

AN INTERDISCIPLINARY CONCEPTUALIZATION OF POSTTRAUMATIC GROWTH: A  
MODIFIED DELPHI STUDY

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Graduate School

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**Title**

An Interdisciplinary Conceptualization of Posttraumatic Growth: A Modified Delphi Study

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The Supervisory Committee certifies that this *disquisition* complies with North Dakota State University's regulations and meets the accepted standards for the degree of

**DOCTOR OF PHILOSOPHY**

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## ABSTRACT

A Modified Delphi methodology was implemented to create a platform for scholars in various disciplines to reach consensus on the concept of posttraumatic growth. Throughout the literature, there are many differing viewpoints and perceptions on the concept. First, the literature on posttraumatic growth was analyzed through a thematic analysis. The results of the analysis of the literature were themes that became the statements of the first and second survey. Eight published scholars accepted an invitation to complete the two surveys with their opinions on how they view posttraumatic growth. The results illuminated areas of consensus and areas of discord amongst the experts. Participants reached consensus that Tedeschi and Calhoun (1995; 1996; 2004) have provided a widely accepted foundational model of posttraumatic growth. The results of the study have implications for interdisciplinary research, development of posttraumatic growth theory, and posttraumatic growth in clinical settings.

*Keywords:* posttraumatic growth, modified Delphi method, clinical counseling, mental health, counselor education and supervision

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## DEDICATION

To Ben:

Your faith in me, endless support, and unwavering love give me the courage to challenge myself.

You inspire me.

To my babies, Charlotte & Hannah:

I dedicate this work to you. Know that within you is a limitless potential, a kind heart, and a fierce strength that will make anything you dream a reality.

You are my greatest accomplishments.

Mama loves you.

To 32:

You are never forgotten.

## PREFACE

*Everything can be taken from a man but one thing: the last of the human freedoms- to choose one's attitude in any given set of circumstances, to choose one's own way. –Victor Frankl*

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## CHAPTER I: INTRODUCTION

“From life’s school of war: that which does not kill me makes me stronger” (Nietzsche, 1898).

Friedrich Nietzsche first published *Twilight of the Idols* or, *How to Philosophize with a Hammer* in 1898. Nietzsche was a German philosopher, poet, and scholar. The statement above reflects how Nietzsche, himself, experienced his life following adversity and how he moved forward with his life. Moreover, the statement illuminates the phenomenon of personal growth in the healing process.

Over the years since that initial reference to personal growth, Nietzsche’s statement has been referred to and changed by many individuals. The statement has now become “What doesn’t kill us makes us stronger.” This adaptation on the original comment changed the emphasis entirely. When Nietzsche published the statement in its original form, it depicted an individual’s response and how the individual experienced the trauma. In the adaptation, the message is that anyone who has experienced crisis or trauma is expected to grow from the adversity. The adaptation leaves a sense of expectation on how individuals work through trauma and minimizes the individual’s experience. The difference in the words used is slight but the difference in the meaning is vast.

So how does an individual experience life following a crisis or trauma?

Significant research has been conducted to understand the negative responses of individuals who have experienced crisis or trauma. Posttraumatic Stress Disorder (PTSD), anxiety, and depression are some of the numerous responses that have been well documented in the literature (Foa, Steketee, & Rothbaum, 1989; Blake, Weathers, Nagy, Kaloupek, Gusman, Charney, & Keane, 1995; Blanchard, Jones-Alexander, Buckley, & Forneris, 1996). The negative responses have been a focus of scholars and researchers in the helping fields for many

years. Subsequently, the phenomenon of personal growth following tragedy has been overlooked and lacks an emphasis in the literature published in the journals of the helping professions.

When researchers are attempting to create a holistic understanding of the experiences of individuals following adverse events, it is imperative to address both the negative and positive experiences, negative and positive outcomes, and negative and positive views. By understanding how people react to crisis and trauma, researchers will be able to fine-tune their focus on measuring the outcomes, furthering the development of theory, and leading the scholars in fields of interest towards consensus on the concepts. Furthermore, practitioners are better equipped to intervene and support the individual during the process of hurting and healing.

The statement made by Nietzsche in its original context is the foundation on which this study is built. The individual experience of growth through and after trauma must be understood by researchers and practitioners alike; therefore, the researcher will strive to gain a deeper understanding of the concept of personal growth based on dialogue amongst scholars in various helping fields. This study; however, is not designed to evaluate crises or traumatic events experienced by individuals. Also, this study is not designed to prove that growth is expected or assumed to be within the realm of possibility for every individual who has experienced trauma. An individual's response to crisis and trauma is incredibly personal and that individual process is respected by the researcher.

### **Overview of the Issue**

In the counseling profession the concept of posttraumatic growth is an emerging area of study and focus in the literature. The emphasis on positive changes that individuals experience as a result of struggling through a traumatic event adheres to the philosophy of growth and

change adherent in the counseling field (Flowers, as cited by Rollins, 2012). Crisis scenarios such as school shootings, natural disasters, violence, political unrest, illness, loss of life, etc. are common experiences and affect humans around the world. The concept of posttraumatic growth has a relatively new presence in the research literature. A large number of researchers studying the effects of these traumatic events focus on the negative characteristics associated with the aftermath of crisis (Tedeschi & Calhoun, 2004). The literature on posttraumatic experiences such as posttraumatic stress, loss, and grief is extensive (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Brewin, Andrews, & Valentine, 2000; Kübler-Ross, 2008). The conceptualization of negative posttraumatic experiences are well defined and accepted within the helping professions. This is not the case for posttraumatic growth.

Researchers in the field of counseling are discussing and writing about posttraumatic growth. Lea Flowers, a licensed professional counselor and co-director of the Post-Traumatic Growth Research Team at Georgia State University stated “[With PTG], you’re not trying to figure out what’s sick and what’s not working but rather how the person coped and was transformed because of [the traumatic event]. It’s less about identifying symptoms and deficits and more about using the process as a root for growth. We will find that this is where counselors can come alive because we’re facilitators of hope and change” (Rollins, 2012, para. 6).

While counselors view posttraumatic growth as a foundation for positive growth and change, researchers in other disciplines who are studying and publishing research on the topic of posttraumatic growth have differing conceptualizations. While the topic of posttraumatic growth is present in articles, books, and manuscripts, there are few empirical studies that provide evidence posttraumatic growth is a measurable, concrete experience that individuals undergo following a trauma. Additionally, authors who write about posttraumatic growth conceptualize it



in different ways. They identify multiple models to illustrate posttraumatic growth, discuss how posttraumatic growth is experienced, and the impact of posttraumatic growth on the lives of individuals following a traumatic event (Zoellner & Maercker, 2006; Tedeschi & Calhoun, 1995, 2004; Schaefer & Moos, 1992; Taylor, 1983; Davis, Nolen-Hoeksema, & Larson, 1998; Park & Folkman, 1997; Filipp, 1999). These models are used to inform the individuals within specific disciplines about aspects of posttraumatic growth. The individuals from these various disciplines used the models referenced above as a foundation for their work in the field of research and fields of application.

When a crisis scenario happens within a community, many different responders react and play a part in helping individuals in need. Counselors are often a part of crisis response teams in the direct aftermath of community crisis, and fulfill a role as providers of services for clients addressing the implications of their trauma. With counselors playing an integral role in the field of mental health, it is imperative to have a complex, deep understanding of all possible consequences of crisis situations, including posttraumatic growth. Counselors are collaborating with professionals from other disciplines on crisis teams and committees within the community when designing crisis actions plans, advocating for necessary mental health services, and facilitating healing with their clients. Efficacy is increased if all professionals have a common basic consensus regarding the concept of posttraumatic growth. Through this study this researcher seeks to develop an initial consensus among professionals about the concept of posttraumatic growth.

### **Statement of the Problem**

Throughout the literature, researchers conceptualize posttraumatic growth differently. This lack of consistency presents gaps in the research involving posttraumatic growth. The

disparity among researchers over how posttraumatic growth is conceptualized and experienced is confusing and troublesome. No common definition exists. For example, some researchers consider it to be an illusion (Taylor, Kemeny, Reed, Bower, & Gruenewald, 2000; Sumalla, Ochoa, & Blanco, 2009; Zoellner & Maecker, 2006). Some researchers propose individuals seek a way to find the “silver lining” from a particularly traumatic event when one does not necessarily exist (Backman, 1989). These views illuminate an obvious disparity in the literature over how posttraumatic growth is experienced and conceptualized. It remains unclear if posttraumatic growth is a coping mechanism or if it is an outcome of experiencing a trauma. Similarly to believing individuals seek a way to find the “silver lining” of a negative experience, researchers have conceptualized posttraumatic growth as a reactionary coping skill used by an individual to move through and past the harmful symptoms following a traumatic event (Affleck & Tennen, 1996; Park & Folkman, 1997; Filipp, 1999). The alternate view is that posttraumatic growth is an outcome of the trauma (Schaefer & Moos, 1992; 1998; Tedeschi & Calhoun, 1995; 2004). In this view, the growth happens as a natural part of the healing process for individuals following a trauma.

In spite of the vast differences among researchers, there is support for on-going study and exploration of the concept. For instance, Calhoun and Tedeschi in 2004 identify a need to further develop theories and models of posttraumatic growth, including their own. With posttraumatic growth being a relatively new topic, there are numerous facets of the existing models left to explore. As discussed earlier in this section, more research and empirical evidence needs to be conducted to deepen the understanding of how posttraumatic growth is experienced, how it is conceptualized amongst professionals in the helping fields, and the impact it has on the lives of those who experience it. By adding to the body of knowledge as it relates to

posttraumatic growth, the results of this study will add to the discussion required to happen to develop a thorough, comprehensive model and theory of posttraumatic growth. Additionally, the findings of this study have the potential to improve the collaboration among helping professionals.

Researchers and helping professionals work together within the mental health community to determine best practices and approaches as it relates to crisis or trauma response. Myriad fields such as counseling, psychology, medicine, emergency management, and sociology come together to provide services to individuals experiencing adverse situations. It is imperative to have common language and understanding of post-trauma concepts such as posttraumatic growth in order to be effective practitioners within the respective fields. As professionals serve on committees and within the community following a crisis event, it would be beneficial to utilize a common language and universally accepted framework of posttraumatic growth.

### **Purpose of the Study**

The purpose of this study is to identify elements of consensus about the concept of posttraumatic growth so as to add to the existing body of research, further a clearer understanding of the phenomenon, and create an ease in communication among helpers across disciplines. Using a Delphi Method, the author will survey a select group of researchers, educators, and professionals from academic disciplines about their views, beliefs, and understanding of posttraumatic growth. The participants of the expert panel are from various disciplines conducting and publishing research on the topic of posttraumatic growth. These scholars will write responses to prompts provided by the researcher to provide the varying views, assumptions, areas of consensus, and interdisciplinary implications on posttraumatic growth in their field of education and practice. As participants reply to the prompts in the series of surveys,

they will be able to add additional remarks, remove, adjust, or maintain their previous remarks. Based on the interpretation of all the data provided by the participants, the researcher will contribute to the literature by cultivating interdisciplinary conversations and furthering a common understanding and description of posttraumatic growth.

The literature highlights gaps in the understanding regarding many facets of posttraumatic growth. A lack of information on the constructs of posttraumatic growth (Zoellner & Maercker, 2005), a difference in the perception of how posttraumatic growth is experienced (Zoellner & Maercker, 2005), and a sparsity of discussion amongst professionals in various disciplines on the concept (Peterson, Park, Pole, D'Andrea, & Seligman, 2008) are concerns that motivated this researcher to conduct this study. Using a Modified Delphi Methodology allows for the exploration of these topics as well as expanding the interdisciplinary conversation on posttraumatic growth.

### **Significance and Implications of the Study**

The significance of this study is the interdisciplinary consensus of the conceptualization of posttraumatic growth. The common conceptualization will allow for more effective communication following a tragedy when mental health services are being activated. The task forces, response teams, and committees will be able to discuss posttraumatic growth with a fundamental understanding of the concept which will allow for services to be developed and administered at a faster pace. Common lexicon will allow for an increase in efficacy of response to tragedy and a positive impact on growth for individuals experiencing crisis.

Another significance of the study is the impact a well thought out, complex, widely accepted understanding of the concept of posttraumatic growth will have on counseling practice and counselor educators. Counselors play a role in crisis response and trauma mitigation;

therefore, their understanding of posttraumatic growth is imperative to facilitate mental health and wellbeing to their client base. Implications from this study are important for counseling professionals because counselors frequently work with clients following a crisis situation and beyond the initial use of Psychological First Aid. Oftentimes, counselors work with a significant portion of the client's trauma experience. They assist in facilitating healing in order to lead a healthy, happy, and meaningful life through the cultivation of self-awareness, processing of emotions, and co-development of a plan to move forward. Counselors who have a thorough knowledge and understanding of posttraumatic growth are better equipped to help individuals recognize and utilize positive outcomes from their trauma as they move forward with their lives. This can only happen when there is a sound, research-based conceptualization regarding posttraumatic growth among trauma service providers. Professionals working in helping fields need to have a thorough, complex understanding of the topic of posttraumatic growth in order to provide help for individuals who are striving to move beyond the crisis stage in their lives. Those who train professional counselors can also benefit from the result of the study.

Counselor educators have a unique responsibility to understand posttraumatic growth due to their responsibility of educating counselors-in-training. These individuals teach students foundational counseling theories, how to implement specific strategies with their clients, and conduct research in the field of counseling. With a comprehensive understanding of posttraumatic growth, counselor educators will be able to appropriately inform the next generation of counselors and positively affect their work on interdisciplinary committees. The information students glean from their professors and instructors will inevitably become a part of how they practice and participate in the field. By having a thorough understanding of the concept, counselors will be able to use psychoeducation with their clients as well as take

necessary steps to assist in their clients' growth following a tragedy. The present study is significant for counselor educators because these professionals introduce, discuss, and help students conceptualize topics important in the field.

Beyond counseling, this study will continue the discussion on posttraumatic growth amongst individuals in various disciplines and help to bring the conversation to the classroom of mental health professionals. Educators will introduce the topic of posttraumatic growth as it is understood amongst scholars in the field of counseling as well as the fields of sociology, psychology, emergency management, and medicine. The common language used in educational programs will allow counseling students to come to the table and communicate effectively with other professionals as they serve on committees, task forces, as advocates for legislation and their clients, and as they assist in the healing process.

Lastly, it is obvious through the review of the literature that a solid theory of posttraumatic growth does not exist. There are various models of posttraumatic growth that illustrate different views on how posttraumatic growth is experienced; however, a widely accepted theory has not yet been developed. The development of a formal, articulated theory will lead to the ability of researchers and practitioners in the field of mental health to effectively communicate with their clients and also with one another. The first step towards a well-developed theory is a consensus on the concept of posttraumatic growth amongst scholars conducting the research.

### **Definitions of Terms**

American Counseling Association (ACA): The American Counseling Association (ACA) is the governing body for professional counselors. The organization produced the ethical codes

used within the field of counseling, provides an annual national conference for practitioners in the mental health field, and promote the research in the field.

Crisis: There are many definitions of crisis throughout the literature. The following are just a few of those definitions.

“People are in a state of crisis when they face an obstacle to important life goals—and obstacle that is, for a time, insurmountable by the use of customary methods of problem-solving.” (Caplan, 1961)

“...an upset in equilibrium at the failure of one’s traditional problem-solving approach which results in disorganization, hopelessness, sadness, confusion, and panic.”

(Lillibridge and Klukken, 1978)

“...crisis is a perception or experience of an event or situation as an intolerable difficulty that exceeds the person’s current resources and coping mechanisms.” (James and Gilliland, 2001)

Trauma: In 2017, the American Psychological Association (APA) define trauma as an “emotional response to a terrible event like an accident, rape or natural disaster.” Immediately following a crisis or event causing trauma, an individual might experience denial and/or shock. The individual’s long term trauma response to a crisis may include, but is not limited to, flashbacks, general feelings of being unwell, depressive symptoms, fluctuating emotions, negative impacts on relationships, or an inability to move past the negative event. Individuals may experience one or more of these responses. Individuals also may experience growth. The growth an individual experiences following a crisis will be the focus of the present study.

Delphi methodology: The Delphi method is used to reach a consensus amongst scholars on a certain topic. The consensus is reached through a series of online surveys conducted over a

period of time. Each survey allows the scholars to modify their existing responses in reaction to the responses provided by the other participant scholars in the study.

Field of Sociology: Individuals in the field of sociology study problems, structure, functioning, behaviors, and development of society. Sociologists gather information on the elements that contribute to the success and challenges of society (American Sociological Association, 2016). Research areas of sociology include, but are not limited to, the following:

Field of Psychology: As defined by the American Psychology Association (APA), “psychology is the study of the mind and behavior. The discipline embraces all aspects of the human experience — from the functions of the brain to the actions of nations, from child development to care for the aged. In every conceivable setting from scientific research centers to mental healthcare services, ‘the understanding of behavior’ is the enterprise of psychologists” (American Psychology Association, 2017).

Field of Emergency Management: As posted on the Federal Emergency Management Association (FEMA) website in a brochure titled *Emergency Management: Definitions, Vision, Mission, Principles*, the following definition is presented: “Emergency management is the managerial function charged with creating the framework within which communities reduce vulnerability to hazards and cope with disasters” (FEMA, 2007).

Field of Medicine: The World Health Organization (WHO, 2000) defines traditional medicine as “the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness.”



Field of Counseling: The American Counseling Association (ACA) has defined counseling as, “a professional relationship that empowers diverse individuals, families, and groups to accomplish mental health, wellness, education, and career goals” (American Counseling Association, 2017).

Expert: The term expert is operationally defined in the present study as a researcher who has published articles on the topic of posttraumatic growth in peer reviewed, professional journals within their respective fields. Participants will be included from the fields of counseling, sociology, psychology, medicine, and emergency management.

### **Limitations**

One of the limitations of this study was the number of participants. The participants in this Modified Delphi study were scholars, or experts, on the topic of posttraumatic growth in order to have a strong and valid study (Hsu & Sanford, 2007). However, since the topic of posttraumatic growth is relatively new, researchers are currently working on the development of a solid model and theory. The lack of consensus on certain aspects of posttraumatic growth in the literature supports using the Modified Delphi methodology; however, the willingness of the scholars publishing on posttraumatic growth to participate posed a challenge for the study.

Another limitation of the study was the differing definitions of crisis and trauma. Each field and participant conceptualized these aspects differently causing for a difference in opinion on the meaning of posttraumatic growth. The Modified Delphi Method provided a platform for the participants to work through these challenges and reach consensus on some aspects of posttraumatic growth while leaving participants in disagreement on other aspects.

An additional limitation of this study was researcher bias. The researcher believes she has grown through previous crisis and trauma to become a different person than she was prior to

the event. This researcher bias is disclosed in the methodology section of this dissertation in an attempt to address the trustworthiness of the study. The researcher had an impartial researcher conduct thematic analysis independently to enhance the trustworthiness of the study.

After the data was collected and analyzed, it was discovered that participants interpreted prompts differently. The researcher identified this as another limitation to the results of the study; however, the researcher believed that the qualitative data obtained through the open-ended question mitigated many of these concerns. For example, in one of the prompts, participants had varied opinions on the importance of the Tedeschi and Calhoun model of posttraumatic growth (1995) with three domains of growth; however, most participants recognized the significance of the model through their comments. The point of confusion was that the participants identified with the Tedeschi and Calhoun model that illustrated five domains of growth (1996) versus the model that illustrated three domains of growth (1995). In other words, the qualitative data obtained through the textboxes allowed the researcher to evaluate the responses on the closed ended questions.

Consensus was the goal of the study; however, with the presence of differing views from scholars in various fields, it was difficult to come to a consensus on the topic of posttraumatic growth. In response to a lack of consensus, the researcher sought to determine the cause of dissension amongst participants through the responses provided or additional prompts. While the desired outcome of the Modified Delphi study was consensus, the discussion amongst interdisciplinary scholars was invaluable.

### **Summary of Chapters**

In Chapter I, the proposed study is outlined. The researcher discusses the lack of interdisciplinary conceptualization of the topic of posttraumatic growth. An area of emphasis is

the development of a consensus on the concept of posttraumatic growth as an outcome for individuals following a crisis or trauma amongst scholars in the field of counseling, medicine, sociology, psychology, and emergency management. The study addresses the gap in literature on the interdisciplinary definition of posttraumatic growth and how the definition can inform counselors and counselor educators. Chapter I also contains definitions for applicable terms used throughout the present study. In Chapter II, the author provides an in depth review of the literature on positive psychology, posttraumatic growth, resilience, and emergency response. Chapter III is focused on methodology and includes the overarching research questions, a description of the Modified Delphi Methodology used in the study, interview questions designed as a part of the instrument, the procedures of the study, and the qualitative data analysis through thematic coding. The results of the study are displayed, as is the data from the expert panel. In the final chapter, Chapter V, the researcher addresses the limitations of the study, provides a discussion of the results, and identifies the implications for counselors, counselor educators, and the interdisciplinary conversations.

## CHAPTER II: LITERATURE REVIEW

Initially, researchers in the helping fields began studying how a life crisis could offer an opportunity for positive personal growth (Caplan, 1964; Frankl, 1973; Park, Cohen, & Murch, 1996; Park, 1998; Maslow, 1954; Yalom, 1980; Antonovsky, 1987; Schaeffer & Moos, 1992). This movement created a shift from a significant focus on client psychopathology to client resiliency and growth. Consequently, the shift unveiled a completely inadequate understanding of the positive outcomes following traumatic life events.

