<th>Very rarely</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Very frequently</th>
<th>Always</th>
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<td>Are you addicted now?</td>
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Appendix B

*Purpose in Life (PIL) Test*
Instructions: For the following statements, please indicate the number that would be most nearly true for you.

Note that the numbers always extend from one extreme feeling to its opposite kind of feeling. "Neutral" implies no judgment either way; try to use this rating as little as possible.

<table>
<thead>
<tr>
<th>1) I am usually:</th>
<th>2</th>
<th>3</th>
<th>Neutral</th>
<th>5</th>
<th>6</th>
<th>Exuberant, enthusiastic</th>
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<tr>
<td>Completely bored</td>
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<th>2) Life to me seems:</th>
<th>6</th>
<th>5</th>
<th>Neutral</th>
<th>3</th>
<th>2</th>
<th>Completely routine</th>
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<tr>
<td>Always exciting</td>
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<th>3) In life I have:</th>
<th>2</th>
<th>3</th>
<th>Neutral</th>
<th>5</th>
<th>6</th>
<th>Very clear goals and aims</th>
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<tbody>
<tr>
<td>No goals or aims at all</td>
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<tr>
<th>4) My personal existence is:</th>
<th>2</th>
<th>3</th>
<th>Neutral</th>
<th>5</th>
<th>6</th>
<th>Very purposeful and meaningful</th>
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<tr>
<td>Utterly meaningless without purpose</td>
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<table>
<thead>
<tr>
<th>5) Every day is:</th>
<th>6</th>
<th>5</th>
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<th>3</th>
<th>2</th>
<th>Exactly the same</th>
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<tr>
<td>Constantly new</td>
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<table>
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<tr>
<th>6) If I could choose, I would:</th>
<th>2</th>
<th>3</th>
<th>Neutral</th>
<th>5</th>
<th>6</th>
<th>Like nine more lives just like this one</th>
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<tbody>
<tr>
<td>Prefer never to have been born</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<th>7) After retiring, I would:</th>
<th>6</th>
<th>5</th>
<th>Neutral</th>
<th>4</th>
<th>3</th>
<th>Loaf completely the rest of my life</th>
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<tr>
<td>Do some of the exciting things I have always wanted to</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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8) In achieving life goals I have:

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<th>Made no progress whatever</th>
<th>2</th>
<th>3</th>
<th>Neutral</th>
<th>5</th>
<th>6</th>
<th>Progressed to complete fulfillment</th>
</tr>
</thead>
</table>

9) My life is:

| Empty, filled only with despair | 2 | 3 | Neutral | 5 | 6 | Running over with exciting good things |

10) If I should die today, I would feel that my life has been:

| Very worthwhile | 6 | 5 | Neutral | 3 | 2 | Completely worthless |

11) In thinking of my life, I:

| Often wonder why I exist | 2 | 3 | Neutral | 5 | 6 | Always see a reason for my being here |

12) As I view the world in relation to my life, the world:

| Completely confuses me | 2 | 3 | Neutral | 5 | 6 | Fits meaningfully with my life |

13) I am a:

| Very irresponsible person | 2 | 3 | Neutral | 5 | 6 | Very responsible person |

14) Concerning man's freedom to make his own choices, I believe man is:

| Absolutely free to make all life choice | 6 | 5 | Neutral | 3 | 2 | Completely bound by limitations of heredity and environment |

15) With regard to death, I am:

| Prepared and unafraid | 6 | 5 | Neutral | 3 | 2 | Unprepared and frightened |

16) With regard to suicide, I have:

| Thought of it seriously as a way out | 2 | 3 | Neutral | 5 | 6 | Never given it a second thought |
### 17) I regard my ability to find a meaning, purpose, or mission in life as:

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<td>Practically none</td>
<td>3</td>
</tr>
<tr>
<td>Practically none</td>
<td>5</td>
</tr>
<tr>
<td>Practically none</td>
<td>6</td>
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### 18) My life is:

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<thead>
<tr>
<th>Description</th>
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<tr>
<td>In my hands and I am in control of it</td>
<td>6</td>
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<tr>
<td>Practically none</td>
<td>2</td>
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<td>Practically none</td>
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<tr>
<td>Practically none</td>
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### 19) Facing my daily tasks is:

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<td>A source of pleasure and satisfaction</td>
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<tr>
<td>Practically none</td>
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<tr>
<td>Practically none</td>
<td>3</td>
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<tr>
<td>Practically none</td>
<td>5</td>
</tr>
<tr>
<td>Practically none</td>
<td>6</td>
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### 20) I have discovered:

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<td>No mission or purpose in life</td>
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<tr>
<td>Practically none</td>
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<tr>
<td>Practically none</td>
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<td>6</td>
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<td>Practically none</td>
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Appendix C

Copyright Permission Letter
October 20th, 2010

Dr. Thomas Barnes
Viktor Frankl Institute of Logotherapy
Box 15211
Abilene, TX, 79698-5211
USA

Dear Dr. Barnes,

This letter will confirm our conversation via phone regarding permission to use the *Purpose in Life Test (PIL)*. I am completing a doctoral dissertation at the University of New Orleans entitled *An Exploration of Meaning in Life and The Influence of Crisis Experiences*. I intend to use the *PIL* through electronic survey with a copyright protected notice.

