COMMUNICATION AND POSTTRAUMATIC GROWTH:

THE POWER OF POSITIVE DECLARATIONS

by

Jennifer L. Owen

Liberty University

A Dissertation Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

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APPROVED BY:

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ABSTRACT

Research has explored the relationship between posttraumatic growth (PTG) and communication trends. Yet, there is a gap in research regarding how positive declarations of desired outcomes can influence PTG and be applied in a therapeutic context. The purpose of this quantitative study was to examine if positive declarations of psychological growth facilitate PTG after trauma and impact levels of hope, anxiety, or depression. A small pilot study was conducted through six counseling sessions with participants (N = 16) divided into either the control (n = 8) or experimental group (n = 8). A novel Positive Communication Approach (PCA), distinguished by linguistic psychoeducation and use of positive declarations, was only implemented with the experimental group. Pretest-posttest data was collected using the SRGS-R, AHS, GAD-7, and PHQ-9 and analyzed by an analysis of covariance (ANCOVA). ANCOVA results indicated no significant difference between group level for each research question. However, cumulative scores on all four questionnaires were higher for the experimental group than the control group, with a more substantial change noted for PTG and hope. The differences between clinical and statistical findings may be attributed to the study's small sample size. Findings support existing literature regarding communication and PTG while providing an empirical source of support for scripture. Furthermore, PCA may be an effective therapeutic intervention for facilitating PTG by cultivating hope and expectation.

Keywords: posttraumatic growth (PTG), positive declarations, trauma, anxiety, depression, hope, Positive Communication Approach (PCA), ANCOVA, scripture

Copyright Page

Dedication

I dedicate this dissertation to the Lord and my family. The Lord has transformed me by using others to speak his plan and victory over my life. My personal transformation inspired the creation of this study, to empower others with a truth that can also change their life. This dissertation is wholly dedicated to my savior, Jesus Christ, as the reason that I live and thrive. I also dedicate this dissertation to my family. Within my direct family lineage, I am the first person to obtain a doctorate. Such a milestone breaks a ceiling over our family that permits new possibilities for future generations. This accomplishment resulted from faith, prayer, and the hard work of relatives who walked before me.

Acknowledgments

While completing this dissertation, several people functioned as a source of stability and inspiration that I would like to acknowledge. Regardless of the extent or form of support, I am truly grateful for the time and energy of those around me. Thank you, Dr. Kristin Kellen, for agreeing to be my dissertation chair. While I researched, wrote, executed a study, and wrote some more, Dr. Kellen remained steadfast in providing me with wisdom and assistance. A valuable aspect of working with Dr. Kellen was her ability to propel my vision forward, never opposing what was placed within my heart. Additional acknowledgment is made to Dr. Rachel Piferi. As Program Director, it was an absolute honor that Dr. Piferi functioned as my committee member. Dr. Piferi's gracious leadership skills were apparent as she contributed insight and encouragement with poise. It was a blessing to receive guidance from academically versed women, who provided some ease through a strenuous and intimidating process.

In addition to faculty, several family members have taught me the skills necessary for this journey. My great aunt, Sharon Hooks, has taught me a lot about faith. Sharon has demonstrated the principles of faith this dissertation was built upon. My father, John Owen, has imparted to me a ferocious determination. He taught me to keep going until you finish the job, whether you feel like it or not. Without either of these influences, I may not have completed this dissertation. Nevertheless, throughout the entire journey, there were two people consistently by my side. My mother, Claudia Owen, was the one person who inquired about my experience and undergirded me every step of the way. Her intentionality and specific recognition of my academics were invaluable, and I am forever grateful. Thank you, mom.

A special acknowledgment to another lady who was consistently by my side, a little lady named Reagan. My daughter Reagan was the one person directly impacted by the demands of this dissertation. As a child, the last five years of Reagan's life were influenced in a manner she did not fully understand. Many sacrifices were made yesterday in hopes of bettering our tomorrow. Throughout the journey, Reagan had to develop a stride and cadence with me that required stamina. I am proud of how she adapted to the challenges. Reagan, my "pookie", life was not always easy with only the two of us during this journey. However, if just one person is positively influenced by this work, I pray that person is you.