To address the lack of clarity and evidence, researchers began to conduct empirical research studies on the growth outcomes following considerably traumatic life events. These studies recognized positive outcomes as being a valid potential consequence of crisis and contributed to a deeper understanding of the phenomenon of growth. For instance, Caplan (1964) postulated that the possibility for growth following stressful life events is a tenant of crisis theory. Caplan's acknowledgement of growth proved to illuminate a new way of thinking and making sense of the human process following negative events; however, it still took approximately 20 years for the growth to be a significant area of focus for researchers and scholars in the helping fields.

In the early stages of research, attempts were made to understand how the growth was experienced, when it was experienced, and other characteristics of the growth. Studies were conducted and researchers discovered that there are specific personality characteristics that correlate with higher instances of self-reported growth following a particularly stressful life event. Such personality traits include a positive outlook (Park, Cohen, & Murch, 1996; Tedeschi & Calhoun, 1996; 2014; Curbow, Somerfield, Baker, Wingard, & Legro, 1993; Affleck & Tennen, 1996; Davis, Nolen-Hoeksema, & Larson, 1998), spiritual or religious ideology

(Aldwin, Sutton, Lachman, 1996; Park, Cohen, & Murch, 1996), and extroversion (Tedeschi & Calhoun, 1996). These studies have shown that individuals with specific personality traits may have a higher likelihood of experiencing growth following adversity.

As mentioned previously, it has been discovered that a positive outlook or way of processing the environment correlates with higher instances of self-reported growth following negative life events. This positive outlook is described as the individual being optimistic and hopeful. These individuals report feeling as though there will be positive outcomes and maintain hope they will achieve their goals. Some research studies evaluated positive outlook and growth following myriad stressful situations (Park, Cohen, & Murch, 1996; Tedeschi & Calhoun, 1996). These studies did not evaluate the interactions and impact of positive outlook and the type of stressful situation on the growth outcome.

Equally important are the studies in which researchers focused on specific categories of stressful life events. For example, studies have been conducted to determine growth following bereavement or the loss of a loved one (Calhoun & Tedeschi, 2010; Schwartzberg & Janoff-Bulman, 1991; Lehman, Davis, DeLongis, Wortman, Bluck, Mandel, & Ellard, 1993; Park & Cohen, 1993; Engelkemeyer & Marwit, 2008), cancer (Collins, Taylor, & Skokan, 1990; Taylor, Wood, & Lichtman, 1983), divorce (Wallerstein, 1986), and heart problems (Affleck, Tennen, Croog, & Levine, 1987). The participants in these studies self-reported growth through improvement of their personal lives and coping abilities.

All the aforementioned studies contributed to the development of the concept of growth following stressful life events by furthering the understanding of when growth can be experienced. While many studies were published to assist in gaining information on the concept of posttraumatic growth, there is still a significant amount of work left in order to effectively

define, anticipate the existence, and assist in facilitating posttraumatic growth. Without a comprehensive understanding of the growth and other positive outcomes, researchers are lacking a holistic view of what can happen in the lives of individuals following a crisis or traumatic event.

### **The Emergence of Positive Outcome Concepts**

Authors who first began writing about positive outcomes concentrated on when the positive outcomes of stressful life events occur (Cordova, Cunningham, Carlson, & Andrykowski, 2001; McMillen, Smith, & Fisher, 1997; Maercker, 1998). During this time, the concept or concepts were in their initial phases of development. Very little research had been conducted on the positive outcomes of stressful situations; therefore, the concept (s) were not well defined or illustrated. The positive outcomes were, and continue to be, referred to by different terms. Each term denotes a slightly different conceptualization and often a different instrument of measure. The terms include, but are not limited to, benefit-finding, stress-related growth, thriving, and posttraumatic growth. Each term or concept is illustrated briefly below.

**Stress-related growth.** Some of the initial research associated with stress-related growth focused on when and how growth was experienced after negative events; however, there didn't seem to be any categorization or organization of the major themes of data. Park (1998) defined stress-related growth as the numerous positive transformations an individual experiences in response to exceedingly stressful life situations. This growth is measured by a number of factors respective to the researcher's lens. Around the same time, a framework of stress-related growth was developed by Schaefer and Moos (1992). During this time, research was being conducted to determine when and how growth was experienced after negative life events; however, there didn't seem to be any categorization or organization of the major themes of the data. Schaefer

and Moos (1992) proposed a preliminary framework to begin the categorization and organization of what the researchers were finding from their studies. They determined that the information researchers were receiving on individuals' growth following crisis could be categorized by how they were coping, their support networks, and their personal resources. This proposed framework or model, allowed researchers that were studying stress-related growth to begin organizing their data. The work of Schaefer and Moos (1992) allowed for researchers to begin evaluating how to measure stress-related growth effectively.

In 1996, Park, Cohen, and Murch responded to the proposed model by Schaefer and Moos (1992) with the Stress-Related Growth Scale (SRGS) to assess stress-related growth following a stressful life event. The SRGS measures stress-related growth by determining predictors such as: intrinsic religiousness, social support satisfaction, stressfulness of the negative event, positive reinterpretation and acceptance coping, and number of positive life events experienced prior to the negative stimulus (Park, Cohen, & Murch, 1996). These predictors allowed researchers to categorize the results, attribute meaning to the experience, and arguably, most importantly, measure stress-related growth. By determining predictors, researchers were not only gathering information on when stress-related growth was experienced, but also how to potentially facilitate the growth as a part of the healing process.

In recent years, research has been conducted on the predictors mentioned above and different populations. For example, in a qualitative research study conducted by Kim and Kim (2013), the researchers discovered personal growth in older Korean immigrants. The acculturation process was determined the stressful event. In the study, researchers discovered the stress-related growth was experienced in form of an increase in mental toughness, an engagement in meaningful activities, and an understanding of culture (Kim & Kim, 2013). The

term of stress-related growth is current in the literature and the concept is being studied; however, stress-related growth is not the only term or concept of growth following crisis that is being studied.

**Benefit-finding.** Another concept that evolved from the literature on coping and stress is the concept of benefit-finding. The term benefit-finding refers to an individual recognizing the positive outcomes that have taken place as a result of a traumatic event. Affleck and Tennen (1996) identified the distinction between individuals who genuinely believe there is a positive consequence of the adverse situation (benefit-finding) and individuals who use the knowledge of benefits as a coping strategy (benefit-reminding). The authors called for future researchers to carefully differentiate an individual's beliefs and coping techniques using a framework similar to the benefit-finding and benefit-reminding mentioned above. After the concept of benefit-finding was introduced by Affleck and Tennen in 1996, two scales or inventories were created in an attempt to measure aspects of the concept.

In response to the development of the concept of benefit-finding, Mohr, Dick, Russo, Pinn, Boudewyn, Likosky, and Goodwin (1999) created one of the scales entitled the Benefit-Finding Scale (BFS). It provided a way to assess an individual's positive life changes. The inventory was created and normed on a sample of 50 patients who were diagnosed with Multiple Sclerosis (MS). After the completion of the inventory, it was discovered that the participants experienced benefit-finding in a multitude of different ways. Participants reported a deepening of personal relationships, a new appreciation for life, and a growth in spiritual involvement (Mohr et al., 1999). These findings are similar to the categories postulated by Tedeschi and Calhoun (1996) in their article introducing the Posttraumatic Growth Inventory (PTGI).



In addition to the development of the BFS was the creation of the Perceived Benefit Scale (PBS) by McMillen and Fisher in 1998. The authors of this scale proposed eight subscales of benefits individuals can experience and self-report. The scales are as follows: “enhanced self-efficacy”, “increased community closeness,” “increased spirituality,” “increased compassion,” “increased faith in other people,” “increased family closeness, “lifestyle changes,” and “material gain” (McMillen and Fisher, 1998). Many of these subscales overlap with the subscales proposed by Tedeschi and Calhoun (1996) in the article introducing the PTGI. The difference with the PBS and PTGI is how the subscales were determined.

In the PBS, the subscales are discovered through empirical research conducted to determine how individuals respond to negative events (McMillen and Fisher, 1998). Participants provided short responses in how they experienced the negative events and the responses were categorized into the eight main subscales described previously. The PTGI determined their subscales by conducting a comprehensive review of the literature on growth and coping following crisis (Tedeschi and Calhoun, 1996). With a difference in approaches to determining how to measure the positive outcomes following crisis, it is significant there would be some overlap in the subscales discovered from both approaches.

**Thriving.** Thriving is yet another positive outcome concept which is derived from the resilience literature. O’Leary and Ickovics (1995) described the concept of thriving as multifaceted and dynamic in nature. Just like the concepts of stress-related growth, benefit-finding, and posttraumatic growth, the concept of thriving is influenced by numerous individual and social factors. While thriving comes from the resilience literature there is one significant difference that sets it apart. Resilience is considered the ability of an individual to maintain homeostasis and yet, thriving is considered the ability to move past the point in which the

stressful life event occurred and to grow in response to the negative stimuli (O’Leary & Ickovics, 1995). In this aspect, the concepts of stress-related growth, thriving, and posttraumatic growth are similar. All three concepts acknowledge a movement or growth past how the individual was functioning and interacting with their world prior to the negative event.

In the literature on the concept of thriving, scales such as the Stress-Related Growth Scale (SRGS) and Posttraumatic Growth Inventory (PTGI) have been used. These scales provide a measurement for the positive outcomes following a stressful life event; however, they do not separate the concept of thriving from that of the concepts of stress-related growth and posttraumatic growth. In other words, thriving is not measured with an instrument specifically designed for the concept. This absence of an instrument for thriving would signify that thriving, stress-related growth, and posttraumatic growth are conflated in the literature and in the conceptualization.

**Posttraumatic growth.** Lastly, and most importantly to this study, the concept of posttraumatic growth is illustrated. In the early 1990s, the term posttraumatic growth was coined and researchers began contributing to the body of knowledge. As the initial researchers on the topic, Tedeschi and Calhoun (1995) provided the specific term ‘posttraumatic growth’ as it is used today. Their research and conversations around the topic became a main focus in the mental health arena due to their creation, reevaluation, and continued the development of the popular model of posttraumatic growth (Calhoun & Tedeschi, 1998; 2006; Tedeschi & Calhoun, 2004). In this model, Calhoun and Tedeschi (1999) defined posttraumatic growth as the self-reported positive psychological changes that an individual experiences in direct result from the struggle and challenges arising from major life crises or trauma. Calhoun and Tedeschi (1999) define

posttraumatic growth with similar language as the authors that define concepts of stress-related growth, benefit-finding, and thriving.

As seen through the posttraumatic growth framework, Tedeschi and Calhoun (1995) and other researchers (Schaefer & Moos, 1992) postulated there are three broad categories of personal growth. Data was gathered from various research studies and numerous research articles to determine three main categories of how individuals report their growth following stressful events. In 1996, Tedeschi and Calhoun published an article highlighting the three categories as follows: changes in perception of self, changes in interpersonal relationships, and changes in philosophy of life. The authors used these three categories as the foundation for the development of the Posttraumatic Growth Inventory (PTGI) (Tedeschi and Calhoun, 1996). The PTGI is a survey used to measure personal growth in the categorical areas and their corresponding specific domains.

In recent studies, Taku, Cann, Calhoun, and Tedeschi (2008) explore five specific domains of growth that define the concept of posttraumatic growth in more detail. These domains are measured by the Posttraumatic Growth Inventory (PTGI). The domains include the following: a renewed appreciation for life, new possibilities, enhanced personal strength, improved relationships with others, and spiritual change. As mentioned previously, these domains in the posttraumatic growth framework have overlap with the organization of concepts of stress-related growth, benefit-finding, and thriving in how they are all conceptualized.

Researchers appear to arbitrarily choose when to use the terms stress-related growth, benefit-finding, thriving, and posttraumatic growth. It appears as though the choice may originate from the measurement tool selected by the researchers. For instance, if a researcher wanted to use the Posttraumatic Growth Inventory, they would likely choose to measure

posttraumatic growth. Also, if a researcher wanted to use the SRGS, they would likely choose to measure stress-related growth. Another study that depicts the issue of referring to the different concepts synonymously is the work by Kim, Schulz, and Carver (2007). The authors describe how they decided to study benefit-finding in the following passage:

Different terminologies (e.g., benefit finding, posttraumatic growth, stress-related growth) and measurement tools have been used to describe the phenomenon of personal growth or positive changes after an encounter with a challenging or traumatic life experience. In this study, we use the term “benefit finding” to refer to this phenomenon. (p. 283)

This statement leaves the impression that the selection of the concept of benefit-finding is arbitrary as the term is synonymous with all the other concepts cited in the quote. Although, at first glance, the meanings of these terms do look similar, there are clear differences in how they are viewed and described in the literature (Davis, Nolen-Hoeksema, & Larson, 1998). In fact, in a longitudinal study of breast cancer patients conducted by Sears, Stanton, and Danoff-Burg in 2003 it was discovered that the concepts posttraumatic growth and benefit finding are not the same but two distinctly different concepts. As social scientists, there is an inherent responsibility to be intentional and have purpose in the research design, therefore, it raises the question: What is causing these terms and/or concepts to be used synonymously when they do not have the same meaning? In order to answer this question, it is imperative to look more closely at these facets of growth and positive outcomes following crisis, especially as examined and discussed in various fields. These different approaches contribute to the lens in which scholars view the concept. Without a similar lens, it is difficult for scholars to discuss these concepts with colleagues and professionals from various fields who may or may not share that same lens.

To evaluate the various ways posttraumatic growth is conceptualized by scholars in numerous fields, we must first examine how positive outcomes following tragedy are being discussed in those differing fields to determine what information already exists. As part of this study, the researcher is seeking input from the participants regarding similarities and differences in how they view posttraumatic growth concepts. It is necessary to gather such information to develop a consistent language.

### **Conceptualizations of Growth across Disciplines**

As discussed previously in this chapter, researchers and practitioners have coined different terms and concepts on positive psychological responses to trauma. Furthermore, these terms and conceptualizations can also be broken down by discipline. In an article by Astier Almedom (2005), the author created a table of the myriad positive psychological responses to trauma as they are studied by various fields. In the table, the fields of sociology, social psychology, behavioral sciences, medicine, psychiatry, and sociology are addressed. The author illuminates the terms, concepts, and research published in the respective fields. It was discovered through the review of the literature that many of the positive outcome concepts following a crisis or trauma are discipline specific. In other words, the concept being researched, the way it is conceptualized by scholars, and tools used to measure it may be different depending on the field in which the scholar is working. This information is significant because it further develops the lens in which scholars view crisis, trauma, and healing. These lenses are what define how the potential participants of the study view posttraumatic growth. The research and discussion taking place in the various helping fields amongst scholars will be discussed in the following section.

**Medical community.** Almedom (2005) illuminates the research on different concepts of positive outcomes following trauma in the various fields. First, in the field of medicine, recovery is a significant focus within practitioners' practice and research. The medical field tends to look at recovery from trauma in a multidimensional context. An individual's recovery is determined by the environment in which the individual spends a majority of their time. Clinical and community interventions are used to encourage or repress an individual's recovery. The focus of individuals working in the medical field appears to be on the healing process and the environment plays a vital role in the recovery.

While scholars in the medical community focus significant efforts in the realm of recovery, a subset of the posttraumatic growth research was conducted with patients diagnosed with cancer. The findings were instrumental in the development of the concept. In one particular study, Cordova et al., (2001) discovered that women who had been diagnosed with breast cancer had exhibited more signs of growth than physically healthy women of similar ages and education levels. The women with a diagnosis of breast cancer experienced higher levels of growth in the areas of relating to others, appreciation of life, and spiritual change. These findings provided a foundation for the proposal that adversity could lead to more growth than if an individual had lived a life without experiencing adversity.

As mentioned above, the emphasis of these responses to medical conditions, including posttraumatic growth, are looked at from a recovery standpoint. In other words, patient care in terms of how to encourage and not repress recovery seems to be a main focus. This is not dissimilar from how counselors want to facilitate the emotional healing and personal growth for their clients; however, the emphasis might be different. For example, in the medical community, doctors and nurses are called to prioritize the physical recovery and care of a patient, while in the

counseling community counselors are able to prioritize the emotional care. These differences in priorities can often lead to differences in how scholars communicate about concepts such as posttraumatic growth.

***Psychiatry community.*** In the field of psychiatry, a specialized field within the medical community, is the research related to positive outcomes associated with the concept of resilience. This concept is frequently researched and discussed by individuals in the field of psychiatry. Resilience is considered the “escape from adversity.” The literature often defines resiliency as the ability to “bounce back” from crisis or traumatic situations (Carver, 1998; Block & Kremen, 1996; Lazarus, 1993). An individual’s ability to be resilient is determined by their background, past life events, experiences, and life circumstances. Researchers in this field emphasize empirical evidence in the development of resiliency theories (Alemdom, 2005). Much like the concept of recovery discussed in the field of medicine, resilience examined from a multidimensional framework.

Scholars in both the medical and psychiatric fields take a holistic view on the experiences of individuals following a crisis or trauma. The concepts of recovery and resilience add to the understanding of what individuals experience following negative stimuli. With this understanding, individuals working in the medical fields can shift their focus from measuring the positive outcomes to determining predictors. The shift would allow practitioners to begin facilitating growth in their patients suffering from traumatic events.

***Sociology community.*** Salutogenesis is a concept developed in the field of sociology by Aaron Antonovsky (1987), a medical sociologist. Antonovsky postulated that health, both mental and physical, are in a “dynamic steady state.” In this theory, the individual attempts to stay at homeostasis and copes with life’s challenges in a way to steady changes. Research is conducted

into the factors that cause emotional wellbeing or health. Salutogenesis is a stark comparison to pathogenesis, the study of factors that lead to disease or illness. The development of the new concept allowed for a movement within the field to research the positive outcomes and consequences of traumatic events.

Sense of Coherence (SOC) is a scale that is incorporated into measuring the salutogenesis, or health, of an individual. This scale is made up of three subscales. Comprehensibility is the first subscale which measures the belief that an individual can go through life being able to understand life events and is able to predict what future life events might happen. Manageability is the second subscale and refers to the belief that an individual has the skills, knowledge, and ability to control their own life. The individual feels as though they have some sense of control over their life. Lastly, meaningfulness is the belief that engaging in life is worthwhile. There is a significance to life. The SOC scale allows sociologists and other researchers to monitor the health of individuals experiencing crisis or trauma through the dimensions of comprehensibility, manageability, and meaningfulness. Individuals who have a higher SOC score would be considered to have a higher health while individuals with a lower SOC score would have a lower health. Health is defined by the traits described in the theory of salutogenesis (Antonovsky, 1998).

**Cognitive and social psychology community.** In the field of cognitive psychology, the concepts of self-efficacy and an individual's locus of control are theories frequently researched. Albert Bandura (1977) defined self-efficacy as an individual's confidence in one's own ability to succeed within the given context of a situation or problem. An individual's locus of control reflects their view on the world. An internal locus of control denotes an individual's belief that they are in control of their own destiny. With a high internal locus of control, the individual



believes they control more in their lives than they believe life happens to them. A high external locus of control reflects an individual's belief that they have little personal control over their life situations and that the environment, etc. controls life events. Self-efficacy and perceived locus of control are two concepts that can be used in tandem. Psychologists often focus their research on this confidence, self-efficacy, or locus of control in response to crises or traumatic events.

The aforementioned concepts are closely related to the topic of posttraumatic growth. Almedom (2005) also discussed the concept of posttraumatic growth as he referenced additional fields. He writes the concepts of posttraumatic growth and transformation are closely associated research topics within the field of social psychology. Posttraumatic growth is primarily researched through the use of the Posttraumatic Growth Inventory (PTGI). The use of the PTGI allows researchers to obtain empirical evidence on the self-report of how personal growth is experienced by individuals following crises or traumatic events. As mentioned previously, the PTGI measures growth in the areas of renewed appreciation for life, new possibilities, enhanced personal strength, improved relationships with others, and spiritual change.

The varied concepts and theories on the positive response individuals experience following a traumatic event present challenges as to how professionals work in an interdisciplinary setting. For counselors working with clients grappling with trauma, it is imperative to be educated on the terminology used in other professions and how it relates to posttraumatic growth. Understanding the overlap and differences these concepts have with posttraumatic growth will inform counselors and practitioners outside of the field of counseling on how to work with individuals who have experienced trauma. This understanding will also contribute to the efficacy in communication across disciplines. Since a basic understanding of concepts being discussed in various fields on the positive outcomes following crisis or trauma

has provided a foundational knowledge, the concept of posttraumatic growth will be addressed in depth.

### **Conceptualizations of Posttraumatic Growth**

As mentioned throughout this chapter, there are numerous concepts in the literature to depict the positive outcomes experienced by individuals following a crisis or negative life event. Stress-related growth, benefit-finding, thriving, and posttraumatic growth are the concepts highlighted above as being used synonymously within the literature. Additionally, concepts such as recovery, resiliency, salutogenesis, self-efficacy, locus of control, and posttraumatic growth are concepts being discussed by scholars in various disciplines. One concept of particular interest to the research is the concept of posttraumatic growth. In addition to these related terms, there are studies that directly address the concept of posttraumatic growth.

The different conceptualizations of posttraumatic growth are discussed and debated by researchers and scholars throughout the literature. Some researchers view posttraumatic growth as an outcome (Schaefer & Moos, 1992, 1998; Tedeschi & Calhoun, 1995, 2004) and others view it as a type of coping strategy (Affleck & Tennen, 1996; Davis, Nolen-Hoeksema, & Larson, 1998; Park & Folkman, 1997; Filipp, 1999; Taylor, 1983). These differences in how researchers believe posttraumatic growth is experienced are points of contention amongst scholars and one major focus of this research study.

**Posttraumatic growth as an outcome.** Various posttraumatic researchers describe the concept of posttraumatic growth differently. There are two predominant models of posttraumatic growth that view the concept as an outcome. After a trauma, an individual would struggle emotionally with their feelings revolving around the event. Through this struggle, the individual would eventually reach a state of personal growth through a significant change in both cognitive

and emotional processing. This would be considered posttraumatic growth as an outcome (Zoellner & Maercker, 2006).