If this request meets with your approval, please sign this letter where indicated below and return it to me by mail. Please use the self-addressed stamped envelope enclosed. Thank you for your assistance.

Sincerely,

Lorraine M. Dinkel, MS, LPC
Doctoral Candidate
University of New Orleans
Bicentennial Education Building, 348-O
2000 Lakeshore Drive
New Orleans, LA 70148

PERMISSION GRANTED FOR THE USE REQUESTED ABOVE:

Thomas Barnes

Date 11-09-10
Appendix D

First Electronic Message
Hello

I am a graduate student under the direction of Dr. Roxane L. Dufrene in the Department of Educational Leadership, Counseling, and Development in the College of Education at the University of New Orleans. I am conducting my dissertation study on The Relationship Between Graduate Counseling Students’ Meaning in Life and Their Crisis Experiences. Your participation in this study will be greatly appreciated. This study has been approved by the Institutional Review Board at the University of New Orleans (IRB# 04Jan11).

Your participation will involve completing the Graduate Counseling Student Crisis Experience Questionnaire (GCSCEQ) and the Purpose in Life (PIL) Test. The GCSCEQ and the PIL will take approximately 15 to 20 minutes for completion. All information that you provide is anonymous; there will be no way to identify you. The results of this study may be published but your name will not be known. Although there may be no direct benefit to you, the possible benefit of your participation will contribute in assisting the understanding of meaning in life and the experience of crisis for counseling students. In your participation of this study, please refer to “crisis experiences” as your own perception of a disaster, a crisis, or resulting trauma. As in most internet communication, there may be some record of exchange in your computer cache or internet service provider’s log file. As a precaution, I suggest that you clean out your temporary internet files and close your browser after submitting your survey.

If you are willing to assist me with this important part of my study, please click the following link to connect to the GCSCEQ and the PIL: http://neworleans.qualtrics.com/SE/?SID=SV_1H9swPY5aNgrpOY

If you are not connected automatically, then you can cut and paste the link into the address box on your web browser and press enter.

Completing the GCSCEQ and the PIL will indicate your consent for participation in this study. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty. Please contact Dr. Ann O’Hanlon (504-280-3990) at the University of New Orleans for answers to questions about this research, your rights as a human subject, and your concerns regarding a research-related injury.

If you have any questions concerning the research study, please contact me at ldinkel@uno.edu. You may also contact my faculty advisor, Dr. Roxane L. Dufrene, by email at rdufren1@uno.edu or by telephone at (504) 280-7434.

Thank you for your consideration and participation.

Sincerely,

Lorraine M. Dinkel, MS, LPC
Doctoral Candidate
University of New Orleans
Bicentennial Education Building, 348-O
2000 Lakeshore Drive
New Orleans, LA  70148
Appendix E

Second Electronic Message
Hello
This is a second request for participation. If you have already completed the survey, please accept my thanks.

I am a graduate student under the direction of Dr. Roxane L. Dufrene in the Department of Educational Leadership, Counseling, and Development in the College of Education at the University of New Orleans. I am conducting my dissertation study on The Relationship Between Graduate Counseling Students’ Meaning in Life and Their Crisis Experiences. Your participation in this study will be greatly appreciated. This study has been approved by the Institutional Review Board at the University of New Orleans (IRB# 04Jan11).

Your participation will involve completing the Graduate Counseling Student Crisis Experience Questionnaire (GCSCEQ) and the Purpose in Life (PIL) Test. The GCSCEQ and the PIL will take approximately 15 to 20 minutes for completion. All information that you provide is anonymous; there will be no way to identify you. The results of the study may be published but your name will not be known. Although there may be no direct benefit to you, the possible benefit of your participation will contribute in assisting the understanding of meaning in life and the experience of crisis for counseling students. In your participation of this study, please refer to “crisis experiences” as your own perception of a disaster, a crisis, or resulting trauma. As in most Internet communication, there may be some record of exchange in your computer cache or internet service provider’s log file. As a precaution, I suggest that you clean out your temporary internet files and close your browser after submitting your survey.