Most of all, I acknowledge my Lord and Savior, Jesus Christ. As I completed a great work outside of me, the Lord completed a great work within me. The amount of transformation I experienced through this process was priceless. While simultaneously balancing routine life demands with this dissertation, faith was necessary to press through moments of overwhelming doubt. Although I was stretched further than ever before, the Lord never allowed me to break. Throughout the doctoral program, there were periods when I questioned if I had made the right choice. It is now abundantly clear I made the correct choice and that the Lord was with me the whole time. The moment I started the race, the Lord was waiting for me at the finish line.

P.S. I did not forget about you, C3. The real "PCA". Your love and excitement transformed this achievement. A sincere thank you for who you are and the support you provided.

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CHAPTER 1: INTRODUCTION TO THE STUDY

Communication and posttraumatic growth (PTG) have been studied independently as well as their relationship together. Research has revealed the ability of language to impact human experiences (de Vries, 2013; Liebrecht et al., 2019) and mental health (Bodie et al., 2021; Zhang et al., 2023). Trauma can lead to an array of issues impacting various aspects of humanity, shaping a person's future (Hartman & McCambridge, 2011; Vila-Badia et al., 2021). The concept of PTG points to the growth a person can experience after trauma that occurs within different domains of functioning (Taku et al., 2021; Tedeschi, 2023; Zhang et al., 2022). Therapeutic interventions, including narrative therapy, have been implemented to facilitate PTG for those who have experienced trauma (Bayes, 2022; Roepke et al., 2018; Tedeschi et al., 2021). However, effective interventions for PTG are lacking (Roepke et al., 2018). Analysis of how communication facilitates PTG has indicated what type of speech and word usage can help create growth after trauma (Sherratt & Worrall, 2021; Zhen & Zhou, 2022; Ziss, 2022). Behind positive communication and word usage, it is expectation and hope that ultimately lead to change (Gallagher et al., 2019; Mazur-Socha et al., 2023).

Understanding how words create hope and expectation is imperative for strategically using communication to bring positive results to a person's life. It is possible that hearing words of life and desired outcomes could stir hope and expectancy for growth among those who have experienced trauma. However, despite available data regarding the impact of words on mental health and PTG, studies are lacking regarding positive declarations and PTG. There is also a need to understand the impact of positive declarations in a therapeutic context. The current study investigated if positive declarations facilitate PTG growth among those who have experienced trauma. The study additionally explored if levels of hope, anxiety, and depression were

influenced by positive declarations. An experiment was conducted through use of a novel Positive Communication Approach (PCA) in counseling sessions. Extensive literature regarding the ability for communication to evoke hope, as well as the preexisting relationship between communication and PTG, created reason to believe that PCA may be an effective intervention for PTG.

Background

The influence of communication has been revealed through various aspects of human functioning (de Vries, 2013; Liebrecht et al., 2019; Zhang et al., 2023), different language theories (Gallois et al., 2021; Schaedig, 2020; Schweitzer & Waytz, 2020) and neurological data (Dyke et al., 2020; Chen & Goodwill, 2022). Positive speech has been linked with decreased psychological burden and increased well-being (Zhang et al., 2023). Emotional differentiation, the ability to use language to express and describe feelings, is linked with mental health (Gallois et al., 2021). Furthermore, language is believed to fuel self-fulfilling prophecies, realities perpetuated by events that align with spoken words (Schaedig, 2020). Not only does communication influence situations, but Language Style Matching (LSM) describes how people are individually influenced by language. LSM explains that people unconsciously match the speaking patterns of those talking to them (Gasiorek et al., 2021). Differentiation, self-fulfilling prophecies, and LSM are concepts that all demonstrate the influence of communication. The influence of communication has also been confirmed through epigenetics and neuroscience. Epigenetics has revealed that what people are exposed to can influence DNA output (Dyke et al., 2020; Lacagnina, 2018). Neurologically, the brain can be rewired as different experiences lead to the modification of neural networks (Alm, 2021; Chen & Goodwill, 2022).