The two posttraumatic growth models (Tedeschi & Calhoun, 1995, 2004; Schaefer & Moos, 1992, 1998) that conceptualized posttraumatic growth as an outcome identify the factors that contribute to growth in a generalized sense. The first of the models to display posttraumatic growth as an outcome is authored by Tedeschi and Calhoun (1995). In this model, it is hypothesized that rumination is a key concept of facilitating posttraumatic growth. As described by the authors, rumination is an individual's analysis of the traumatic event and how this event has impacted their life. Rumination leads to the individual experiencing changes in beliefs, behaviors, and how they interact with their world. These changes signify the presence of posttraumatic growth. In 1996, Tedeschi and Calhoun presented five domains of posttraumatic growth: The individual's life narrative as well as the narrative of the traumatic event evolve into a foundational piece of their identity (Zoellner & Maercker, 2006).

In the Schaefer and Moos (1992) model, the researchers emphasized environmental and personal systems factors as having an impact on the predictability of the presence of posttraumatic growth. For example, personal traits may be any of the following: self-efficacy, resilience, confidence, disposition, motivation, health, optimism, outlook, and prior crisis experience. Excluding health and prior crisis experience, the majority of the personality traits described previously are considered intrinsic traits. The environment is also taken into consideration through relationships, familial ties, friendships, finances, societal influences, and living arrangements. All of these aspects interact to produce posttraumatic growth as an outcome.

Both models described above illustrate posttraumatic growth as an outcome. In other words, the models propose individuals experience posttraumatic growth as a product of the traumatic life event. While there are similarities in these two approaches, there are also differences. In the Schaefer and Moos (1992) model, the emphasis is on the predictors (ie. personality traits) that assist in facilitating posttraumatic growth where in the Tedeschi and Calhoun (1996) model the emphasis is on how the growth is experienced. One model evaluates the antecedents closely (Schaefer & Moos, 1992) while the other evaluates the experience during and after the growth takes place (Tedeschi & Calhoun, 1996).

The traits of posttraumatic growth are separate concepts researched by scholars in differing disciplines. As mentioned previously, scholars view posttraumatic growth differently. Next, we examine the view of posttraumatic growth as a coping strategy.

**Posttraumatic growth as a coping strategy.** The alternate view on the model of posttraumatic growth is that personal growth is solely a coping strategy. There are many ways individuals cope with adverse situations. Finding meaning in the event and creating a “positive illusion” are two coping strategies employed by individuals. Posttraumatic growth can be used in a way to answer existential questions about negative stimuli in life. Questions such as “Why did this happen to me?” and “What is the purpose of this event in my life?” cause survivors of traumatic events to grapple with the reason behind highly negative circumstances. These thoughts contribute to the drive behind posttraumatic growth as a coping strategy. Questions are formed as survivors strive to find meaning in their experience and the concept of posttraumatic growth, or positive psychological changes in response to trauma, allows for a positive way to make meaning out of the situation, inevitably leading to coping and healing (Davis, Nolen-Hoeksema, & Larson, 1998).

Other researchers who view posttraumatic growth as a means for coping question the existence of true posttraumatic growth. For instance, Taylor and Armor (1996) posited that the concept of posttraumatic growth was actually a “positive illusion.” Oftentimes, humans pursue the “silver lining” of negative experiences, whether they are reality or not (Peterson et. al., 2008). In an attempt to make sense or meaning out of a horrific experience, individuals will find a “the silver lining.” It has been proposed that this optimistic view of the situation is simply not a reality; therefore, negating any true positive outcome. These critics would say that posttraumatic growth is not a realistic outcome but instead is more of a coping strategy following a crisis situation (Taylor, 1983; Taylor & Armor, 1996). Does an individual’s need to see the ‘silver lining’ of a negative experience to contribute to the individual’s posttraumatic growth? In other words, is posttraumatic growth or a portion of posttraumatic growth an illusion (Zoellner & Maercker, 2006, 2004; Nolen- Hoeksema & Davis, 2004; Park, 2004; Wortman, 2004)? It is proposed that individuals find the “silver lining” of their experience because they feel as though they must; however, this point of view is in direct opposition of the counseling approach that a person’s truth is, in fact, reality.

Another way of discussing posttraumatic growth is to accept it as a reality, but only as an adaptation to crisis. Therefore, researchers who suggest this debate that posttraumatic growth is not a concrete reality and is an approach used by individuals to facilitate healing. Therefore, posttraumatic growth is a tool used to reframe the negative experience into something that the individual can take and use in a positive way. The individual does not accept the new beliefs as a part of their framework but instead, use the knowledge of the benefits from the adverse situation as a way of coping. The individual would experience posttraumatic growth as an adaptive response (Affleck & Tennen, 1996). It is argued, then that posttraumatic growth is a

coping mechanism (Taylor & Armor, 1996). An individual who experienced crisis or trauma would experience posttraumatic growth as a way to understand or make meaning out of their experience. Often, an individual would experience negative emotions following a particularly traumatic event. Individuals might even experience symptoms of Posttraumatic Stress Disorder (PTSD). These individuals, the individuals who struggle with symptoms such as flashbacks, fear, severe anxiety, self-destructive behavior, or loss of interest in activities that once brought joy, would use posttraumatic growth as a way to cope with these symptoms.

**Posttraumatic growth as both outcome and coping.** In 2004, the researchers Maercker and Zoellner created a model to address the various opinions on posttraumatic growth as either an outcome or as a coping strategy. Their model incorporated both views. Following a trauma, individuals may experience the functional component of posttraumatic growth as described through the research of Tedeschi and Calhoun (1995; 1996; 2006) and the positive illusions as described by Taylor et al. (2000). The model proposes posttraumatic growth as being on somewhat of a continuum. An individual can experience levels of the functional component of posttraumatic growth as well as levels of the illusory component. The authors propose that the individuals are only delusional about their posttraumatic growth if they only experience illusory component and not the functional component (Maercker & Zoellner, 2004).

One final, similar conceptualization of posttraumatic growth is that posttraumatic growth coupled with action will result in positive outcomes while posttraumatic growth together with inaction creates a flawed, maladapted illusion of the situation (Hobfoll, Hall, Canetti-Nisim, Galea, Johnson, & Palmieri, 2007). In fact, these researchers proposed that this type of mental inaction would not be labeled as posttraumatic growth at all. In other words, to experience true

posttraumatic growth, individuals must act and change aspects of their lives, otherwise, without the action component, posttraumatic growth is simply a way of coping, or simply an illusion.

### **Interdisciplinary Conceptualization**

Consensus does not exist amongst researchers on how to conceptualize posttraumatic growth (Zoellner & Maercker, 2006). The differences cause a discrepancy in understanding amongst researchers within the field of mental health and in closely aligned disciplines. This lack of a common focus and language in the aftermath of crises makes it difficult for coordinated and consistent assistance for individuals, especially those who are traumatized.

Often, professionals work together on task forces, crisis response teams, and research teams to determine empirically supported best practices in the wake of adverse situations. In working closely together, performance and efficacy is directly correlated to the ability to communicate with one another (Bracken & Oughton, 2006). When working with professionals from differing fields, common language increases understanding amongst practitioners and positively influences effective collaboration (Lowry, Curtis, & Lowry, 2004). In the aftermath of a crisis, individuals from these fields respond by implementing procedures to mitigate trauma and facilitate healing (Gomez & Turoff, 2007).

By conducting an interdisciplinary study on defining the concept of posttraumatic growth as an outcome of crisis scenarios, the gap will begin to be bridged. This study aims to begin an interdisciplinary conversation amongst practitioners, researchers, and educators. The author also plans to support an increasing emphasis on interdisciplinary research in the literature by bridging the gap of consensus between scholars in different fields, the study would develop a consensus and access to the thoughts of scholars within different fields. If the different professionals in

distinct fields reach a consensus on the terminology and meaning of the concept of posttraumatic growth, they are then able to collaborate more effectively.

### **Resilience and Posttraumatic Growth**

Resilience has been a topic of interest in the field of mental health since its introduction in 1987 by Michael Rutter. Over the past, almost three decades, an abundance of research and effort has been put into trying to conceptualize how individuals return to homeostasis following an event that shakes the foundation in which they have built their lives. Michael Rutter, a psychologist, and many other mental health professionals have dedicated their life and work to contributing to the body of knowledge as it relates to resiliency following a crisis (e.g. Bonanno, 2004; Luther, Cichetti, & Becker, 2000; Masten, 2001; Werner, 1989). One common definition of resiliency is the ability to “bounce back” or return to the state in which the individual was in prior to the crisis or traumatic event (Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008; Carver, 1998; Block & Kremen, 1996; Lazarus, 1993). However, more studies have discussed resiliency and posttraumatic growth as on in the same concept (Tedeschi, Calhoun, & Cann, 2007). As a result, the postulation that posttraumatic growth is a form of resilience is debated amongst researchers (Johnson, Hobfoll, Hall, Canetti-Nisim, Galea, & Palmieri 2007; Tedeschi, Calhoun, & Cann, 2007; Westphal & Bonanno, 2007). More information needs to be gathered on the differences and similarities of how both resiliency and posttraumatic growth are viewed in the research community (Levine, Laufer, Stein, Hamama-Raz, & Solomon, 2009).

One specific topic addressed in the literature is the relationship between posttraumatic growth and resilience. Interestingly, it was discovered that posttraumatic growth and resilience are inversely related (Levine et al., 2009). When an individual experiences resilience, the ability to experience posttraumatic growth declines (Levine et al., 2009). This relationship was



discovered through the study by Levine et al. (2009) as researchers measured for levels of resilience and posttraumatic growth among individuals from Israel who had experienced some type of war related trauma. The researchers discovered that as levels of resilience increased, levels of posttraumatic growth decreased. With higher levels of resilience, homeostasis was reached and the likelihood of personal growth decreased. The findings of the research conducted by Levine et al. (2009) significantly impacted how both posttraumatic growth and resilience are viewed in present research; however, they also called for more information to be gathered on the differences and similarities of how both resiliency and posttraumatic growth are viewed in the research community.

### **Calls for Future Research**

Peterson et al. (2008) proposed that additional research needed to be conducted to understand the relationships, similarities, and differences amongst posttraumatic growth and other positive outcome concepts as they relate to crisis and trauma. In the literature, it is found that there are many different terms, concepts, and theories involving the positive responses following adverse situations. Across disciplines, myriad terms are used, concepts are defined, and theories are utilized to conduct research into the manner in which humans succeed, grow, or heal in response to life's challenges. The paucity of information in certain aspects of research on the topic of posttraumatic growth has informed the development of this study.

Additionally, Peterson et. al. (2008) proposed a greater development of posttraumatic growth models and theory. Current research provides a useful outline of the concept of posttraumatic growth; however, greater detail on the predictors and factors of posttraumatic growth would be beneficial to both researchers and practitioners (Zoellner & Maercker, 2006). In both the models proposed by Schaefer and Moos (1992) and Tedeschi and Calhoun (1995, 2004),

the constructs used to predict and determine the presence of posttraumatic growth are only broadly defined. This general definition allows for later development of concrete operationalization of the constructs as well as a thorough, detailed theory. Zoellner & Maercker (2006) called for additional research and development of theories as well as the constructs.

A unique call for additional research on vicarious posttraumatic growth was introduced by Manne, Ostroff, Winkel, Goldstein, Fox, & Grana, (2004). Manne and her team conducted research on the posttraumatic growth experienced by women with breast cancer and reflected upon how research had not been conducted on how posttraumatic growth might be experienced by the family members of the breast cancer patients in the study (2004). Oftentimes, these individuals become caretakers and carry the burden of illness with their loved ones. Information is needed to add to the body of knowledge on the role posttraumatic growth plays in the lives of individuals who are emotionally close to survivors of crisis.

The calls for research were included in this study because it illustrates the additional information needed to further understand the concept of posttraumatic growth. Many of these individuals conducting research, writing, and publishing on the concept of posttraumatic growth are in turn the same individuals calling for additional studies to focus on elements of the concept that have not been addressed in previous studies (Zoellner & Maercker, 2006; Peterson et al., 2008). The information obtained from future research would add to the understanding of the concept and potential advance the field towards a widely-accepted theory of posttraumatic growth.

### **Thematic Analysis of the Posttraumatic Growth Literature**

In order to create an initial survey for participants, the author found it necessary to identify key findings from the literature on posttraumatic growth. Therefore, in this Modified

Delphi study, the researcher conducted a specific thematic analysis of the literature. Her process included creating questions to guide her analysis and then to organize the literature into specific themes. Table 1 displays the guiding questions as well as the specific themes that were the basis for the statements in the surveys. The literature review and analysis proved to be significant in the findings of this study.

Table 1

*Thematic analysis themes*

<b>Questions Guiding Thematic Analysis</b>	<b>Themes</b>
What are the underlying assumptions among current researchers regarding posttraumatic growth?	Concrete and/or Constructive Researchers strongly align with a specific model
How has the issue of posttraumatic growth been explored in differing fields?	Following different crises: breast cancer survivors, 9/11 terror attacks, psychological trauma, natural disasters Researchers in various fields conceptualize posttraumatic growth differently
What are current areas of consensus among writers and researchers in defining posttraumatic growth?	Researchers strongly align with a specific model of posttraumatic growth Posttraumatic growth is a valuable concept in the mental health field
What are the current diverse and differing viewpoints among writers and researchers in defining posttraumatic growth?	Agreement that a lack of consensus on multiple aspects of posttraumatic growth is acknowledged by various researchers Existence of illusory posttraumatic growth Multiple models of posttraumatic growth exist and are used in research today The presence of action in one’s life is required to experience posttraumatic growth Posttraumatic growth is a concept independent of other positive outcome concepts

Table 1. *Thematic analysis themes (continued)*

Questions Guiding Thematic Analysis	Themes
Is posttraumatic growth a stand-alone concept or is it a part of another concept?	Differing views on the independent or dependent nature of the concept
What types of interdisciplinary conversations are occurring among professionals in helping fields regarding posttraumatic growth?	Resiliency and posttraumatic growth are different concepts
	Thriving, benefit-finding, stress-related growth, and posttraumatic growth are viewed as the same concepts or as different concepts
	Strong research presence in fields of Psychiatry, Psychology, Medicine, and Nursing
	Lack of research published in fields of Sociology, Emergency Management, and Counseling
	Tendency to conduct research with researchers that have the same conceptualization of posttraumatic growth and similar viewpoints
Is posttraumatic growth a stand-alone concept or is it a part of another concept?	Calls for interdisciplinary work on the concept
	Differing views on the independent or dependent nature of the concept
	Resiliency and posttraumatic growth are different concepts
	Thriving, benefit-finding, stress-related growth, and posttraumatic growth are viewed as the same concepts or as different concepts

The themes described above reflect the areas of agreement and disagreement on the conceptualization of posttraumatic growth. These areas of disagreement within the research being conducted by scholars in various fields illuminated the necessity of interdisciplinary dialogue in order to reach consensus on the concept of posttraumatic growth. The author organized the themes as they related to the six key questions guiding the thematic analysis.

**What are the underlying assumptions among current researchers regarding posttraumatic growth?** Tedeschi and Calhoun (1995) created their model on the assumption that individuals construct posttraumatic growth following a traumatic event (Tedeschi & Calhoun, 1995; 2004). In other words, if one perceives personal growth, growth occurs. To support this assumption, these researchers created the Posttraumatic Growth Inventory (PTGI) to measure an individual's self-reported posttraumatic growth (1996). In the inventory, growth is measured through the five main domains. The individual completing the inventory decides how to answer the prompts and whether the traumatic event has led them to personal growth. The inventory is meant to measure how this growth is perceived by the individual. Through this process, it is evident that Tedeschi and Calhoun view posttraumatic growth in a way that is constructed by the individual. Therefore, if an individual perceives personal growth, personal growth occurred.

On the other hand, some researchers assume that posttraumatic growth may also be an illusion. Researchers Maercker and Zoellner (2004) developed a model of posttraumatic growth that acknowledged the constructive aspects of the concept. In addition, they proposed an illusory aspect of posttraumatic growth as being a significant part of a model for posttraumatic growth. The researchers authored an article proposing the Janus-face model of posttraumatic growth in 2004 which incorporated both the constructive and illusory components of posttraumatic growth. In the thematic analysis of the literature, it was discovered that some researchers aligned strictly with the constructive view of posttraumatic growth while others were open to the illusory aspect of the concept.

It is interesting, and a bit confusing to note that even researchers such as Maercker and Zoellner, who introduced the concept of an illusionary basis for posttraumatic growth, accept the

assumption that there is a constructive aspect to posttraumatic growth. The researcher sought to gain clarification from participants on the panel regarding common, consistent, assumptions related to the concept.

### **How has the issue of posttraumatic growth been explored in differing fields?**

Posttraumatic growth has been explored by researchers in various fields. These fields include medicine, psychiatry, nursing, psychology, sociology, emergency management, and counseling. The focus of context for posttraumatic growth experiences in these fields is different. The lens in which the researchers view the traumatic event, individual, and environment is different depending on factors such as education, training, experiences, and outlook. In other words, posttraumatic growth is viewed as a discipline specific construct. These differences cause the evaluation of various facets of the concept of posttraumatic growth by researchers from numerous fields.

For example, in the field of nursing, a significant amount of research has been conducted on how posttraumatic growth is experienced by patients who are diagnosed or who have been diagnosed with breast cancer (Cordova, Giese-Davis, Golant, Kronenwetter, Chang, & Spiegel, 2007). Studies have been conducted in the field of medicine on posttraumatic growth following a medical trauma such as spinal cord injury (Chun & Lee, 2008) and heart attacks (Sheikh, 2004). Scholars in the fields of psychiatry and psychology have conducted studies trying to understand facets of how individuals experience the growth. For example, the topic of rumination has been introduced and studied as it relates to posttraumatic growth in an attempt to thoroughly understand how an individual reaches growth following trauma (Stockton, Hunt, Joseph, 2011).

**What types of interdisciplinary conversations are occurring among professionals in helping fields regarding posttraumatic growth?** The examples provided of how scholars in

differing fields are exploring the concept of posttraumatic growth also provides insight into this question. Overall, interdisciplinary work is significant. Interdisciplinary work is a significant topic of conversation in the literature. Much of the research being conducted is published in the fields of psychiatry, psychology, medicine, and nursing. Publications are limited in the fields of sociology, emergency management, and counseling. All of the aforementioned fields are helping fields; therefore, the conceptualization of posttraumatic growth is a relevant topic for research considerations. Currently, interdisciplinary publications are non-existent, yet there is a common focus within the helping fields. Certainly, this is a significant area for exploration and discussion.

**What are current areas of consensus among writers and researchers in defining posttraumatic growth?** Even with the differences in views on how posttraumatic growth is both experienced and measured, the literature showed that many scholars used Tedeschi and Calhoun's model of posttraumatic growth (1995) as a foundational model in which to build their conceptualization of the topic. Even Maercker and Zoellner, the authors of a different model of posttraumatic growth, acknowledged the workings of Tedeschi and Calhoun by integrating aspects of Tedeschi and Calhoun into their model. There is a general consensus among those researchers studying posttraumatic growth that the work of Tedeschi and Calhoun is a valuable foundation.

Similar to the assumptions, one of the areas of consensus among researchers is the alignment with the Tedeschi and Calhoun (1995) model of posttraumatic growth. Tedeschi and Calhoun's article published in 2004 on the conceptual foundations and empirical evidence for posttraumatic growth has been recorded as being cited on Google Scholar 3,226 times by other researchers referencing their work and model. The frequent reference to the model in the

literature led this researcher to determine that many scholars agree the Tedeschi and Calhoun model of posttraumatic growth is widely accepted as, at least, a foundational model for the concept of posttraumatic growth.

Another aspect of posttraumatic growth many researchers agree on is the importance and relevance of the topic in the helping fields. Research on the topic of posttraumatic growth has burgeoned since the inception of the concept in the late 1980s and early 1990s. The growing interest in the concept was likely caused in part by the positive psychology movement which was pioneered by Dr. Martin Seligman. Positive psychology is defined as the focus of mental health professionals on the positive interpretations of one's experiences, characteristics, and overall life (Seligman & Csikszentmihalyi, 2014). The flourishing of the positive psychology research began around the time when Dr. Seligman became president of the American Psychology Association in 1998; therefore, possibly explaining the escalation of the exploration of the concept of posttraumatic growth. The positive psychology movement has led to the emphasis on positive reactions or experiences; therefore, consensus has been reached that positive outcome concepts such as posttraumatic growth are relevant and necessary in the helping fields.

Interestingly, another area of consensus in the arena of positive outcome concepts and the concept of posttraumatic growth is the recognition that agreement on the terms used, understanding of how the concept is experienced, and the measurement of the concept(s) has not been reached. In other words, there is consensus on the lack of consensus in respect to the positive outcome concepts. For example, as mentioned previously, Davis, Nolen-Hoeksema, and Larson (1998) proposed that all positive outcome concepts should be treated as independent terms and constructs. Therefore, to discuss the concepts as representing the same meaning would be incorrect and further conflate the terms. Other researchers, mirror the concerns



proposed by Davis, Nolen-Hoeksema, and Larson. Researchers have also proposed the conflation of the concepts of posttraumatic growth and resilience (Almedom, 2005; Westphal & Bonanno, 2007). Those individuals dedicating much of their research career to contributing to the body of knowledge of posttraumatic growth claim the independence of the concept from other positive outcome concepts; however, recognize the convergence of the concepts within the literature (Ramos & Leal, 2013).