If you are willing to assist me with this important part of my study, please click the following link to connect to the GCSCEQ and the PIL: http://neworleans.qualtrics.com/SE/?SID=SV_1H9swPY5aNgrpOY If you are not connected automatically, then you can cut and paste the link into the address box on your web browser and press enter.

Completing the GCSCEQ and the PIL will indicate your consent for participation in this study. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty. Please contact Dr. Ann O’Hanlon (504-280-3990) at the University of New Orleans for answers to questions about this research, your rights as a human subject, and your concerns regarding a research-related injury.

If you have any questions concerning the research study, please contact me at ldinkel@uno.edu. You may also contact my faculty advisor, Dr. Roxane L. Dufrene, by email at rdufren1@uno.edu or by telephone at (504) 280-7434.

Thank you for your consideration and participation.

Sincerely,

Lorraine M. Dinkel, MS, LPC
Doctoral Candidate
University of New Orleans
Bicentennial Education Building, 348-O
2000 Lakeshore Drive
New Orleans, LA 70148
Appendix F

First Program Coordinators Email Note
Hello

I am conducting a research study for the purpose of completing my dissertation entitled: *The Relationship Between Graduate Counseling Students’ Meaning in Life and Their Crisis Experiences*. I would appreciate your assistance. Would you post the informed consent, below, on your program’s listserv inviting counseling students’ participation in my study?

I sincerely thank you for your willingness to assist me in my research.

Sincerely,
Lorraine M. Dinkel, MS, LPC
Doctoral Candidate
University of New Orleans
Bicentennial Education Building, 348-O
2000 Lakeshore Drive
New Orleans, LA 70148
Appendix G

Second Program Coordinators Email Note
Hello

This is a second request for participation in my research study for the purpose of completing my dissertation entitled: *The Relationship Between Graduate Counseling Students’ Meaning in Life and Their Crisis Experiences*. If your students participated in the first request please accept my appreciation. Would you post one more time the below informed consent on your program’s listserv inviting counseling students who have not participated in my study?

I sincerely thank you for your willingness to assist me in my research.

Sincerely,
Lorraine M. Dinkel, MS, LPC
Doctoral Candidate
University of New Orleans
Bicentennial Education Building, 348-O
2000 Lakeshore Drive
New Orleans, LA  70148
Appendix H

IRB Approval
University Committee for the Protection of Human Subjects in Research
University of New Orleans

Campus Correspondence

Principal Investigator: Roxane L. Dufrene
Co-Investigator: Lorraine M. Dinkel
Date: January 31, 2011
Protocol Title: “The Relationship Between Graduate Counseling Students’ Meaning in Life and Their Crisis Experiences”
IRB#: 04Jan11

The IRB has deemed that the research and procedures described in this protocol application are exempt from federal regulations under 45 CFR 46.101 category 2, due to the fact that the information obtained is not recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects.

Exempt protocols do not have an expiration date; however, if there are any changes made to this protocol that may cause it to be no longer exempt from CFR 46, the IRB requires another standard application from the investigator(s) which should provide the same information that is in this application with changes that may have changed the exempt status.

If an adverse, unforeseen event occurs (e.g., physical, social, or emotional harm), you are required to inform the IRB as soon as possible after the event.

Best wishes on your project.
Sincerely,

Robert D. Laird, Ph.D., Chair
UNO Committee for the Protection of Human Subjects in Research
Appendix I

Participants’ List of Universities and Colleges
### Frequencies of Participants' University or College Attended (n = 629)

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### University or College Attended

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*Note.* Missing = number of participants choosing not to answer.
VITA

Lorraine M. Dinkel was born in Tehran, Iran and has had the opportunity to live in many places around the world and the United States of America. She attended Shenandoah University in Winchester, Va. and received a Bachelor of Music Education Degree with a Performance certificate in 1985. In 1993, she moved to Columbia, Missouri to pursue her Master of Music degree at the University of Missouri. After moving to the southern area of Missouri, she decided to return to school in 1998 and earn a Masters Degree in School Guidance and Counseling from Missouri State University. In 2008, Lorraine moved to New Orleans, LA to pursue a doctorate in Counselor Education at the University of New Orleans. Lorraine is currently a licensed professional counselor in the states of Missouri and Georgia.

Lorraine has been active in the educational arena for many years, teaching percussion and music from the preschool level through the university level. She has been a school guidance counselor in Missouri for two years. In addition, she has worked in the inpatient psychiatric setting as a residential therapist for an adolescent male behavioral unit and as a unit director for a children’s residential unit. While earning her doctorate Lorraine served on the Alpha Eta Executive Board and as a research grant co-chair for ACCA. She became a published author and began presenting at the local, state, regional, and national levels. Lorraine had the honor of presenting the results of her dissertation at the 18th World Congress of the Frankl Institute of Logotherapy.