**What are the current diverse and differing viewpoints among writers and researchers in defining posttraumatic growth?** Topics lacking consensus for researchers publishing on posttraumatic growth are illuminated in the previous review of the literature on the existing models. Controversial topics of posttraumatic growth are the idea of illusory posttraumatic growth, the requirement of action by the individual, and the idea that posttraumatic growth is an independent concept. These variations in the perception of posttraumatic growth contribute to the diversity in conceptual models. As mentioned previously in this literature review, there are multiple models of posttraumatic growth that integrate various conceptualizations of the construct.

Some researchers believe an illusory form of posttraumatic growth exists (Maercker & Zoellner, 2004). In studies conducted on posttraumatic growth and cancer, researchers have posited the individual experiences positive illusions; however, true posttraumatic growth has not occurred. Illusory posttraumatic growth has been explored as a defense mechanism (Widows, Jacobsen, Booth-Jones, & Fields, 2005), as a coping strategy (Zoellner & Maercker, 2006), and other conceptualizations (Tomich & Helgeson, 2006). Hobfoll et al. (2007) proposed that an individual must take action in their lives or the individual would be unable to experience true posttraumatic growth. In other words, inaction accompanies illusory posttraumatic growth.

These differing perspectives have been proposed in published, peer-reviewed journals and have caused controversy for researchers working on the concept of posttraumatic growth.

While some researchers believe in the existence of illusory posttraumatic growth, others focus their research efforts on posttraumatic growth as a reality. Posttraumatic growth has been explored as it constitutes positive identity changes. Tedeschi and Calhoun (1995) discovered the positive identity changes individuals incorporate into their new self-perceived identity following a tragedy. In fact, Janoff-Bulman (1992) proposed that these positive changes in identity following a tragedy were a direct result of the hardships experienced. As an addition to the body of knowledge on posttraumatic growth as a reality, a potential transmission of posttraumatic growth was exposed by Weiss (2004). In fact, Hobfoll et al.'s proposal of action-based growth is even accepted within those studying posttraumatic growth as a reality; however, those who do not align with illusory posttraumatic growth propose that action is not a requirement of growth but, that it is one way to experience growth.

The researcher's analysis of the literature uncovered these major areas of controversy over how scholars view posttraumatic growth. There were examples of strong disagreements as well as slight differences in terminology and applications. For the study, the researcher deemed it necessary that she create a platform for panelists to openly discuss areas of dissent and, ideally, reach consensus in some way. The surveys allowed participants to share their opinions, to see others' opinions, and to rethink posttraumatic growth from different perspectives.

**Is posttraumatic growth a stand-alone concept or is it a part of another concept?** As mentioned previously, the notion that posttraumatic growth is a stand-alone concept is recognized by researchers who claim its independence from the concept of resilience (Almedom, 2005; Westphal & Bonanno, 2007). Furthermore, some researchers recognize the independence

of posttraumatic growth from other positive concepts such as thriving, stress-related growth, and benefit-finding (Davis, Nolen-Hoeksema, and Larson, 1998). Other researchers use the aforementioned concepts as synonyms for positive outcomes following tragedy. For example, in a publication by Park and Fenster (2004), the authors claim that stress-related growth is often discussed under the terms thriving and posttraumatic growth. These varying opinions and ways of communicating about the concept lead to the necessity of further discussion and, eventually, consensus on the conceptualization of the phenomenon of posttraumatic growth.

### **The Development of Survey One**

The questions guiding the thematic analysis of the literature on posttraumatic growth led the researcher to the themes discussed above. These themes generated the questions used in the survey. In Table 2 on the next page, the movement from themes to statements is illustrated. The statements represent the themes for the thematic analysis of the literature.

Table 2

*Themes transformed into survey statements*

<b>Themes Generated from Thematic Analysis</b>	<b>Statements on the Survey</b>
Concrete and/or Constructive	Posttraumatic growth is a stand-alone construct.
Researchers strongly align with a specific model	The relationship between posttraumatic growth and resilience are indirectly correlated. For example, as an individual's resilience increases his or her ability to grow as a result of a traumatic life experience decreases.
Following different crises: breast cancer survivors, 9/11 terror attacks, psychological trauma, natural disasters	
Researchers in various fields conceptualize posttraumatic growth differently	

**Table 2.** *Themes transformed into survey statements (continued)*

<b>Themes Generated from Thematic Analysis</b>	<b>Statements on the Survey</b>
Researchers strongly align with a specific model of posttraumatic growth	<p>The model proposed by Tedeschi &amp; Calhoun (1995) is a widely accepted foundational model of posttraumatic growth. The model consists of three dimensions of growth. Changes in the perception of self, changes in interpersonal relationships, and changes in philosophy of life (Schaefer &amp; Moos, 1992; Tedeschi &amp; Calhoun, 1995) are the three domains of growth following a traumatic experience. These dimensions provide a foundation for the exploration of the construct of posttraumatic growth.</p> <p>Discussion is limited across disciplines on the construct of posttraumatic growth.</p> <p>Posttraumatic growth is limited to a discipline specific construct.</p> <p>Illusory posttraumatic growth is an integral part of the conceptualization of posttraumatic growth.</p> <p>Certain conditions must be present in order to have true posttraumatic growth vs. the illusion of posttraumatic growth.</p> <p>An individual must change aspects of his or her life to experience true posttraumatic growth.</p> <p>An individual must make changes to his or her identity to experience true posttraumatic growth.</p> <p>An individual must be open to new experiences following the traumatic event to experience true posttraumatic growth.</p> <p>Illusory posttraumatic growth is an integral part of the conceptualization of posttraumatic growth.</p>
Posttraumatic growth is a valuable concept in the mental health field	
Agreement that a lack of consensus on multiple aspects of posttraumatic growth is acknowledged by various researchers	
Existence of illusory posttraumatic growth	
Multiple models of posttraumatic growth exist and are used in research today	
The presence of action in one's life is required to experience posttraumatic growth	
Posttraumatic growth is a concept independent of other positive outcome concepts	
Strong research presence in fields of Psychiatry, Psychology, Medicine, and Nursing	
Lack of research published in fields of Sociology, Emergency Management, and Counseling	
Tendency to conduct research with researchers that have the same conceptualization of posttraumatic growth and similar viewpoints	
Calls for interdisciplinary work on the concept	
Differing views on the independent or dependent nature of the concept	
Resiliency and posttraumatic growth are different concepts	

**Table 2.** *Themes transformed into survey statements (continued)*

<b>Themes Generated from Thematic Analysis</b>	<b>Statements on the Survey</b>
Thriving, benefit-finding, stress-related growth, and posttraumatic growth are viewed as the same concepts or as different concepts	

In Chapter II, the researcher illustrated the current research consistent with the purpose of this present study on posttraumatic growth. From the literature, the differing conceptualizations by scholars in various disciplines was discussed and models of posttraumatic growth highlighted. In the different models, posttraumatic growth was viewed as an outcome, a coping mechanism, or a combination of both outcome and coping. These models represent a foundational knowledge and understanding of the concept of posttraumatic growth. As in line with the calls for future research by scholars and the various perspectives on the concept, the purpose of the study was to determine how posttraumatic growth is conceptualized by these individuals and to work towards a consensus on how posttraumatic growth is viewed.

## CHAPTER III: METHODOLOGY

The following are the contents of the methodology section presented in the study:

Researcher lens, research questions, interview questions, research process, participants, informed consent, and data collection and analysis.

### **Researcher Lens**

Posttraumatic growth is a pivotal concept in the healing process of individuals following a crisis. This opinion originates from a personal experience of crisis, trauma, and growth. During my freshman year at college I was walking back to the dorm room from class when a student opened fire on professors and classmates at Virginia Tech. Following the shooting on campus on April 16<sup>th</sup>, 2007, the Virginia Tech students, staff, and faculty experienced an outpouring of support from local, regional, and national communities. In the days afterward, I remember seeing people who had driven cross country to hand out goody bags with drawings and handwritten notes scribbled on the outside. I saw a woman who had brought her beautiful golden retriever service dog for students to pet and soothe their anxiety and negative feelings. I experienced a large gymnasium that had been turned into a triage center available for students, faculty, and staff to meet their mental health needs. I heard heroic stories from witnesses of victims' last actions that saved others' lives but ended their own. I felt the sadness and hope that came from listening to Nikki Giovanni recite her poem 'We are Virginia Tech' at the convocation. I saw the university, students, and faculty begin to grow from the ashes of the tragedy.

In the years following the shooting, I felt like I had grown, not in spite of, but because of the tragedy. I had grown in many aspects of both my personal and professional life. I knew I wanted to study the positive growth I had experienced and had witnessed on the campus in those

days, weeks, months, and years to follow. As a counselor, I wanted to be able to understand the concept of the growth I experienced and how others might experience the same concept. I would like to conduct research, including, but not limited to, this study, to better understand the concept of posttraumatic growth and the implications it has on counseling practices, advocacy, and counselor education.

Through my experiences, I have learned what the concept of posttraumatic growth feels like. This perspective and foundational lens is an interesting additional aspect to research being conducted on posttraumatic growth. While I would not venture to state that it is uncommon for a researcher to have experienced posttraumatic growth, I would say for a researcher to have the ability to relate and understand the concept more thoroughly adds to the study. The lens in which I see crisis and trauma situations is from the perspective of a clinician and, also, a survivor. I am able to relate to the experience of posttraumatic growth, the concept of focus within this study.

My past experiences with posttraumatic growth have led me to pursue a career as a counselor and counselor educator. This, too, is a part of the lens in which I view the world. This lens does differ from the lens of a sociologist, psychologist, doctor, nurse, or individual in emergency management. I have been trained to see the individual's strengths and weaknesses, process their experiences, work within a therapeutic relationship to facilitate healing, and assist clients in reaching their goals. In most cases, the desired outcome of counseling sessions is for the client to live a healthy, happy, and fulfilling life. The manner in which I am trained and educated has contributed to the way I view people, problems, and outcomes. This training, aside personality and past experiences, has developed the researcher's lens.

## **Research Design**

The researcher used a Modified Delphi methodology to seek a consensus on the conceptualization of posttraumatic growth. A Modified Delphi Method is commonly used to build consensus amongst scholars through a series of surveys as a means to collect data (Dalkey, 1969; Martino, 1983; Young & Jamieson, 2001). Participants from sociology, counseling, psychology, emergency management, and medicine were asked to provide feedback on the topic of posttraumatic growth in order to reach a consensus across disciplines. Authors in these disciplines were chosen to be a part of the panel in order to continue an interdisciplinary discussion on the topic. A significant amount of the literature available on posttraumatic growth is generated from authors in these academic and clinical fields.

Delbecq, Van de Ven, and Gustafson (1975) proposed the Delphi Method should be used to reach five objectives. Of these five objectives, three were pertinent to this research study. In this study, a Modified Delphi Method was used to reveal underlying assumptions of prominent researchers, pursue information that might lead to consensus, and integrate the various opinions of scholars from various disciplines into the conceptualization of posttraumatic growth as it applies to work in the mental health arena (Hsu & Sandford, 2007). These objectives created the foundation for this study on posttraumatic growth.

The researcher asked the scholars in these differing fields to work towards accepting a common definition and conceptualization by answering prompts on two surveys. Oftentimes, researchers use three or more surveys to collect the needed information and to build towards the consensus amongst the participants (Delbecq, Van de Ven, & Gustafson, 1975; Brooks, 1979; Ludwig, 1997; Custer, Scarcella, & Stewart, 1999). However, in this study two surveys, containing open-ended statements were utilized. The goal was to obtain extensive responses



from the participants (Custer, Scarcella, & Stewart, 1999). Due to the nature of this study, the researcher utilized a modified version of the Delphi Method. As described by Hsu & Sandford, (2007), the Modified Delphi Method requires the researcher to transform data from published, peer-reviewed journal articles into a structured survey. In a typical Delphi study, the researcher generates collective opinions from the participants by asking them very broad, open questions about the topic. However, since there is such a diverse, inconsistent, body of work on posttraumatic growth, the researcher felt it necessary to first organize the existing literature to create the initial survey sent to participants. To obtain the information the author collected and conducted a qualitative thematic analysis of articles published in peer-reviewed journals. These journals represented a wide variety of disciplines.

Once the analysis was complete, the researcher adapted the themes identified to create the first survey. The survey contained statements related to aspects of posttraumatic growth. Using a scale, participants rated the importance of each statement as it relates to the conceptualization and definition of posttraumatic growth. Upon completion of these surveys the researcher analyzed the data and prepared the second survey.

The second, and final, survey was comprised of the same statements in the second survey; however, the panel's collective response means and all rich text responses were provided. Also included in the second survey were each participant's past responses on the statement. A column was available for the participant to rate their last response, taking into account the panel's collective response. This was the final opportunity to reach consensus as a panel of scholars. Additional information and details regarding the data collection and analysis are available in the following sections.

## **Research Question**

After a careful and in depth review of the literature on posttraumatic growth, the overall research question was as follows:

How is posttraumatic growth conceptualized amongst scholars in the fields of counseling, sociology, psychology, medicine, and emergency management?

## **Participants**

Scholars on posttraumatic growth were selected to participate. “Scholar” was operationally defined in this study as someone who published in peer-reviewed, scholarly journals on the topic of posttraumatic growth. This Modified Delphi method’s efficacy was determined by the participant’s expertise, knowledge and experience with the topic, willingness to participate in the study, and ability to convey their thoughts through the written word (Adler & Ziglio, 1996). The participants of this study were selected based on their ability to write and publish in scholarly journals. Accompanying the participants’ ability to write and publish on posttraumatic growth was their willingness to participate in the study. The participants met the qualifications for participating in this study if they published at least one article on posttraumatic growth in a peer-reviewed journal and accepted the invitation to participate in the study. This study used a purposeful sampling technique; therefore, each participant showed an ability to write and displayed a knowledge of posttraumatic growth by publishing in scholarly journals on the topic. Participants in this study wrote anywhere from 1 to over 10 articles on posttraumatic growth.

Another important aspect of this Modified Delphi Method was the development of a heterogeneous sample of participants (Lynn, Layman, & Englebardt, 1998). The sample of researchers in the study involved participants with varying thoughts, opinions, skills, and

experiences in order to provide a comprehensive, thorough set of data or results. In the study, the heterogeneity of the sample was displayed by the varying disciplines represented. By involving researchers from the fields of sociology, psychology, counseling, emergency management, and medicine, the group had myriad thoughts and opinions on the topic provided. The participants were asked to provide the title of the field in which they worked and studied. The common thread among all participants was past research and publications on the concept of posttraumatic growth.

After referring to the literature and developing a list of relevant researchers, each researcher was contacted through information found online at their respective professional sites. The information was obtained through publications and/or searching the internet for phone numbers or email addresses. Once the contact information was obtained, the researcher emailed or called the potential participants to invite them to participate in the study. At the beginning of the study, ten potential participants were invited to participate. Refer to Appendix B for the email used in contacting the participants. Also available in Appendix B is the script for the invitation when it is conducted over the phone. After the initial ten scholars were contacted, additional scholars were invited to the study in order to reach the intended ten participants. Eight scholars accepted the invitation to participate in the series of surveys. The eight participants' names, self-reported fields of work and study, and articles published may be viewed on the next page in Table 3.

Table 3

*Participants in the study*

<b>Participant</b>	<b>Self-Reported Field of Work and Study</b>	<b>Article(s) Published</b>
Dr. Katherine Richardson	Organizational leadership and HR management	Richardson, K.M. (2014). Meaning reconstruction in the face of terror: An examination of recovery and posttraumatic growth among victims of the 9/11 World Trade Center attacks. <i>Journal of Emergency Management</i> , 13(3).
Dr. Catarina Ramos	Posttraumatic growth and group intervention among women with breast cancer	<p>Ramos, C., &amp; Leal, I. (2003). Posttraumatic growth in the aftermath of trauma: A literature review about related factors and application contexts. <i>Psychology, Community, &amp; Health</i>, 2(1), 43-54.</p> <p>Ramos, C., Leal, I., &amp; Tedeschi, R. G. (2016). Protocol for the psychotherapeutic group intervention for facilitating posttraumatic growth in nonmetastatic breast cancer patients. <i>BMC Women's Health</i>, 16(1), 22.</p> <p>Ramos, C., Leal, I., &amp; Tedeschi, R. G., (2012). Posttraumatic growth, rumination and social support in women with breast cancer: Impact of an intervention. <i>Psychology and Health</i>, 27, 312-313.</p> <p>Ramos, C., Leal, I., &amp; Tedeschi, R. G. (2013). A group-based intervention to facilitate posttraumatic growth in Portuguese women with non-metastatic breast cancer- Preliminary data. <i>Psycho-oncology</i>, 22, 269.</p> <p>Leal, I., Paiva, D., Patrao, I., &amp; Ramos, C. (2012). Quality of life, posttraumatic stress and posttraumatic growth in breast cancer survivors. <i>Asia-pacific Journal of Clinical Oncology</i>, 8, 240-241.</p>

Table 3. *Participants in the study* (continued)

<b>Participant</b>	<b>Self-Reported Field of Work and Study</b>	<b>Article(s) Published</b>
Dr. Catarina Ramos (continued)	Posttraumatic growth and group intervention among women with breast cancer	<p>Leal, I. P., Ramos, C. B., &amp; Tedeschi, R. G. (2016). Posttraumatic growth, core beliefs and illness perception: A Structural Equation Model with women diagnosed with breast cancer. <i>International Journal of Psychology</i>, 51, 701.</p> <p>Ramos, C., Figueiras, L., Lopew, M., Leal, I., &amp; Tedeschi, R. G. (2015). Event related rumination inventory: psychometric properties on a Portuguese sample. <i>Psicologia, Saude &amp; Doencas</i>, 16, 299-310.</p>
Dr. Mary Beth Werdel	Pastoral Counseling	<p>Werdel, M. B., &amp; Wicks, R.J. (2012). <i>Primer on posttraumatic growth: An introduction and guide</i>. John Wiley and Sons.</p> <p>Werdel, M. B., Dy-Liacoo, G.S., Ciarrocchi, J. W., Wicks, R.J., &amp; Breslford, G. M. (2014). The unique role of spirituality in the process of growth following stress and trauma. <i>Pastoral Psychology</i>, 63(1), 57-71.</p>
Dr. Anamara Ritt-Olson	Positive psychology	<p>Milam, J. E., Ritt-Olson, A., &amp; Unger, J. B. (2004). Posttraumatic growth among adolescents. <i>Journal of Adolescent Research</i>, 19(2), 192-204.</p> <p>Milam, J., Ritt-Olson, A., Tan, S., Unver, J., &amp; Nezami, E. (2005). The September 11th 2001 terrorist attacks and reports of posttraumatic growth among multi-ethnic sample of adolescents. <i>Traumatology</i>, 11(4), 233.</p>

Table 3. *Participants in the study* (continued)

Participant	Self-Reported Field of Work and Study	Article(s) Published
Dr. Susan Cadell	Social work and palliative care caregiving	<p data-bbox="776 344 1406 485">Cadell, S., Regehr, C., &amp; Hemsworth, D. (2003). Factors contributing to posttraumatic growth: A proposed structural equation model. <i>American Journal of Orthopsychiatry</i>, 73(3), 279-287.</p> <p data-bbox="776 527 1349 667">Cadell, S. (2007). The sun always comes out after it rains: Understanding posttraumatic growth in HIV caregivers. <i>Health &amp; Social Work</i>, 32(3), 169-176.</p> <p data-bbox="776 709 1406 850">Cadell, S., &amp; Sullivan, R. (2006). Posttraumatic growth and HIV bereavement: Where does it start and when does it end? <i>Traumatology</i>, 12(1), 45.</p> <p data-bbox="776 892 1406 1108">Cadell, S., Hemsworth, D., Smit Quosai, T., Steele, R., Davies, E., Liben, S., Straatman, L., &amp; Siden, H. (2014). Posttraumatic growth in parents caring for a child with a life-limiting illness: A Structural Equation Model. <i>American Journal of Orthopsychiatry</i>, 84(2), 123.</p> <p data-bbox="776 1150 1333 1213">Cadell, S. (2003). Trauma and growth in Canadian carers. <i>Aids Care</i>, 15(5), 639-648</p>

Table 3. *Participants in the study* (continued)

Participant	Self-Reported Field of Work and Study	Article(s) Published
Dr. Bronwyn Morris	Psycho-oncology	<p data-bbox="776 342 1365 485">Wilson, B., Morris, B. A., &amp; Chambers, S. (2014). A structural equation model of posttraumatic growth after prostate cancer. <i>Psycho-Oncology</i>, 23(11), 1212-1219.</p> <p data-bbox="776 527 1403 737">Morris, B. A., Chambers, S. K., Campbell, M., Dwyer, M., &amp; Dunn, J. (2012). Motorcycles and breast cancer: The influence of peer support and challenge on distress and posttraumatic growth. <i>Supportive Care in Cancer</i>, 20(8), 1849-1858.</p> <p data-bbox="776 779 1382 989">Morris, B. A., Wilson, B., &amp; Chambers, S. K. (2013). Newfound compassion after prostate cancer: a psychometric evaluation of additional items in the Posttraumatic Growth Inventory. <i>Supportive Care in Cancer</i>, 21(12), 3371-3378.</p> <p data-bbox="776 1031 1398 1220">Morris, B. A., &amp; Shakespeare-Finch, J. (2011). Cancer diagnostic group differences in posttraumatic growth: Accounting for age, gender, trauma severity, and distress. <i>Journal of Loss and Trauma</i>, 16(3), 229-242.</p> <p data-bbox="776 1262 1390 1472">Morris, B. A., Campbell, M., Dwyer, M., Dunn, J., &amp; Chambers, S. K. (2011). Survivor identity and post-traumatic growth after participating in challenge-based peer-support programmes. <i>British journal of health psychology</i>, 16(3), 660-674.</p>

Table 3. *Participants in the study* (continued)

Participant	Self-Reported Field of Work and Study	Article(s) Published
Dr. Andreas Maercker and Ms. Iara Meili	Posttraumatic growth, cross-cultural psychology, metaphors	<p data-bbox="776 342 1406 520">Maercker, A., &amp; Herrle, J. (2003). Long-term effects of the Dresden bombing: Relationships to control beliefs, religious belief, and personal growth. <i>Journal of Traumatic Stress, 16</i>(6), 579-587.</p> <p data-bbox="776 562 1406 779">Knaevelsrud, C., Liedl, A., &amp; Maercker, A. (2010). Posttraumatic growth, optimism and openness as outcomes of a cognitive-behavioural intervention for posttraumatic stress reactions. <i>Journal of Health Psychology, 15</i>(7), 1030-1038.</p> <p data-bbox="776 821 1406 999">Wagner, B., Knaevelsrud, C., &amp; Maercker, A. (2007). Post-Traumatic Growth and Optimism as Outcomes of an Internet-Based Intervention for Complicated Grief. <i>Cognitive Behaviour Therapy, 36</i>(3), 156-161.</p> <p data-bbox="776 1041 1406 1220">Rabe, S., Zöllner, T., Maercker, A., &amp; Karl, A. (2006). Neural correlates of posttraumatic growth after severe motor vehicle accidents. <i>Journal of Consulting and Clinical Psychology, 74</i>(5), 880.</p> <p data-bbox="776 1262 1406 1440">Zoellner, T., Rabe, S., Karl, A., &amp; Maercker, A. (2008). Posttraumatic growth in accident survivors: Openness and optimism as predictors of its constructive or illusory sides. <i>Journal of Clinical Psychology, 64</i>(3), 245-263.</p> <p data-bbox="776 1482 1406 1619">Maercker, A., &amp; Zoellner, T. (2004). The Janus face of self-perceived growth: Toward a two-component model of posttraumatic growth. <i>Psychological Inquiry, 15</i>(1), 41-48.</p> <p data-bbox="776 1661 1406 1839">Zoellner, T., &amp; Maercker, A. (2006). Posttraumatic growth in clinical psychology—A critical review and introduction of a two component model. <i>Clinical psychology review, 26</i>(5), 626-653.</p>



Table 3. *Participants in the study* (continued)

<b>Participant</b>	<b>Self-Reported Field of Work and Study</b>	<b>Article(s) Published</b>
Dr. Steven Powell	Not reported	<p>Powell, S., Rosner, R., Butollo, W., Tedeschi, R. G., &amp; Calhoun, L. G. (2003). Posttraumatic growth after war: A study with former refugees and displaced people in Sarajevo. <i>Journal of Clinical Psychology</i>, 59(1), 71-83.</p> <p>Rosner, R., &amp; Powell, S. (2006). Posttraumatic growth after war. <i>Handbook of Posttraumatic Growth: Research and Practice</i>, 197-213.</p>

Okoli and Pawlowski (2004) proposed a few incentives that may cause scholars to agree to participate in the study. The three incentives were as follows: 1) being selected to participate in a diverse, exclusive group; 2) the unique opportunity to build consensus; and 3) bolstering their image in their field and beyond. These factors are unique to individuals participating in a Delphi study and may create an interest in accepting the invitation to participate in the study. These potential incentives were included in the email inviting the participants to partake in the study.

### **Modified-Delphi Methodology**

**Online surveys.** The surveys in the research study were conducted online through a Qualtrics platform. The internet has been used to gather information through surveys since the 1990s. As internet availability and use increase, it becomes a common and effective way to conduct research (Evans & Mather, 2005). The online survey allowed for anonymity that was not be possible if the panel was conducted in person. Anonymity is unique and crucial to the methodology of a Delphi study (Rowe & Wright, 1999; Hsu & Sandford, 2007). The anonymity provided in this study allowed participants to respond to the prompts in the survey without fear

of their responses having a negative impact on their professional or personal lives. The participants were more likely to respond with candor.

The use of an online survey allowed for the participants to respond in a thoughtful, calculated manner. They were able to think about how to respond and give the responses as much attention as they could afford. There was flexibility in when the participants completed the responses allowing for minimal disruption of their professional and personal schedules (Lazar & Preece, 1999; Franceschini III, 2000). Scheduling a date, time, and location for the panel to meet was no longer an issue due to the online survey; therefore, contributed to the ease and timeliness of completing the study (Granello & Wheaton, 2004).

Additional advantages to conducting the research through internet based surveys was noted throughout the research. Limited cost, immediate response, flexibility of the survey, and the decreased risk of transcription errors were all benefits of conducting an online survey. Without an online survey, there would have been a required expense of mailing the materials or travel costs for the participants (Schleyer & Forrest, 2000). Using an online study significantly influenced the budget for the study by eliminating excess costs and the necessity of finding funding.

Additionally, if the surveys were conducted through the mail instead of online, the timeframe in which the researcher conducted the study would have been significantly longer (Farmer, 1998; Lazar & Preece, 1999; Franceschini III, 2000). With this longer timeline, participants may have lost interest in the study or responses may be lost in the mail. The shorter timeframe an online survey promised required a less significant commitment in terms of time for the participants. This increased a potential participant's willingness to accept the invitation to participate. The loss of interest due to significant time commitment or the loss of survey

responses in the mail could have created significant challenges to the study by increasing the potential for non-response error.

Another advantage of creating an online survey was the flexibility in creating a visually appealing and easy to navigate survey. The researcher was able to change the format easily by accessing the survey online (Wyatt, 2000). In addition, the researcher was able to control the display of the prompts, graphics, color, animation, and the placement of the different facets of the survey (Granello and Wheaton, 2004). These quick and easy changes contributed to the flexibility provided by using an online survey.

Lastly, an advantage of using an online survey was that data collection was simple and allowed for less instances of transcription error (Lazar & Preece, 1999; Granello & Wheaton, 2004; Schonlau, Fricker, & Elliot, 2002). In other words, by conducting an online survey, the researcher was protecting the integrity of the results. While the online survey method may not be suited for every study, the researcher believes it was an appropriate technique for this study because of the aforementioned advantages. As web-based surveys have become more prevalent in the research community, specific methodology and best practices have been developed. Granello and Wheaton's (2004) 12 steps in conducting research with a web-based survey instrument was used in this study. The information within the steps informed the development of the procedures and data collection for this study.

## **Procedures**

The first stage in conducting the study involved the development of the initial set of prompts for the first survey. In many studies, researchers using a traditional Delphi methodology, the first iteration of the survey would be almost wholly open-ended to allow participants to share their plethora of knowledge, opinions, and feedback regarding the given

prompts. Given the nature of this study, each participant has written and published on posttraumatic growth. Therefore, the researcher conducted a thematic analysis of the current literature to obtain the knowledge and opinions of present scholars researching posttraumatic growth in place of having an open-ended initial survey. The thematic analysis resulted in the prompts used in the first of the two surveys.

Once the prompts were determined, a pilot survey was sent to two scholars. A pilot study was conducted to determine the clarity and functionality of each question included in the instrument. The pilot survey contained the same set of prompts developed for the first survey; however, it was only sent to two participants. Feedback on the clarity of the questions and quality of the instrument was obtained. Next, adjustments to the survey were made to ensure it was easily understood and it measured the research questions designed for this study. Feedback from participants on the pilot survey included providing a description of the Tedeschi and Calhoun model as a part of one of the prompts; therefore, the researcher briefly illustrated the model by explaining the three domains that make up posttraumatic growth as it relates to the Tedeschi and Calhoun model created in 1995. In addition, feedback was provided to define illusory posttraumatic growth; however, the researcher decided to omit the definition to gauge the participants' familiarity with the concept. Once the adjustment to the survey was made and the researcher and research committee chair deemed the survey was appropriate, the survey was sent to all eight participants and the study officially began.

A survey was used including prompts about how the participants conceptualize posttraumatic growth. The survey prompts allowed for the participants to select the importance of each prompt as it related to their conceptualization of posttraumatic growth. Also available in the study, was a section where the participants were asked to explain how they came to select

their answers. The participants are urged to write in detail to respond to the prompts. These responses provided rich text for the participants to read in the second survey to assist them in determining how they may alter or maintain their responses from the first survey. The open-ended portion of the survey allowed for an interdisciplinary discussion of posttraumatic growth which led to a consensus or disagreement on individual concepts of posttraumatic growth to be utilized in the field of counseling and across disciplines.

The participants had two weeks to answer the questions on the first survey. They completed their responses on the Qualtrics platform. The researcher compiled the responses into one document. Qualtrics calculated the mean of the scores for each response option (ie. Not important at all, somewhat important, moderately important, very important, or extremely important). The second survey contained the data obtained in the first survey.

The researcher then created the second survey. The second survey contained the ten statements in the first survey, the comprehensive mean responses for each statement, and the comments made by the scholars in the first survey. The information provided in the second survey was void of identifiable information of the scholars participating in the study. The participants used the comprehensive results from the first survey to determine their responses.

The scholar provided his or her response on the importance of each statement as it related to his or her conceptualization of posttraumatic growth (i.e. not important at all, somewhat important, moderately important, very important, or extremely important). Following each opportunity to select a response, the scholar was asked to provide any feedback on deciding to change their response or keeping it the same as the first survey by submitting their opinions in the textbox. The panel was given two weeks to respond to the second survey prompts. At the end of the two weeks, the scholars submitted their responses to the researcher through the

Qualtrics platform. Once the responses were obtained, the researcher analyzed the data by calculating the mean responses of all participants. The qualitative responses were analyzed using thematic analysis.

Below is Table 4 with the corresponding dates of when each survey was disseminated, the date in which the reminder email was sent, the date the survey was expected to be returned, and the time frame in which data analysis took place.

Table 4

*Survey schedule*

	<b>Survey Sent</b>	<b>Reminder Email</b>	<b>Due Date</b>	<b>Data Analysis</b>
<b>First Survey</b>	Monday, January 23, 2017	Wednesday, February 1, 2017	Monday, February 6, 2017	February 6- February 17, 2017
<b>Second Survey</b>	Friday, February 18, 2017	Tuesday, February 28, 2017	Friday, March 3, 2017	Friday, March 3- 6, 2017

**Questions Guiding the Thematic Analysis of the Literature**

1. What are the underlying assumptions among current researchers regarding posttraumatic growth?
2. How has the issue of posttraumatic growth been explored amongst differing fields?
3. What are current areas of consensus among writers and researchers in defining posttraumatic growth?
4. What are the current diverse and differing viewpoints among writers and researchers in defining posttraumatic growth?

5. What types of interdisciplinary conversations are occurring among professionals in helping fields regarding posttraumatic growth?
6. Is posttraumatic growth a stand-alone concept or is it a part of another concept?
7. What are the differences between resilience and posttraumatic growth?
8. What are similarities between resilience and posttraumatic growth?

### **Informed Consent**

The researcher provided participants with an informed consent document which outlined the study. North Dakota State University's Institutional Review Board (IRB) approval code was included on the informed consent document. The participants signed the document and returned it to the researcher. Please see Appendix A for the informed consent document used in this study. Once the informed consent documents were received from all of the participants, the first survey was provided and data collection begins.

### **Data Collection and Analysis**

**General overview of data collection and analysis.** In a Modified Delphi Method design, the data collection and analysis is an ongoing process once the research begins. The initial step in this Modified Delphi Study was to conduct a thematic analysis of the phenomenon of posttraumatic growth from the literature published in peer-reviewed journals. The results from the thematic analysis of the literature became the prompts on the first and second surveys. Next, a series of two surveys were sent out to participants inviting them to respond with their opinions on the themes from the literature on posttraumatic growth. The second survey was created based on the information provided by the scholars on the panel in the previous survey.

The researcher used the qualitative method of open thematic coding to determine common ideas and conceptualizations amongst the scholars (Hayes & Singh, 2012) from the data

collected from the literature. While reading through the data, the researcher highlighted significant statements and opinions of the participants. These highlighted statements and opinions became codes. The coding process generated etic codes which originate from the literature (Hays & Singh, 2012).

Once the codes were determined, they were recorded on index cards. The researcher determined how the codes worked together to fully describe and illuminate the concept of posttraumatic growth. Patterns in the data began to develop from the following factors: participants revealed the patterns, the recognition something important was missing, similarity of codes, co-occurrence of codes, triangulation and corroboration, and the arrangement of codes (LeCompte & Schensul, 1999). The researcher identified common viewpoints or themes. These themes within the literature became the prompts on the first survey.

The first survey was developed on the NDSU Qualtrics platform. The first part of the survey included the instructions on how to complete the survey. Each prompt was formatted and arranged in a visually appealing manner to assist in the ease of completing the survey. Prompts were designed to appear one at a time. The participants selected a response to the prompt to reflect the importance of each statement. The options for responses included the following: *not important at all*, *slightly important*, *moderately important*, *very important*, and *absolutely essential*. The amount of time allowed to complete the survey was unlimited to emphasize the importance of providing detailed responses. The participants were able to advance through the survey and also return to prompts provided earlier. At the end of the survey, participants are thanked for their participation and given information on the next steps of the study.

After the first survey was submitted by the participants, the researcher compiled and collated the data into a document. The mean of each response by the collective panel were stated



adjacent to each prompt. The participant's previous responses to each prompt was listed next to the statement. The researcher removed any irrelevant information provided in the responses of the first survey. The final column was where the participant rates their response, taking into consideration the panel's mean and typed responses. Once the second survey was created, the researcher invited the participants to answer the prompts by providing the link for the second survey through Qualtrics.

During the final survey, ideally, a consensus was desired amongst the scholars participating in the panel; however, the discussion was considered invaluable. As outlined by Green (1982), consensus was considered to be reached if 80 percent of the participants in the study selected responses within two categories (i.e. level of importance).

The qualitative research approach of open thematic coding was used again to determine themes in the responses of the scholars participating in the research. While reading through the data, the researcher highlighted significant statements and opinions of the participants. The significant statements became codes and were transcribed onto index cards to determine themes. Once the themes and patterns were determined, the data analysis portion of the research study was concluded.

**Thematic analysis of the literature.** The survey prompts were created through a thematic analysis of the literature published on posttraumatic growth. The research articles used to extract themes of important concepts of posttraumatic growth were written by researchers and scholars in varying fields. Some of these researchers were included as participants in this study. Much of the research published in peer-reviewed, scholarly journals came from the fields of psychology and oncology. The information used to determine themes within the literature was published in journals such as: *The Journal of Traumatic Stress*, *The Journal of Psychosomatic*

*Medicine, Journal of Clinical Psychology, Journal of Clinical Psychology in Medical Settings, Psychological Inquiry, Clinical Psychology Review, Applied Psychology: An International Review, American Psychologist, and The Journal of Loss and Trauma.*

Research published in the aforementioned journals provided a plethora of data for the initial stages of data analysis for this study. The data was gathered through a thematic analysis to extract commonalities and differences in how scholars conceptualize growth. The guidelines proposed by Braun & Clarke (2006) were used in the thematic analysis of the literature on posttraumatic growth. Below are the step-by-step guidelines used in the analysis of the literature.

***Becoming familiar with the data.*** The researcher reviewed each article used in the study by reading it at least two times. The articles used were published by scholars in varying fields. Publications by scholars who contribute to the information available on posttraumatic growth by proposing models were included as well as scholars who use those models. Varying opinions, topics of agreement, and points of dissention were a part of the literature used in the study. The articles were chosen based on the number of times each article had been cited. Literature on various models of posttraumatic growth were used during the analysis as well as literature contributed by scholars with fewer articles published.

To become familiar with the data, the researcher immersed herself in the literature described above. Each article was reviewed at a minimum of two times and maximum of four times during this initial stage. While reviewing the literature, the researcher engaged with the material by writing with a highlighter over certain pages that might later become themes. The researcher wrote questions that arose during the readings in the margins, highlighted quotes that immersed as meaningful, and color coded the articles to denote the various topics of each article.

These actions were a way to actively engage with the material and become immersed in the data used in the study.

***Produce the codes.*** Following the initial review of the literature in the aforementioned step 1, the researcher began compiling words, key phrases, and topics that appeared repeatedly throughout a majority of the text. These words, key phrases, and topics became the codes generated for the data set and were denoted by highlighting the text, taking notes in the margin, and by writing with highlighter over sections of text. Vogt, Vogt, Gardner, and Haeffeke (2014) defined a code used in qualitative research as construct created by researchers to represent or “translate” data. The words, phrases, and topics coded were significant statements about how posttraumatic growth is conceptualized by scholars contributing to the body of literature.

***Pursuit of themes within the data.*** Following the coding process described in step 2, the researcher began transferring each code to a post-it note. These codes were all placed on a large white board to obtain a view of them all. Once the researcher was able to see the hundreds of codes, she began analyzing and organizing them into potential themes. Saldaña (2015) defines a theme as “an outcome of coding, categorization, and analytic reflection.” The post-it note format allowed for flexibility in the movement of codes from one potential theme to another. The codes were carefully selected for potential themes and as the data analysis continued, some codes were moved to create new themes or added to already existing themes. The process of determining themes took place during a two-week period. Once the initial themes were generated, the fourth step in thematic analysis was discussed by Braun & Clarke (2006) took place.

***Review the potential themes.*** The researcher reviewed the codes generated for each potential theme. The purpose of the review was to eliminate codes that were not appropriate for the theme it was categorized with. Any codes that did not correlate to the theme in which it was

categorized was reevaluated to determine if there was a more appropriate theme. If there was a more appropriate theme to apply the code to, the adjustment was made and the review of codes continued. All codes were reevaluated. Some codes became a part of new themes, some remained associated with the same theme it was designated to in step 3, and some codes were recognized as not being pertinent to any theme generated from this study. Codes without an assigned theme were reevaluated to address whether there was an appropriate association with a theme.

The researcher continued organizing and reevaluating the codes until the codes had been associated with appropriate themes. Both codes and themes generated from the data were deemed as accurately representing the existing research and conceptualizations of posttraumatic growth published by scholars in various fields.

***Definition of the generated themes.*** The themes were extracted from the current literature available on the conceptualization of posttraumatic growth. These themes were defined by creating a description of the theme through the use of the codes. If the themes were clear and accurately described the concept of posttraumatic growth, they became final themes from the literature. These themes were used to create the statements in the first survey.

***Writing the report of the results.*** The statements used in the Modified Delphi study were constructed through the aforementioned thematic analysis. Upon completion of the thematic analysis, the researcher compiled themes into statements that reflected the results. The results for the thematic analysis are found in the results section of this document. These results are in the form of the first survey used in the study. The results from the thematic analysis of the literature are separate results than the results from the Modified Delphi portion of the study. Lastly, the Results, Discussion, and Conclusion chapters were written.

## **Trustworthiness**

Researchers believe addressing the qualitative concept of trustworthiness in a study using the Delphi Method is more appropriate than addressing the quantitative concepts of reliability and validity (Holloway & Wheeler, 1996; Day & Bobeva, 2003; Cornick, 2006). Therefore, the trustworthiness of this Modified Delphi study was examined. Trustworthiness is defined by Hays and Singh (2012) as the “truthfulness of [the] findings and conclusions based on maximum opportunity to hear participant voices in a particular context.” The researcher conducted the study to allow for the voices of the participants to shine and illuminate the phenomenon of posttraumatic growth while striving for consensus on the concept.

In the initial survey, the researcher contributed to the trustworthiness of the study by asking an additional researcher who was not connected to the department or this research study to conduct a thematic analysis of the data collected. The additional researcher was required to be IRB trained and certified in order to have access to the data. The additional researcher was experienced in conducting qualitative research through thematic coding and analysis. Identifying information was excluded in the data provided to the additional researcher to contribute to the anonymity of the participants. The additional researcher was not aware of the themes determined by the main researcher. Once the second analysis of the data was performed, the main researcher reviewed the themes deduced by both researchers and created the first survey.

In summary, this Modified Delphi research study was conducted in three parts: the literature review, the first survey, and the second survey. A thematic analysis of the literature was conducted to generate themes which became the prompts of the first and second survey. Next, the first survey was disseminated and in two weeks the results were collected through the Qualtrics platform. With the data collected in the first survey, the researcher created the second

survey. The participants completed the second survey in two weeks and the data was collected through Qualtrics. The results are outlined in the following chapter.

## CHAPTER IV: RESULTS

The results of the study are present for the two separate portions of the study. Results will be reported for the thematic analysis of the literature on posttraumatic growth as well as the results for the surveys completed by the panel of experts. The results of the thematic analysis of the literature became the statements for the first survey. The results of the first survey became a part of the second survey. The second survey's results are considered the results of the culmination of all the aforementioned steps.

### **Results from the Review of Literature**

The thematic analysis conducted on numerous articles published in peer-reviewed journals resulted in approximately ten themes and subthemes. These themes and subthemes were transformed into statements to serve as prompts in the first survey of the Delphi study. The results may be viewed on the next page in Table 5 which displays the statements used in the first survey.

Table 5

*Results of literature review: Themes used as statements in first survey.*

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**Themes and Statements**

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**Theme:** Posttraumatic growth is a stand-alone concept

**Theme:** There is a relationship between posttraumatic growth and resilience.

**Theme:** The model proposed by Tedeschi & Calhoun (1995) is a widely accepted foundational model of posttraumatic growth. For reference, the model consists of three dimensions of growth. Changes in the perception of self, changes in interpersonal relationships, and changes in philosophy of life (Schaefer & Moos, 1992; Tedeschi & Calhoun, 1995) are three domains of growth following a traumatic experience.

**Theme:** Posttraumatic growth is limited to a discipline specific concept.

**Theme:** Discussion is limited across disciplines on the concept of posttraumatic growth.

**Subtheme:** Interdisciplinary communication is vital to obtain common understanding.

**Theme:** Illusory posttraumatic growth is an integral part of the conceptualization of posttraumatic growth.

**Theme:** Certain conditions must be present in order to have true posttraumatic growth vs. the illusion of posttraumatic growth.

**Theme:** An individual must change aspects of his or her life to experience true posttraumatic growth.

**Theme:** An individual must be open to new experiences following the traumatic event to experience true posttraumatic growth.

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As mentioned previously, the themes above in the table are themes that evolved from the review of the literature. These themes became the statements of the first and second survey. For each survey, the participants responded to the importance of the themes (i.e. statements) as they related to their conceptualization of posttraumatic growth.

### **Results from the Surveys**

**Survey 1.** The first survey results were calculated by the Qualtrics program and recorded. The means of the responses and qualitative information provided by participants were input as a part of the second survey. The responses on the importance of the statement as it relates to the participant's individual conceptualization of posttraumatic growth were varied for the following prompts: There is a relationship between posttraumatic growth and resilience, illusory posttraumatic growth is an integral part of the conceptualization of posttraumatic growth, an individual must change aspects of his or her life to experience true posttraumatic growth, an individual must make changes to his or her identity to experience true posttraumatic growth, an individual must be open to new experiences following the traumatic event to experience true posttraumatic growth. In other words, there was disagreement on the importance of aspects of posttraumatic growth such as its relationship with resilience, illusory components of posttraumatic growth, openness to new experiences, and the necessity of changing one's life and/or identity.

When determining consensus among participants, the researcher used the approach proposed by Green (1982). Consensus was considered by Green (1982) to be reached if 80 percent of the participants in the study selected responses within two categories (i.e. level of importance). The panel reached consensus with 100% of the participants selecting either 'very important' or 'extremely important' to reflect that posttraumatic growth is a stand-alone concept.

On the prompt referring to the Tedeschi and Calhoun (1995) model of posttraumatic growth, 85.71% or six out of seven participants responded either ‘very important’ or ‘extremely important.’ In other words, the expert panel strongly aligned with the Tedeschi and Calhoun (1995) model of posttraumatic growth.

Lastly, it was noted in the first survey that 57.14% or four out of seven participants responded with the prompt of posttraumatic growth being a discipline specific concept as being ‘not at all important’ in their conceptualization of posttraumatic growth. While Green’s (1982) definition of consensus was not reached in the responses for this prompt, 57.14% of participants is significant in that over half of the expert panel recognized the interdisciplinary nature of the concept as being important to how posttraumatic growth is viewed. Through the first survey’s results, it was determined some aspects of posttraumatic growth were viewed similarly and many aspects of posttraumatic growth were viewed differently. These results were compiled together and the second survey was created. The means and qualitative responses of the panel were provided for each participant and the goal of consensus was emphasized when the second survey was disseminated.

Below are tables (6-15) of the means and frequency counts of how the participants responded to each statement on the first survey.

Table 6

*Results of Survey 1: Posttraumatic growth is a stand-alone concept.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Number Count</b>
Not at all important	0.00%	0
Slightly important	0.00%	0
Moderately important	0.00%	0
Very important	57.14%	4
Extremely important	42.86%	3
Total	100.00%	7

Table 7

*Results of Survey 1: There is a relationship between posttraumatic growth and resilience.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Number Count</b>
Not at all important	0.00%	0
Slightly important	14.29%	1
Moderately important	28.57%	2
Very important	28.57%	2
Extremely important	28.57%	2
Total	100.00%	7

Table 8

*Results of Survey 1: The model proposed by Tedeschi & Calhoun (1995) is a widely accepted foundational model of posttraumatic growth. For reference, the model consists of three dimensions of growth. Changes in the perception of self, changes in interpersonal relationships, and changes in philosophy of life (Schaefer & Moos, 1992; Tedeschi & Calhoun, 1995) are three domains of growth following a traumatic experience.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Number Count</b>
Not at all important	0.00%	0
Slightly important	14.29%	1
Moderately important	0%	0
Very important	57.14%	4
Extremely important	28.57%	2
Total	100.00%	7

*Note:* Participants responded to this question with different selections on the importance of the statement in reference to their conceptualization of posttraumatic growth; however, most participants considered the Tedeschi and Calhoun model of posttraumatic growth to be a widely accepted foundational model. Participants commented that while they aligned with the Tedeschi and Calhoun model, they believed the five domains more accurately depicted the domains of growth.

Table 9

*Results of Survey 1: Posttraumatic growth is limited to a discipline specific concept.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Number Count</b>
Not at all important	57.14%	4
Slightly important	14.29%	1
Moderately important	14.29%	1
Very important	14.29%	1
Extremely important	0.00%	0
Total	100.00%	7

Table 10

*Results of Survey 1: Discussion is limited across disciplines on the concept of posttraumatic growth. Interdisciplinary communication is vital to obtain common understanding.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Number Count</b>
Not at all important	0.00%	0
Slightly important	0.00%	0
Moderately important	28.57%	2
Very important	14.29%	1
Extremely important	57.14%	4
Total	100.00%	7

Table 11

*Results of Survey 1: Illusory posttraumatic growth is an integral part of the conceptualization of posttraumatic growth.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Number Count</b>
Not at all important	14.29%	1
Slightly important	28.57%	2
Moderately important	14.29%	1
Very important	28.57%	2
Extremely important	14.29%	1
Total	100.00%	7

Table 12

*Results of Survey 1: Certain conditions must be present in order to have true posttraumatic growth vs. the illusion of posttraumatic growth.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Number Count</b>
Not at all important	0.00%	0
Slightly important	28.57%	2
Moderately important	42.86%	3
Very important	28.57%	2
Extremely important	0%	0
Total	100.00%	7

Table 13

*Results of Survey 1: An individual must change aspects of his or her life to experience true posttraumatic growth.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Number Count</b>
Not at all important	14.29%	1
Slightly important	14.29%	1
Moderately important	0.00%	0
Very important	42.86%	3
Extremely important	28.57%	2
Total	100.00%	7

Table 14

*Results of Survey 1: An individual must make changes to his or her identity to experience true posttraumatic growth.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Number Count</b>
Not at all important	14.29%	1
Slightly important	28.57%	2
Moderately important	28.57%	2
Very important	0.00%	0
Extremely important	28.57%	2
Total	100.00%	7

Table 15

*Results of Survey 1: An individual must be open to new experiences following the traumatic event to experience true posttraumatic growth.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Number Count</b>
Not at all important	0.00%	0
Slightly important	28.57%	2
Moderately important	42.86%	3
Very important	14.29%	1
Extremely important	14.29%	1
Total	100.00%	7

The results displayed in the tables above highlighted differing opinions on many of the prompts. Participants were unable to reach consensus on the importance of an individual needing to be open to new experiences to experience posttraumatic growth, an individual making needing to make changes to his or her identity. The qualitative data submitted by each participant in the first survey can be viewed in Appendix D. The appendix shows the second survey which incorporates the results of the first survey. These results became the second survey to inform the participants of the comprehensive results of the study. The information provided in the second

survey allowed to participants to review other expert opinions and determine whether to change their answers or keep them the same.

**Survey 2.** The second survey results were calculated by the Qualtrics program and recorded. In the results, it was discovered 100% of the six participants who completed the second survey considered the Tedeschi and Calhoun (1995) model of posttraumatic growth to be ‘very important.’ In the responses in both the first and second survey, participants accepted the model and the three domains as being important to their conceptualization of posttraumatic growth; however, the qualitative responses showed that participants identified Tedeschi and Calhoun’s model of posttraumatic growth which incorporates five subscales of growth (1995) being more pertinent than their model with the three domains (1995). That is, the participants agreed that the five subscales of posttraumatic growth more accurately illustrate how they view the concept of posttraumatic growth. This prompt is the only statement in the survey in which all participants unanimously selected the same response.

Consensus was reached per the standard proposed by Green (1982) with at least 80% of participants selecting ‘very important,’ or ‘extremely important’ on the following prompts: ‘Discussion is limited across disciplines on the concept of posttraumatic growth’ and ‘an individual must change aspects of his or her life to experience true posttraumatic growth.’ In other words, participants believed dialogue between professionals is minimal; however, the conversation is critical in the development of an understanding of the concept of posttraumatic growth. Also, participants acknowledged that change is necessary and required for an individual to experience posttraumatic growth.

For the additional prompts, participants were unable to reach consensus (Green, 1982). These prompts included the following: ‘Posttraumatic growth is limited to a discipline specific

concept,’ ‘illusory posttraumatic growth is an integral part of the conceptualization of posttraumatic growth,’ ‘certain conditions must be present in order to have true posttraumatic growth vs. the illusion of posttraumatic growth,’ and ‘an individual must be open to new experiences following the traumatic event to experience true posttraumatic growth.’ The lack of consensus denotes there are a few, if not many, aspects of posttraumatic growth that scholars are unable to agree upon. For example, the idea that posttraumatic growth could be illusory is accepted and considered important to some participants while other participants considered it to be completely unimportant.

Below are Tables 16-25 of the mean and frequency count of the responses for the second survey. Of the eight initial participants, six participants completed the second survey. One of the six individuals did not respond to the last five prompts of the second survey.

Table 16

*Results of Survey 2: Posttraumatic growth is a stand-alone concept.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Frequency Count</b>
Not at all important	0.00%	0
Slightly important	0.00%	0
Moderately important	33.33%	2
Very important	50.00%	3
Extremely important	16.67%	1
Total	100.00%	6



Table 17

*Results of Survey 2: There is a relationship between posttraumatic growth and resilience.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Frequency Count</b>
Not at all important	0.00%	0
Slightly important	0.00%	0
Moderately important	33.33%	2
Very important	33.33%	2
Extremely important	33.33%	2
Total	100.00%	6

Table 18

*Results of Survey 2: The model proposed by Tedeschi & Calhoun (1995) is a widely accepted foundational model of posttraumatic growth. For reference, the model consists of three dimensions of growth. Changes in the perception of self, changes in interpersonal relationships, and changes in philosophy of life (Schaefer & Moos, 1992; Tedeschi & Calhoun, 1995) are three domains of growth following a traumatic experience.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Frequency Count</b>
Not at all important	0.00%	0
Slightly important	0.00%	0
Moderately important	0.00%	0
Very important	100.00%	6
Extremely important	0.00%	0
Total	100.00%	6

Table 19

*Results of Survey 2: Posttraumatic growth is limited to a discipline specific concept.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Frequency Count</b>
Not at all important	50.00%	3
Slightly important	0.00%	0
Moderately important	16.67%	1
Very important	16.67%	1
Extremely important	16.67%	1
Total	100.00%	6

Table 20

*Results of Survey 2: Discussion is limited across disciplines on the concept of posttraumatic growth. Interdisciplinary communication is vital to obtain common understanding.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Frequency Count</b>
Not at all important	0.00%	0
Slightly important	0.00%	0
Moderately important	16.67%	1
Very important	33.33%	2
Extremely important	50.00%	3
Total	100.00%	6

Table 21

*Results of Survey 2: Illusory posttraumatic growth is an integral part of the conceptualization of posttraumatic growth.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Frequency Count</b>
Not at all important	0.00%	1
Slightly important	60.00%	3
Moderately important	0.00%	0
Very important	40.00%	2
Extremely important	0.00%	0
Total	100.00%	5

Table 22

*Results of Survey 2: Certain conditions must be present in order to have true posttraumatic growth vs. the illusion of posttraumatic growth.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Frequency Count</b>
Not at all important	20.00%	1
Slightly important	20.00%	1
Moderately important	0.00%	0
Very important	60.00%	3
Extremely important	0%	0
Total	100.00%	5

Table 23

*Results of Survey 2: An individual must change aspects of his or her life to experience true posttraumatic growth.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Frequency Count</b>
Not at all important	20.00%	1
Slightly important	0.00%	0
Moderately important	0.00%	0
Very important	60.00%	3
Extremely important	20.00%	1
Total	100.00%	5

Table 24

*Results of Survey 2: An individual must make changes to his or her identity to experience true posttraumatic growth.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Frequency Count</b>
Not at all important	20.00%	1
Slightly important	0.00%	0
Moderately important	40.00%	2
Very important	20.00%	1
Extremely important	20.00%	1
Total	100.00%	5

Table 25

*Results of Survey 2: An individual must be open to new experiences following the traumatic event to experience true posttraumatic growth.*

<b>Response Selection</b>	<b>Average Response</b>	<b>Frequency Count</b>
Not at all important	20.00%	1
Slightly important	40.00%	2
Moderately important	20.00%	1
Very important	20.00%	1
Extremely important	0.00%	0
Total	100.00%	5

The tables above signified the changing of opinions from the first survey to the second on prompts such as the statement about the Tedeschi and Calhoun model of posttraumatic growth (1995; 1996). The thought that posttraumatic growth is a standalone concept and unrelated to other positive outcome concepts is agreed upon with 100% of the participants recognizing this to be an important factor of posttraumatic growth. Although all of the participants agreed on the importance of posttraumatic growth as a standalone concept, the amount of importance varied from moderately important to extremely important. While consensus was reach on a few aspects

of posttraumatic growth, many aspects lacked consensus. The components of change and illusion are still polarizing in the second survey.

In the qualitative portion of the results, the central tendency results were reiterated with written feedback from the participants. For example, the participants recognized the Tedeschi and Calhoun model of posttraumatic growth (1995) being widely accepted as a foundational model for the concept. This reaffirmed the result of 100% of the participants considering the model ‘very important’ to their conceptualization of posttraumatic growth. The information provided in the qualitative portion of the results; however, presented that the participants go further to align with the five subscales defining posttraumatic growth as proposed by Tedeschi and Calhoun (1996). The affirmation of the model and alignment with the five subscales can be determined from this comment from a participant, “Like most of the other authors said, the 5-factor model is more accurate to describe the dimensions of PTG.” A majority of the comments from participants reflected their preference of the later model proposing five subscales of growth.

The comments also reflected that some participants were more familiar with the literature on the concept of posttraumatic growth. A few participants made comments that illustrated confusion or a lack of awareness in reference to the prompts used in the survey. For example, a participant said, “The statements question both "certain conditions" and "true" PTG, which make it hard to assess the importance of the statement.” This comment illuminates a lack of awareness of the research present on illusory posttraumatic growth and the participant’s confusion is reflected in the comment.

The qualitative results of the second survey were significant in how they illuminated participants’ perspectives and conceptualizations of posttraumatic growth; however, there was not a significant amount of data provided. Therefore, the researcher listed the qualitative results

in the table below. The qualitative responses from the second survey are listed below in Table 26. The means and qualitative responses of the second survey are considered to be the final results of the study.

Table 26

*Qualitative results of Survey 2*

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**Qualitative Responses**

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**Statement: Posttraumatic growth is a stand-alone concept.**

“We agree with many of the comments provided above. And how we said, from a Western perspective it may be stand-alone, meaning that it can be differentiated from other concepts such as resilience. But we stick to the opinion that assuming that PTG is a stand-alone concept and that this notion is true for all cultures, might be too short sighted.”

**Statement: There is a relationship between posttraumatic growth and resilience.**

“What kind of relationship? there is conceptual overlap and a causal relationship”

“The first response given in the list comes closest to the one we gave in the first survey and we mostly agree with this opinion. However, we believe that the the learning process (gaining positive aspects for life after an aversive event) may not only occur after extreme adversities, but also after more mild ones. For instance, imagine someone may loose his/her job involuntarily. Who decides if this event is extreme or not? The person may whatsoever reevaluate his/her life or (according to the first answer) cognitively restructure by seing new opportunities and therefore experience grow.”

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Table 26. *Qualitative results of Survey 2* (continued)

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**Qualitative Responses**

**Statement: The model proposed by Tedeschi & Calhoun (1995) is a widely accepted foundational model of posttraumatic growth.**

“Very important model, but I agree that it is 5 subscales”

“Like most of the other authors said, the 5-factor model is more accurate to describe the dimensions of PTG.”

“It is important that T&C's model not limit our understanding. If other models develop, we need to know that. I found it difficult to assess the importance of this statement.”

**Statement: Posttraumatic growth is limited to a discipline specific concept.**

“discipline-specific in what sense? can only be explained by X, only features in X .... (the software made me give an answer but I didn't want to)”

“It becomes clear that all authors agree that PTG is not limited to one discipline.”

**Statement: There is a relationship between posttraumatic growth and resilience.**

“What kind of relationship? there is conceptual overlap and a causal relationship”

“The first response given in the list comes closest to the one we gave in the first survey and we mostly agree with this opinion. However, we believe that the the learning process (gaining positive aspects for life after an aversive event) may not only occur after extreme adversities, but also after more mild ones. For instance, imagine someone may loose his/her job involuntarily. Who decides if this event is extreme or not? The person may whatsoever reevaluate his/her life or (according to the first answer) cognitively restructure by seing new opportunities and therefore experience grow.”

**Statement: The model proposed by Tedeschi & Calhoun (1995) is a widely accepted foundational model of posttraumatic growth.**

“Very important model, but I agree that it is 5 subscales”

“Like most of the other authors said, the 5-factor model is more accurate to describe the dimensions of PTG.”

“It is important that T&C's model not limit our understanding. If other models develop, we need to know that. I found it difficult to assess the importance of this statement.”

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Table 26. *Qualitative results of Survey 2* (continued)

---

**Qualitative Responses**

---

**Statement: Posttraumatic growth is limited to a discipline specific concept.**

“discipline-specific in what sense? can only be explained by X, only features in X ....  
(the software made me give an answer but I didn't want to)”

“It becomes clear that all authors agree that PTG is not limited to one discipline.”

**Statement: Discussion is limited across disciplines on the concept of posttraumatic growth. Interdisciplinary communication is vital to obtain common understanding.**

“Interdisciplinarity seems to be an important goal striving for in PTG research, according to all the answers.”

**Statement: Illusory posttraumatic growth is an integral part of the conceptualization of posttraumatic growth.**

“It seems that this question is a very controversial one. And we notice that the concept of ‘illusory aspects’ is not as widely known. But we find the first (most extensive) answer most compelling.”

**Statement: Certain conditions must be present in order to have true posttraumatic growth vs. the illusion of posttraumatic growth.**

“Again, the first and most extensive answer is the most compelling one and we would agree with it.”

“The statements question both "certain conditions" and "true" PTG, which make it hard to assess the importance of the statement.”

**Statement: An individual must change aspects of his or her life to experience true posttraumatic growth.**

“Again, the first most elaborated question seems very true. Many other authors share a similar opinion.”

**Statement: An individual must make changes to his or her identity to experience true posttraumatic growth.**

“The first answer sounds about right.”

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Table 26. *Qualitative results of Survey 2* (continued)

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**Qualitative Responses**

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**Statement: An individual must be open to new experiences following the traumatic event to experience true posttraumatic growth.**

“I agree that I do not like the use of the term ‘must’”

“There was a programming error. My answer was added as the last sentences to the first answer. The first answer seems plausible to me. However, I still think that individuals must be open for new experiences. Otherwise the cognitive restructuring will not work. The first participant said "some people may experience PTG without experiencing the aspects related to the domain 'New Possibilities'". On one side I agree, being open for new experiences is part of perceiving "new possibilities". However, the remaining 4 dimensions wouldn't be possible to attain, if someone was not open for new experiences.”

“Again, terminology makes the evaluation difficult.”

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The participants in the Modified Delphi study responded to open-ended and close-ended questions to illustrate their opinions on posttraumatic growth. In the results, it was discovered all participants agreed the Tedeschi and Calhoun model (1995) is a widely accepted foundational model for posttraumatic growth. At the same time, many participants agreed with one another that the newer approach with five domains (Tedeschi & Calhoun, 1996) more accurately illustrates posttraumatic growth. Also, in the findings were points of contention amongst participants such as the topic of illusory posttraumatic growth. Overall, the results illuminate perspectives of the expert panel on the concept of posttraumatic growth.

## CHAPTER V: DISCUSSION

As the researcher made sense of the results, the quote by Nietzsche (1898) was revisited: “From life’s school of war: that which does not kill me makes me stronger.” The quote represents one individual’s experience following a traumatic event. In an attempt to understand this experience on a deeper level, the researcher created a study to begin dialogue among experts in the field of posttraumatic growth and to initiate a platform to work towards reaching a consensus on how these scholars conceptualize the phenomenon. By reaching consensus among professionals in the helping fields on aspects of posttraumatic growth, there will be a common language and understanding among individuals working to assist survivors following traumatic life events and facilitate the healing process.

While consensus was the end goal for the study, the dialogue and conversation with scholars from various helping fields was invaluable in how it illuminated perspectives on how posttraumatic growth is experienced, measured, and evaluated. There are various opinions on how this phenomenon of growth is experienced among scholars. This study provided a platform for the participants conducting research in their respective fields to read about the opinions of others conducting research in differing fields and to work towards an agreement on the conceptualization of posttraumatic growth. The results of the study showed consensus was made on a few aspects of posttraumatic growth but also illuminated aspects of posttraumatic growth that were not easily agreed upon. Through the quantitative and qualitative data gathered in the study, the researcher has uncovered aspects of how posttraumatic growth is viewed among the expert panel of participants and observed the manner in which the scholars communicated with one another.

## **Researcher Lens**

The researcher has experienced posttraumatic growth following a shooting on the Virginia Tech campus in 2007. Prior to her involvement in the mental health field, she did not recognize that how she experienced the aftermath of the shooting was, in fact, an identified concept in the literature. As she began working in the field of mental health, she uncovered the concept and literature introducing a model of posttraumatic growth by Tedeschi and Calhoun (1995; 1996). This research model allowed the researcher to recognize the phenomenon of posttraumatic growth as she experienced as being a developing concept in the helping fields.

As the years followed and the researcher continued her education, she knew she wanted to focus research efforts on the concept of posttraumatic growth. Before the research began for the study, the researcher only recognized her experiences following the shooting as her individual experience, much like Nietzsche (1898) did when recognizing his growth following his experiences with war. The researcher was amazed at how an incredibly negative event could have a positive influence on her life. Once she began to learn more about change following a crisis, the researcher began viewing the phenomenon of growth she experienced with a critical lens. The struggle she saw among experts in defining and measuring posttraumatic growth contributed to the critical lens in which the researcher reflected on her own experience. She found herself referencing the different models of posttraumatic growth when reflecting on her experience to determine commonalities and differences between the model and her experiences. The researcher's prior experience with posttraumatic growth contributed to a foundational knowledge and understanding not easily attained by researchers.

The results I discovered through this research study have validated the journey I've made thus far on the road to helping others. In the results, a participant noted the desire for researchers to focus on the community element of posttraumatic growth. This comment illustrates a topic of posttraumatic growth that deeply resonates with me. In fact, as I began looking into community responses to trauma, I found limited research on how posttraumatic growth was experienced within a community. But first, I recognized the deficit of widely accepted, consistent definition of posttraumatic growth. Without this definition, it would be challenging to communicate with other first responders of crisis and trauma situations to assist the community in their grief and growth. This lack of consensus would also pose challenges for conducting research on the experiences of posttraumatic growth from a large population. These are the thoughts and questions that led me to this study.

### **Research Question**

The results of the study effectively answered the research question. As mentioned in the methods section of this study, the purpose of this study was to understand how scholars from various helping fields conceptualized posttraumatic growth. Through the use of closed and open questions, the researcher was able to determine how the scholars conceptualized the topic to include aspects in which scholars have reached consensus and aspects in which scholars maintain their differing opinions on posttraumatic growth. For example, it was discovered that all participants overwhelmingly agree that the Tedeschi and Calhoun model of posttraumatic growth (1995) is a widely accepted foundational model for those conducting research on the topic. Also, the results of the study highlighted the controversial topic of posttraumatic growth as a potential illusion with some participants considering this aspect of posttraumatic as important and some participants considering this aspect of posttraumatic growth as not important at all. All of these

opinions and the dialogue presented as a part of the study led to a greater understanding of how the participants, researchers on posttraumatic growth, view the concept.

### **Summary of Findings**

**Model of posttraumatic growth.** As discovered in the study, the expert panel reached consensus on Tedeschi and Calhoun's model of posttraumatic growth being the foundational model of posttraumatic growth. The initial model included three domains of growth: 'changes in the perception of self,' 'changes in interpersonal relationships,' and 'changes in philosophy of life' (Schaefer and Moos, 1992; Tedeschi and Calhoun, 1995). The participants noted that they felt as though the five domains of growth later proposed by Tedeschi and Calhoun (1996) more accurately depict the concept of posttraumatic growth. The five domains proposed by Tedeschi and Calhoun in 1996 include 'greater appreciation of life and changed sense of priorities,' 'warmer, more intimate relationships with others,' 'a greater sense of personal strength,' 'recognition of new possibilities or paths for one's life,' and 'spiritual development.'

The five domains illustrated above allow for researchers to more effectively measure for posttraumatic growth. The domains are specific enough to effectively categorize how posttraumatic growth is experienced by individuals following a traumatic life event; however, they are vague enough to allow for some flexibility in how individuals define concepts such as strength and priorities. The flexibility the five domains allow can also cause problems in measurement and evaluating the presence of posttraumatic growth. Like one participant mentioned in the qualitative portion of the survey, posttraumatic growth is an intrinsically experienced concept. Due to its intrinsic nature, it is difficult for scholars to quantify the existence of posttraumatic growth and value an individual's self-reported growth.

**Controversy and illusory posttraumatic growth.** Another aspect of the quantitative results addressed in the survey was the controversial nature of the proposed illusory component of posttraumatic growth. The central tendency values signified varied responses and opinions on the importance of illusory posttraumatic growth. In other words, some scholars believed posttraumatic growth might not truly exist in some individuals. Other scholars either believed this illusion of posttraumatic growth was unimportant to how they view posttraumatic growth or questioned the existence of the illusory component of posttraumatic growth. In the study, this topic was hotly debated and consensus was not attained.

When evaluating potential reasons for discord amongst the participants, the researcher is brought back to the quote by Nietzsche (1898). As discussed previously, Nietzsche illustrates his personal experience with posttraumatic growth. This illustration, coupled with the comment from the participant on the intrinsic nature of the concept of posttraumatic growth, depicts one side of the argument against the importance of the illusory component. On the other side of the argument defending the component of illusion are scholars attempting to effectively define and measure all aspects of posttraumatic growth. While quantifying and effectively measuring an individual's growth is considered to be an acceptable approach by scholars working in the helping fields, there seems to be a significant difference in priorities among scholars wanting to understand an individual's experience by quantifying the experience and scholars wanting to understand the individual's experience through their eyes.

Counselors are trained to assist survivors by working through negative experiences, processing the outcomes of the negative experiences, and help the individual move forward by facilitating growth and healing. Effectively completing these activities leaves little room for counselors to devalue an individual's experience by questioning whether the growth they are

reporting is real or a figment of their imagination. The researcher, a counselor, believes this line of thinking devalues the voice of the client. One participant mentioned that the importance of the illusory component of posttraumatic growth is a moot point. This is interesting because there are two different definitions of moot point. On the one hand, a moot point could mean the topic of illusory posttraumatic growth is debatable or open to discussion. On the other, it could mean the topic of illusory posttraumatic growth has little value or meaning in the conceptualization of posttraumatic growth. Either meaning the participant was referring to illustrates the polarized opinions on the topic of illusion and posttraumatic growth.

The reason the aspect of illusory posttraumatic growth is argued may be due to the approach in which clinicians interact with their clients. For counselors, the narrative the client shares with the counselor is reality. Therefore, if the client shares about the experience of posttraumatic growth, then posttraumatic growth occurred. If the reporting for posttraumatic growth was from the clinician, then maybe the concept of posttraumatic growth would be appropriate; however, the current means of reporting posttraumatic growth is through a client completed inventory. Meaning, the client is reporting their perceptions of their posttraumatic growth experience. By focusing efforts on determining whether the growth is “true” posttraumatic growth or “illusory” posttraumatic growth, counselors and clinicians alike would silence the voice of the client. If the finding of an “illusory” posttraumatic growth experience was shared with clients in an attempt to remain transparent, the therapeutic alliance could be damaged and this would have a negative impact on the client.

**Assumption of foundational knowledge.** While many participants had opinions on the importance the component of illusion has on their conceptualization of posttraumatic growth, there were a few participants who were unaware of the existence of illusory posttraumatic

growth. In their model of posttraumatic growth, Zoellner and Maercker (2006) proposed the concept of posttraumatic growth has two components: functional and illusory. The functional component represents the growth an individual experiences through self-transcendence and self-constructed experience: a traditional conceptualization in terms of the research on posttraumatic growth. Researchers have focused a significant effort in understanding the functional component of posttraumatic growth (Tedeschi & Calhoun, 1995; 1996; Cordova et al, 2001; Manne et al., 2004). The illusory component of posttraumatic growth is described as the ‘self-deceptive’ and ‘dysfunctional’ side of posttraumatic growth by Zoellner and Maercker (2006). The idea that growth might not exist when an individual says they experienced growth has been researched and discussed by scholars (Taylor et al., 2000; Sumalla, Ochoa, & Blanco, 2009). The researcher was curious that one participant did not acknowledge the concept of illusory posttraumatic growth. Interestingly, this same individual did not answer any additional questions related to true or illusionary posttraumatic growth. It is possible that this participant only views posttraumatic growth in a specific way and was not willing to engage in the possibility that the reality of it is based in an individual’s mind.

The realization of having participants with varying knowledge and understanding of the concept of posttraumatic growth was enlightening because it was expected that all participants had the same basic knowledge of the concept due to their scholarly publications. Because of the varying knowledge and understanding of the participants, many different opinions were introduced and discussed. It became apparent that platforms to professionally discuss posttraumatic growth are imperative to the development of theory and the effective practice in the helping fields. Common language, understanding, and conceptualizations, or at least an awareness of current opinions, on posttraumatic growth are a necessity for scholars attempting to



develop a theory for practitioners to use while assisting in the growth and healing of individuals following a traumatic event. By using empathy, compassion, and genuine curiosity, aspects critical to interacting with people, researchers in the helping fields can discuss both the topics in which there are consensus and the topics in which there are discord as it refers to the concept of posttraumatic growth. From these discussions will arise a comprehensive understanding of the concept and professional working relationships among scholars and practitioners in various fields.

**Professionals' desires to connect.** Another important finding from the results was the desire for participants to learn from other participants in the study. While this urge to connect with other professionals working in helping fields wasn't embraced by all participants, it became evident in some of the responses that the collaboration amongst scholars was valued by some. For example, in the first survey one participant stated about the call for interdisciplinary discussion, "I completely agree with this statement. This is why at least anthropology and linguistics are equally important as psychology, concerning PTG research." This comment reflects an eagerness to be considered an integral part of the development of the concept, model, and theory of posttraumatic growth. In other words, this individual recognizes the need to include scholars from various disciplines to research posttraumatic growth and they want their work to be included in the future concept.

After the study concluded, there was another instance of a participant wanting to professionally engage with another participant due to their compelling anonymous responses. The researcher received an email asking for the contact information for one of the participants with detailed responses on the survey. The individual asking for the contact information wanted to connect with the other participant to discuss their work on posttraumatic growth. The contact

information was released to the individual upon the participant's consent. This would be a perfect example of building relationships with scholars from various disciplines to work towards a common understanding of the concept of posttraumatic growth.

The building of professional relationships and collaborative work has been a call for future work on the concept of posttraumatic growth by researchers (Almedom, 2005; Calhoun & Tedeschi, 2004). With the implications of the concept of posttraumatic growth spanning a multitude of disciplines and settings, it is imperative to begin or continue working together through open, honest, and respectful communication. The recognition of the importance of interdisciplinary discussion and work was highlighted in the results of the surveys. The researcher believes this a value amongst the participants of the study.

**Calls for additional research.** Upon the analysis of the results, it was discovered that throughout the qualitative responses to the open-ended questions participants mentioned aspects of posttraumatic growth that have not been a focus in the literature. For example, one participant seemed to have a significant interest in the topic of culture and posttraumatic growth. She stated perspectives from various cultures might not even recognize the concept of posttraumatic growth as it is described in the current literature. The comments made by this participant often challenged the conceptualizations based off of models of posttraumatic growth developed and utilized in western cultures (Schaefer & Moos, 1992; Tedeschi & Calhoun, 1995). Through the participant's comments, questions were proposed about the influence of culture on the concept of posttraumatic growth. It became evident that culture and posttraumatic growth should be a topic for further research.

Additionally, there was a call to focus on how posttraumatic growth is experienced by a community or a society. One participants mentioned they would like to see researchers address

these topics in future studies. This does seem to be an area of posttraumatic growth that has limited research to illustrate when and how posttraumatic growth is experienced on a larger level. From personal experience, the researcher believes posttraumatic growth does happen on a community level; however, this is not addressed or corroborated in the literature. As the findings of this study displayed, posttraumatic growth and community is an area in need of exploration.

### **Implications for Future Research**

As this study on the scholarly conceptualization of posttraumatic growth across disciplines illuminated aspects of consensus, it also highlighted areas in which researchers do not agree. The inability to reach consensus on aspects such as the illusion component of posttraumatic growth could be directly related to each individual's strong opinions on how they believe posttraumatic growth is experienced. While consensus, or lack of consensus, was measured in this study, the rationale as to why there was or wasn't consensus was not determined. In other words, additional research may be conducted to determine the root of the discord on aspects of posttraumatic growth. By facilitating interviews and deeper conversation on their opinions, researchers would be able to delineate the cause of dissent among scholars. Once the cause of dissent among the scholars was determined, additional studies could be conducted to bridge the gap between individuals with differing opinions.

Through the process of running the study, the researcher recognized an emphasis on interdisciplinary discussion. For example, one of the participants summarized the results from the first survey and determined the meaning of the results to show that the expert panel as a whole valued interdisciplinary discussion as it relates to the concept of posttraumatic growth. While this is in line with what the literature says as well (Calhoun & Tedeschi, 2004), some

participants in this study did not seem open to creating dialogue or conversing with scholars that had differing opinions as evidenced by the lack of written responses in the second survey.

Consensus was reached in the study on the importance of interdisciplinary discussion and how this interdisciplinary discussion is limited in the helping fields in reference to the concept of posttraumatic growth; however, the dialogue in the second survey was very limited. This is the survey which allowed participants to connect or disconnect with what others were writing. This survey was where there was an opportunity to build connections, yet, many of the participants stayed silent and simply answered the closed ended questions (ie. quantitative data).

With this finding in mind, future research may be conducted in the area of facilitating interdisciplinary discussion among scholars, professionals, and clinicians on the topic of posttraumatic growth. Not only publishing articles and conducting research together, but getting together to discuss the future of posttraumatic growth. To do this effectively, researchers must examine and evaluate arenas in which discussions similar to this have been conducted successfully.

Lastly, there is one idea the researcher would like to discuss on the concept of posttraumatic growth and the counseling field. The thought of posttraumatic growth is an exciting one; however, much like the quote from Nietzsche, the growth experienced following a tragedy is individual by nature. In society today, we have adapted the quote to read “Whatever doesn’t kill us makes us stronger.” This adaptation changes the meaning of the comment from an individual’s experience to a societal expectation. The researcher urges counselors and others in the helping fields to allow the thought of posttraumatic growth to be of an individual’s process. This means clinicians cannot expect a client suffering from trauma to grow, but should use all of

the information available in the literature to create a foundation where growth is possible. The prospect of growth cannot overshadow the pain and suffering in the here-and-now.

In conclusion, the purpose of this study was fulfilled by contributing to a deeper understanding of how scholars from various disciplines conceptualize posttraumatic growth. This study determined areas of consensus amongst the experts on the panel and illuminated areas of discord as they relate to the concept of posttraumatic growth. Many of the areas in which the participants did not reach consensus allow for additional studies to explore details as to where this dissention originates. Through the surveys in this study, a platform was created for scholars from various disciplines to come together and discuss their views on posttraumatic growth. The results of the study add to the body of knowledge on posttraumatic growth and assist in the facilitation of interdisciplinary discussion. It is the researcher's hope that these conversations continue to occur so that scholars from the helping fields work towards a thorough, well-developed model and theory in which to implement to assist individuals in their personal growth and healing.

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## APPENDIX A: INFORMED CONSENT

NDSU North Dakota State University  
School of Education  
1919 N. University Drive, SGC C118  
Fargo, ND 58108-6050  
701-231-7415

**Title of Research Study:** An interdisciplinary conceptualization of posttraumatic growth through a Delphi study

**This study is being conducted by:**

Researcher: Cailen Birtles  
[Cailen.birtles@ndsu.edu](mailto:Cailen.birtles@ndsu.edu)  
719-232-9201

Principal Investigator: Dr. Brenda Hall  
[Brenda.hall@ndsu.edu](mailto:Brenda.hall@ndsu.edu)  
701-231-8077

**Why am I being asked to take part in this research study?**

You are invited to participate in this study because you are an expert on the topic of posttraumatic growth as evidenced by your scholarly writing and publications. There will be approximately 10 participants in this study.

**What is the reason for doing the study?**

The purpose of this study is to work towards a consensus on the conceptualization of posttraumatic growth across the disciplines of counseling, sociology, psychology, emergency management, and medicine. This study will facilitate a conversation amongst experts in varying fields on the topic of posttraumatic growth.

**What will I be asked to do?**

The researcher will email the informed consent document in the initial invitation email and answer any questions about the study. By responding to the invitation and accepting the invitation to participate in this study, the participant is accepting the information detailed here in the informed consent. Acceptance to the invitation will be considered as an acceptance of the terms of the informed consent. As a participant, you will be asked to schedule time to complete a series of two online surveys. The statements in each survey will be developed from a content analysis of the literature available on the topic of posttraumatic growth. The participants will answer on a scale from 1-5 on the importance of each statement as it pertains to the conceptualization of posttraumatic growth. The median and standard deviation of the responses for the panel will be collected for each survey. Each of the two surveys will have an area where the participants will respond with information on how and why they responded to each statement the way they did. The two surveys will each take approximately 1-1.5 hour(s) to complete. To participate in this study, it is required that participants have access to the internet.

**Where is the study going to take place, and how long will it take?**

Content analysis will be conducted to determine the statements used in the two surveys. The researcher will conduct the content analysis at the Stop-N-Go Center (SGC) at North Dakota State University (NDSU) or at her home. The content analysis will be completed prior to the dissemination of the initial survey on December 6<sup>th</sup>. The surveys will take place online using the Qualtrics platform. The link for the surveys will be provided through email on the 6<sup>th</sup> of December and 10<sup>th</sup> of January. Please see table below with expected dates for the surveys dissemination and collection. The two surveys will take approximately 1-1.5 hour(s) to complete. Access to internet is a requirement to participate in this study.

<i>Survey Schedule</i>				
	<b>Survey Sent</b>	<b>Reminder Email</b>	<b>Due Date</b>	<b>Data Analysis</b>
<b>1<sup>st</sup> Survey</b>	Tuesday, December 6, 2016	Tuesday, December 13, 2016	Tuesday, December 20, 2016	December 20-January 9, 2016
<b>2<sup>nd</sup> Survey</b>	Tuesday, January 10, 2017	Tuesday, January 17, 2017	Tuesday, January 24, 2017	January 24-31, 2017

**What are the risks and discomforts?**

The study is not expected to have any risks for you. You may find yourself feeling uncomfortable answering the questions in the study. If there is ever a time where you feel uncomfortable and do not wish to answer the question, you can choose not to answer by skipping the prompt on the online survey or letting the researcher know you do not want to answer the question. At any time, you are able to discontinue your participation in the study.

**What are the benefits to me?**

You may decide to disclose to colleagues of your participation in the study. This might increase visibility in your field. Participants have the unique ability to reach consensus both within their field and throughout disciplines on the topic of posttraumatic growth. Lastly, participants are invited to engage with other professionals in a diverse, yet exclusive, group. These benefits of participating in a Delphi study are supported by the authors Okoli and Pawlowski (2003).

**What are the benefits to other people?**

The research may provide benefits for those wishing to better understand the concept of posttraumatic growth. Consensus amongst professionals in differing fields can begin to bridge the gap of communication, conceptualization, and theory development. Society may develop a deeper understanding of the healing process and the role posttraumatic growth plays in that process.

**Do I have to take part in the study?**

Your participation in this research is your choice. If you decide to participate in the study, you may change your mind and stop participating at any time without penalty or loss of benefits to which you are already entitled.

**What are the alternatives to being in this research study?**

If you withdraw before the research is over, your information will be removed at your request, and we will not collect additional information about you.

**Will I receive any compensation for taking part in this study?**

You will be compensated with a \$10.00 gift card to show my appreciation for your participation in the study. You will receive a gift card whether you are able to complete the study or not.

**What if I have questions?**

Before you decide whether to accept this invitation to take part in the research study, please ask any questions that might come to mind now. Later, if you have any questions about the study, you can contact the researcher, Cailen Birtles at 719-232-9201/ Cailen.birtles@ndsu.edu or Dr. Brenda Hall at 701-231-8077/ Brenda.hall@ndsu.edu.

**What are my rights as a research participant?**

You have rights as a participant in research. If you have questions about your rights, or complaints about this research, you may talk to the researcher or contact the NDSU Human Research Protection Program by:

- Telephone: 701.231.8995 or toll-free 1.855.800.6717
- Email: [ndsu.irb@ndsu.edu](mailto:ndsu.irb@ndsu.edu)
- Mail: NDSU HRPP Office, NDSU Dept. 4000, PO Box 6050, Fargo, ND 58108-6050.

The role of the Human Research Protection Program is to see that your rights are protected in this research; more information about your rights can be found at: [www.ndsu.edu/irb](http://www.ndsu.edu/irb) .

**Documentation of Informed Consent:**

You are freely making a decision whether to be in this research study. Signing this form means that

1. You have read and understood this consent form
2. You have had your questions answered, and
3. You have decided to be in the study.

You will be given a copy of this consent form to keep.

\_\_\_\_\_  
Your signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Your printed name

\_\_\_\_\_  
Signature of researcher explaining study

\_\_\_\_\_  
Date

---

Printed name of researcher explaining study



## APPENDIX B: WRITTEN AND ORAL SCRIPTS

### Written Script to Clinical Mental Health Professionals via Email

“Hello,

You are being contacted to be invited to participate in Delphi research study. My name is Cailen Birtles and am conducting a research study for my dissertation. It will fulfill part of the requirements for my Ph.D. in Counseling Education and Supervision program within the College of Education at North Dakota State University. The research study may be presented at research conferences or published as a professional research journal article. The research study I am conducting is to move towards a consensus on the concept of posttraumatic growth and allow interdisciplinary discussion amongst experts researching the topic.

Participants of the study will be asked to complete a series of two surveys. The first survey will have statements in which you will be asked to identify, on a 1-5 Likert scale, how important you feel like the statement is in conceptualizing posttraumatic growth. The statements in the survey elicit the views on posttraumatic growth as it relates to the work professionals are doing in the fields of counseling, sociology, psychology, emergency management, and medicine. The participants will also be asked to write about what lead them to their responses. In the second survey, a median and standard deviation of the panel’s responses along with the comments as to the reasoning behind the responses will be available. The participants will be asked to answer and will be given the opportunity to change their previous answers in response to the information available on the panel’s responses. After the last survey, the data will be analyzed by determining the median and standard deviation of the responses. Attached is a table with the approximate dates when the surveys will be released and when they are asked to be returned.

The survey will be conducted through the online Qualtrics platform. The responses of the surveys will be downloaded and aggregated. Anonymity will be a feature of this study. Other participants will not know the identity behind the answers provided while the study is taking place.

The first and second surveys can take anywhere from 30 minutes to 90 minutes to complete, depending on the quantity of written response provided for each statement.

If you are interested in participating in the research study, please let me know by \_\_\_\_\_ . If you have any questions about the study or the process, please email me back or call me at 719-232-9201.

Thank you in advance for your time.

Respectfully,

Cailen Birtles, MA, NCC, LPCC

Ph.D. Candidate/ Counselor Education

Graduate Teaching Assistant/ College of Education

North Dakota State University

p: 719-232-9201

e: [cailen.birtles@ndsu.edu](mailto:cailen.birtles@ndsu.edu)

## Oral Script to Clinical Mental Health Professionals via Telephone

“Hello,

I am calling to be invite you to participate in Delphi research study. My name is Cailen Birtles and am conducting a research study for my dissertation. It will fulfill part of the requirements for my Ph.D. in Counseling Education and Supervision program within the College of Education at North Dakota State University. The research study may be presented at research conferences or published as a professional research journal article. The research study I am conducting is to create a consensus on the concept of posttraumatic growth and allow interdisciplinary discussion amongst experts researching the topic.

Participants of the study will be asked to complete a series of two surveys. The first survey will have statements in which you will be asked to identify, on a 1-5 Likert scale, how important you feel like the statement is in conceptualizing posttraumatic growth. The statements in the survey elicit the views on posttraumatic growth as it relates to the work professionals are doing in the fields of counseling, sociology, psychology, emergency management, and medicine. The participants will also be asked to write about what lead them to their responses. In the second survey, a median and standard deviation of the panel’s responses along with the comments as to the reasoning behind the responses will be available. The participants will be asked to answer and will be given the opportunity to change their previous answers in response to the information available on the panel’s responses. After the last survey, the data will be analyzed by determining the median and standard deviation of the responses. Attached is a table with the approximate dates when the surveys will be released and when they are asked to be returned.

The survey will be conducted through the online Qualtrics platform. The responses of the surveys will be downloaded and aggregated. Anonymity will be a feature of this study. Other participants will not know the identity behind the answers provided while the study is taking place.

If you are interested in participating in the research study, please let me know by \_\_\_\_\_ . If you have any questions about the study or the process, please email me back or call me at 719-232-9201.

Thank you for your time.”

## APPENDIX C: IRB APPROVAL



November 22, 2016

Dr. Brenda Hall  
Counselor Education

Re: IRB Determination of Exempt Human Subjects Research:  
Protocol #HE17099, "An interdisciplinary conceptualization of posttraumatic growth through a Delphi Study"

Co-investigator(s) and research team: Cailen Birtles

Certification Date: 11/22/2016 Expiration Date: 11/21/2019  
Study site(s): online  
Sponsor: n/a

The above referenced human subjects research project has been certified as exempt (category #2b) in accordance with federal regulations (Code of Federal Regulations, Title 45, Part 46, Protection of Human Subjects). This determination is based on the original protocol with revised consent/information sheet (received 11/22/2016).

Please also note the following:

- If you wish to continue the research after the expiration, submit a request for recertification several weeks prior to the expiration.
- The study must be conducted as described in the approved protocol. Changes to this protocol must be approved prior to initiating, unless the changes are necessary to eliminate an immediate hazard to subjects.
- Notify the IRB promptly of any adverse events, complaints, or unanticipated problems involving risks to subjects or others related to this project.
- Report any significant new findings that may affect the risks and benefits to the participants and the IRB.

Research records may be subject to a random or directed audit at any time to verify compliance with IRB standard operating procedures.

Thank you for your cooperation with NDSU IRB procedures. Best wishes for a successful study.  
Sincerely,

Digitally signed by Kristy Shirley  
DN: cn = Kristy Shirley, o = NDSU,  
ou = Institutional Review Board,  
email = kristy@shirley@ndsu.edu,  
c = US  
Date: 2016.11.22 14:04:42 -0500

Kristy Shirley, CIP, Research Compliance Administrator

For more information regarding IRB Office submissions and guidelines, please consult [http://www.ndsu.edu/research/integrity\\_compliance/irb/](http://www.ndsu.edu/research/integrity_compliance/irb/). This Institution has an approved FederalWide Assurance with the Department of Health and Human Services: FWA00002439.

### INSTITUTIONAL REVIEW BOARD

NDSU Dept 4000 | PO Box 6050 | Fargo ND 58108-6050 | 701.231.8995 | Fax 701.231.8098 | [ndsu.edu/irb](http://ndsu.edu/irb)

Shipping address: Research 1, 1735 NDSU Research Park Drive, Fargo ND 58102

NDSU is an EDNA university

#### APPENDIX D: QUESTIONS INFORMING THEMATIC ANALYSIS

1. What are the underlying assumptions among current researchers regarding posttraumatic growth?
2. How has the issue of posttraumatic growth been explored amongst differing fields?
3. What are current areas of consensus among writers and researchers in defining posttraumatic growth?
4. What are the current diverse and differing viewpoints among writers and researchers in defining posttraumatic growth?
5. What types of interdisciplinary conversations are occurring among professionals in helping fields regarding posttraumatic growth?
6. Is posttraumatic growth a stand-alone concept or is it a part of another concept?

## APPENDIX E: SURVEY 1

### Introduction to participants:

The statements found in the Delphi study attached have been created following an in-depth review of the literature through the use of a thematic analysis. The researcher, after reviewing a significant amount of the literature on posttraumatic growth, identified major themes throughout. These themes are represented as the statements in this Delphi study. As researchers and authors on the construct of posttraumatic growth, you are being asked to scale each statement on a Likert scale of 1-5. The scale will represent your opinion to what measure the statement relates to the construct of posttraumatic growth. (1: the statement does not relate to the construct of posttraumatic growth to 5: the statement relates strongly to the construct of posttraumatic growth.) After selecting a numerical value to the statement, you will be asked to describe what has led to your selection. The more information you provide will increase the amount of data available and may lead to deeper conversation and/or understanding of the construct. The better understanding we have of posttraumatic growth will lead to the further development of a theory.

### Delphi Statements

1. Posttraumatic growth is a stand-alone construct.
2. The relationship between posttraumatic growth and resilience are indirectly correlated. For example, as an individual's resilience increases his or her ability to grow as a result of a traumatic life experience decreases.
3. The model proposed by Tedeschi & Calhoun (1995) is a widely accepted foundational model of posttraumatic growth. The model consists of three dimensions of growth. Changes in the perception of self, changes in interpersonal relationships, and changes in philosophy of life (Schaefer & Moos, 1992; Tedeschi & Calhoun, 1995) are the three domains of growth following a traumatic experience. These dimensions provide a foundation for the exploration of the construct of posttraumatic growth.
4. Discussion is limited across disciplines on the construct of posttraumatic growth.
5. Posttraumatic growth is limited to a discipline specific construct.
6. Illusory posttraumatic growth is an integral part of the conceptualization of posttraumatic growth.
7. Certain conditions must be present in order to have true posttraumatic growth vs. the illusion of posttraumatic growth.
8. An individual must change aspects of his or her life to experience true posttraumatic growth.

9. An individual must make changes to his or her identity to experience true posttraumatic growth.
10. An individual must be open to new experiences following the traumatic event to experience true posttraumatic growth.

## APPENDIX F: SURVEY 2

Assess the importance of the highlighted statement based on your conceptualization of posttraumatic growth and the information provided above.

### **1. Posttraumatic growth is a stand-alone concept.**

#### Responses on the first survey:

Not at all important: 0%  
Slightly important: 0%  
Moderately important: 0%  
Very important: 57.14%  
Extremely important: 42.86%

#### Comments from participants:

"The complex process by which PTG occurs involves the interaction of several factors, namely individual, trauma related, environmental and social ones, as it is shown in the distinct models of PTG covered by previous studies (Dong et al., 2015; Morris & Shakespeare-Finch, 2011; Triplett et al., 2012; Wilson et al., 2014; Zhou et al., 2015). Despite the impact of many factors, PTG is a stand-alone construct, conceptually different from other constructs (e.g. resilience)."

"PTG is an important concept, however it sounds wrong to say that it is a stand-alone concept. PTG is not a diagnosis, and thus a cultural concept, which may differ between cultures. In this sense, it may be a stand-alone concept for some cultures (mainly western), but for other cultures it may not be a concept at all."

"The implication for PTG in research and clinical work."

"It is important that positive aspects of difficult and stressful experiences be acknowledged."

"I am not sure exactly what is meant by "stand-alone concept," but if it's referring to the belief that posttraumatic growth is different from resilience or hardiness then yes I think it is important for the development and understanding of the construct."

"It is stand-alone. However, it cannot be viewed singularly as it is intrinsically tied to other variables such as distress (which is necessary for PTG to occur)."

### **2. There is a relationship between posttraumatic growth and resilience.**

#### Responses on the first survey:

Not at all important: 0%  
Slightly important: 14.29%  
Moderately important: 28.57 %



Very important: 28.57%  
Extremely important: 28.57%

Comments from participants:

"Resilience represents a dynamic process that encompasses efficient adaptation under adverse circumstances. As for PTG, it is defined as an outcome of the cognitive restructuring process; PTG differs from resilience as it is related only to positive changes and not to both positive and negative outcomes. Thus, there is not a relationship between posttraumatic growth and resilience, since they are independent constructs. However, it should be noted that this distinction has been the object of some controversy. Calhoun and Tedeschi (2004) underline that the adversity level experienced by trauma survivors who develop PTG is higher than that of resilient individuals; therefore, PTG is only present in extremely stressful situations, being associated with a transformative process that draws a clear distinction between before and after the traumatic event."

"The differentiation between the two concepts is not always very clear. Some authors say it is the same thing, whereas others see a clear cut. As we understand it, resilience is the ability to bounce back after an aversive event, without experiencing much of a deficit or a disorder after the adversity. On the other hand, someone who experiences PTG may have undergone much aversive feelings and has gained something after experiencing a deficit (after a revaluation). Both concepts are important resources, the difference may be the point in time (resilience being first, PTG rather later in the process of overcoming)."

"Distinguishing two concepts is very important. PTG is not resilience. However some research suggests that as people move through stress and trauma and experience PTG they become more resilient. Additional people who are resilient may not self report PTG."

"This is only important to me because people generally conflate the two."

"I believe they are two separate constructs they are likely related."

"Learned wisdom can come out of PTG, and provide resilience for future trauma."

**3. The model proposed by Tedeschi & Calhoun (1995) is a widely accepted foundational model of posttraumatic growth. For reference, the model consists of three dimensions of growth. Changes in the perception of self, changes in interpersonal relationships, and changes in philosophy of life (Schaefer & Moos, 1992; Tedeschi & Calhoun, 1995) are the three domains of growth following a traumatic experience.**

Responses on the first survey:

Not at all important: 0%  
Slightly important: 14.29%  
Moderately important: 0%  
Very important: 57.14%

Extremely important: 28.57%

Comments from participants:

"In fact, the three domains explained above describe the main areas of change that each individual can experience when PTG is perceived. Yet, and in accordance with the first paper about Posttraumatic Growth Inventory (PTGI), Tedeschi and Calhoun (1996; 2004) described PTG as having five subscales: 'personal strength', 'new possibilities', 'relating to others', 'appreciation of life', and 'spiritual change'. Several studies confirmed that the five-structured nature of PTGI is the most accepted and replicated solution (Anderson & Lopez-Baez, 2008; Brunet et al., 2010; Jaarsma, Pool, Sanderman, & Ranchor, 2006; Linley et al., 2007; Morris et al., 2005; Teixeira & Pereira, 2013). Furthermore, a study with 926 adults who experienced a range of stressfulness events tested the latent factor structure of PTGI, comparing five models of the underlying structure, and concluded that the five-factor model is best suited to characterize PTG as a multidimensional construct (Taku et al., 2008). Thus, since the PTGI is the measure that is more frequently used to assess PTG, I consider that PTG should be defined in five dimensions, as it is measured by PTGI, instead of three dimensions."

"In other publications there are 5 domains, which are stated and we normally refer to. The model was a very important cornerstone for PTG research. However, its universality may not be as relevant as some researchers have claimed."

"This is one model. Parks has another on Stress related growth which has different facets and research suggests is a more accurate term to what is being examined."

"It is probably an evolving concept."

"The model has three dimensions but the PTGI has five subscales. I think that all five are important to explain and emphasize."

"I agree T&C is the widely accepted model, but I do not think it's important to limit it to those 3 dimensions. There can be changes in priorities, or spiritual growth (which perhaps falls under the "philosophy of life" dimension)."

"These three dimensions are general enough to cover the types of PTG that can occur. However, current measurements of PTG may not capture all aspects of growth (e.g., compassion)."

**4. Posttraumatic growth is limited to a discipline specific concept.**

Responses on the survey:

Not at all important: 0.00%

Slightly important: 14.29%

Moderately important: 0.00%

Very important: 57.14%

Extremely important: 28.57%

### Comments from the participants:

“I consider that PTG is limited to a discipline specific construct, in what regards its own definition, as it was first mentioned by Tedeschi and Calhoun (1995; 1996). Nonetheless, the different perspectives that emerged since then introduced the construct of PTG into academic discussion; consequently, perceived growth after trauma is understood by different constructs, such as benefit-finding or stress-related growth. I consider that a standardization of the construct could be useful to the scientific community. Though, given the complexity of the PTG model, the emergence of different perspectives is natural, not only in what regards the definition itself, as well as in what pertains to the PTG model and how growth is perceived.”

“Although it is more present in psychological literature, many anthropologists have done similar research. This has definitely been a great enrichment to psychological literature, which is often limited to dimensional thinking and reporting (e.g. 3, or 5 dimensions according to Tedeschi&Calhoun). Language plays an important role, too. Some cultures may express their perception of overcoming adversity in different ways.”

“PTG explores concepts and themes that are relative to philosophy and religious and spiritual texts. And so the idea can be in conversation with multiple disciplines.”

“I am not sure what this means. PTG is a human experience. The study of PTG has largely been psychological but that does limit the concept.”

“What discipline would you limit it to? I do not think it needs to be kept to one discipline.”

“PTG is not defined by discipline. It can potentially occur in everyone across a number of different contexts/traumas.”

5. Discussion is limited across disciplines on the concept of posttraumatic growth. Interdisciplinary communication is vital to obtain common understanding.

### Responses on the first survey:

Not at all important: 0%  
Slightly important: 0%  
Moderately important: 28.57%  
Very important: 14.29%  
Extremely important: 57.14%

### Comments from participants:

"According to its definition, PTG has a cognitive nature, i.e., a cognitive restructuring (represented by challenge to core beliefs and rumination) has to take place, so that PTG can be developed. Nevertheless, the perception of PTG manifests itself as behavioral changes in

different areas of the subject's life: 'personal strength', 'new possibilities', 'relating to others', 'appreciation of life', and 'spiritual change'. In this sense, several factors (e.g., individual, social, economic) might affect the PTG model and so the discussion of PTG may well be extended to other disciplines related to factors that may or may not interfere with the PTG model."

"I completely agree with this statement. This is why at least anthropology and linguistics are equally important as psychology, concerning PTG research."

"My field is interdisciplinary and so I see it as vital and happening. However I recognize the limits that exist as well."

"I would like to see much more discussion of growth's impact socially and on communities."

"I rated this extremely important because I agree with the second sentence that 'interdisciplinary communication is vital.' But I feel these are two separate statements and I am not sure I agree with the first sentence that "discussion is limited."

## **6. - Illusory posttraumatic growth is an integral part of the conceptualization of posttraumatic growth.**

### Responses on the first survey:

Not at all important: 14.29%  
Slightly important: 28.57%  
Moderately important: 14.29 %  
Very important: 28.57%  
Extremely important: 14.29%

### Comments from participants:

"I consider that illusory growth is not an integral part of PTG, as illusory vs. constructive PTG is a different interpretation on PTG and corresponds only to a perspective about the conceptualization of PTG and not the definition per se. The PTG definition, as I see it, does not depend on this conceptualization of illusory-constructive components. Instead, the concept of PTG is about the PTG model and it can be perceived through the five domains mentioned bellow."

"The mechanism behind PTG is not very clear. Illusory aspects or sugarcoating positive aspects of the process of overcoming adversity need more attention."

"Yes. The research is important to understand. Some people have 'growth' experiences that may be related to memory of pre-trauma functioning and not actual growth. This perceived growth/actual growth relationship has important research implications. There are clinical implications as well."

"Cognitive behavioral therapy and what we know about the brain's plasticity would both suggest that what people believe about themselves can become true if it did not start that way."

"I am not familiar with the term "illusory PTG" so I do not feel it can be an integral part of PTG."

"The discussion regarding whether PTG is real is a mute point. PTG cannot always be corroborated or verified by an external source as change can be implicit."

### **7. Certain conditions must be present in order to have true posttraumatic growth vs. the illusion of posttraumatic growth.**

#### Responses on the first survey:

Not at all important: 0%  
Slightly important: 28.57%  
Moderately important: 42.86%  
Very important: 28.57%  
Extremely important: 0%

#### Comments from participants:

"According to the "two component model" from Zoellner and Maercker (2006), certain individual characteristics must be present in order to perceive constructive or illusory growth, such as internal locus of control, hardiness and sense of coherence, openness to new experiences, and acceptance coping. Additionally, some cognitive factors might also play a role in the illusory side of PTG, such as rumination, dispositional optimism, sense making and the quest for meaning."

"This sounds right to me. However, I don't understand what kind of "certain conditions" are meant."

"That's an interesting question that we haven't explored."

"The next series of questions are all about 'true' PTG. I am not sure how to define that so am not sure how to fully answer these questions."

"PTG and other forms of psychological growth can be hard to measure; there will always be those who call into question the validity of such assessments (as compared to more objective measures of physical growth like height or weight). But as social scientists we should strive to develop guidelines and definitions that assist with the construct validity."

"Certain elements do have to be present for PTG to occur. These can be different in different contexts/traumas."

## **8. An individual must change aspects of his or her life to experience true posttraumatic growth.**

### Responses on the first survey:

Not at all important: 14.29%

Slightly important: 14.29%

Moderately important: 0 %

Very important: 42.86%

Extremely important: 28.57%

### Comments from participants:

"The most comprehensive model of PTG theorizes that the foundation for the possibility of growth lies in the degree to which the person's assumptive world is shattered by the traumatic event (Calhoun & Tedeschi, 2006; Cann et al., 2010; Tedeschi & Calhoun, 2004). In fact, the seismic nature of the traumatic event fosters the challenge to core beliefs and the beginning of cognitive process on the traumatic experience to rebuild the challenged assumptive world. Therefore, as structural components of the assumptive world, core beliefs are defined as fundamental assumptions about the universe, connections with others and the person place in it, determining how people will behave and spend effort to influence events. In order to rebuild a viable assumptive world, when it was previously shattered or disrupted as a result of a highly stressful event, cognitive-emotional processing may bring about personal growth. During this process of challenge to core beliefs before perceiving PTG, the individual can perform some changes in his/her life due to cognitive and identity changes. However, this shifting in aspects of life is not essential since it might have (or might have not) occurred as a consequence of challenge to core beliefs."

"For PTG to happen, individual beliefs must be shattered and reevaluated. Therefore, certain aspects must probably change. These aspects may entail change of beliefs, norms, or values."

"Yes however the aspects may be philosophical or spiritual." "I think it is a matter of perception really."

"The meaning people make of their situations may change dramatically even if outward aspects do not change. That can be true PTG."

"I agree; but this change does not have to be a physical or behavioral manifestation. It could be reflected in a change of values."

"Agreed. But as stated previously, these changes may be implicit and not an externally observable change."

## **9. An individual must make changes to his or her identity to experience true posttraumatic growth.**

Responses on the first survey:

Not at all important: 14.29%  
Slightly important: 28.57%  
Moderately important: 28.57%  
Very important: 0%  
Extremely important: 28.57%

Comments from participants:

"Several studies have found a direct and strong relationship between the degree of disruption of core beliefs and the emergence of PTG (Cann et al, 2010; Lindstrom, Cann, Calhoun, & Tedeschi, 2013; Su & Chen, 2015; Taku et al., 2015). Furthermore, three studies in particular reported that the challenge to core beliefs was the main predictor of PTG (Danahauer, Russell et al., 2013; Triplett, Tedeschi, Cann, Calhoun, & Reeve, 2012; Wilson, Morris, & Chambers, 2014; Zhou, Wu, Fu, & An, 2015). In fact, the challenge to core beliefs is the strongest predictor of PTG and according to its definition, the challenge to core beliefs includes changes in his or her identity. Thus, I consider that the sentence is completely appropriated."

"I don't see the difference between "change aspects of his or her life" and "change his or her identity". For me, both statements deserve the same answer."

"Probably more important than making actual changes."

"Disagree; see prior statement." Prior statement: "I agree; but this change does not have to be a physical or behavioral manifestation. It could be reflected in a change of values."

"I don't think I agree to this statement - but what you mean by "identity" is not clear."

**10. Assess the importance of the statement below based on your conceptualization of posttraumatic growth. An individual must be open to new experiences following the traumatic event to experience true posttraumatic growth.**

Responses on the survey:

Not at all important: 0.00%  
Slightly important: 28.57%  
Moderately important: 42.86%  
Very important: 14.29%  
Extremely important: 14.29%

Comments from participants:

"One of the domains of PTG is named New Possibilities, in which the individual discovers new options for his life, in several domains. The creation of a new life path is related with a perception of a new philosophy of life that challenges core beliefs leading to new opportunities

that did not exist before the trauma. It is in the context of the perception of new possibilities in life that the individual can perceive that he/she is more open to new experiences. However, I consider that this is not an essential condition. The increase of openness to new experiences may or may not occur during the PTG process, since it is different from one individual to another and some people may experience PTG without experiencing the aspects related to the domain “New Possibilities”.”

“In order to reevaluate one's life, it seems necessary that an individual must be open for "a new value" (= new meaning, new perspective). Without openness, it must be quite hard to put a new perspective on things.”

“The personality facet of Openness to new Experiences correlates with PTG scales in research.”