The harm that results from highly stressful experiences is considered trauma (Vila-Badia

et al., 2021). Some sources of trauma include accidents, violence, sexual abuse, disaster, terrorism, and war (Williams & Williams, 2020). A person's development or life trajectory can be hindered by trauma or even result in posttraumatic stress disorder (PTSD) (American Psychiatric Association, 2022). Other common mental health issues that result from trauma include anxiety, depression, somatic disorders, obsessive-compulsive disorders, substance use disorder, and suicide (Beilharz et al., 2020; Bryant, 2019). There are different types of traumas resulting in varying levels of impact and severity (Birkeland et al., 2022). Multiple variables influence the development of traumatic stress, such as self-perception, personality, culture (Williams & Williams, 2020), and social support (Bonnan-White et al., 2018). When brokenness does result from trauma, human functioning can be impacted on a physical (Havermans et al., 2020; Paredes-Echeverri, et al., 2022), psychological (Jugessur et al., 2021; Mahlangu et al., 2023), and social level (Dunn et al., 2023; Noor et al., 2021). Both short and long-term consequences of trauma can occur that lead to hindered functioning, ailments, disease, and even death (Agoratos et al., 2018; Havermans et al., 2020). Although trauma can lead to brokenness and debilitation, people can also experience growth and transcendence after trauma.

Posttraumatic growth is positive psychological change after highly stressful or traumatic events (Allen et al., 2022; Dell'Osso et al., 2022; Taku et al., 2021). After a traumatic event, cognitive processing creates understanding and meaning of the trauma. Such processing often involves consideration of why the event happened and how life has since changed (Henson et al., 2021). World views and assumptions are disrupted when trauma occurs. Therefore, PTG occurs when new assumptions and worldviews are created that are driven by purpose, positivity, and meaning (Allen et al., 2022; Tedeschi, 2023). PTG is comprised of five domains, which are relationship quality and compassion, appreciation of life, spiritual and existential change,

personal strength, and a new or different path (Taku et al., 2021; Tedeschi, 2023; Zhang et al., 2022). Examples of some PTG studies have been with those who have survived cancer (Zhai et al., 2019), had HIV/AIDS (Barskova & Oesterreich, 2009), lost a spouse (Doherty & Scannell, 2022), survived a natural disaster (Jung and Han, 2023), or been a refugee (Von Arcosy et al., 2023). Understanding the importance of PTG has motivated mental health practitioners to facilitate PTG with trauma survivors through use of various therapeutic interventions.

Therapeutic interventions are used for both treating trauma and facilitating PTG. The framework of trauma-informed care (TIC) drives many treatment modalities for coping with trauma (Noor et al., 2021). Psychotherapeutic interventions used for treating trauma, such as cognitive behavioral therapy (CBT) (Belleville et al., 2018), cognitive processing therapy (CPT) (Murray et al., 2022; Thompson-Hollands et al., 2018), or prolonged exposure (Cherestal & Herts, 2021; Murray et al., 2022) can also help facilitate PTG. Additionally, some interventions were specifically created for PTG such as SecondStory and The Posttraumatic Growth Path (Roepke et al., 2018). However, many PTG interventions were studied using pretest-posttest designs creating a need for more randomized controlled trials (RCT) (Roepke et al., 2018). The use of words and language to promote PTG is demonstrated through narrative therapies, which allow people to develop new stories of strength and empowerment (Bayes, 2022; Tedeschi et al., 2021). Narrative therapy is impactful because it uses communication in a positive manner. Positive communication can also facilitate PTG through discussion of rehabilitation and recovery (Spialet et al., 2019), phrases that create forward motion (Ziss, 2020), and specific pronoun usage (Blackburn et al., 2021). However, it is not words themselves that heal and propel growth, but the hope and expectation that they create.

The presence of hope and expectation are essential for a person to grow after trauma.

Attention has been given to better understanding hope as both an emotional and cognitive construct. People are motivated to accomplish goals, and hope is what drives the behavior that helps people achieve their goals (Gallagher et al., 2019). People with high hopes are historically more confident in life and experience more positive emotions than those with low hopes. People with low hope tend to abandon goals when met with challenges or opposition to goal attainment (Gallagher et al., 2019). As hope motivates people toward their goals, expectation is the perceived likelihood of certain outcomes (Dowling & Rickwood, 2016). Expectation also drives behavior as people are more likely to act if certain outcomes are predicted (Mazur-Socha et al., 2023). Within a therapeutic context, expectation is significant for the therapeutic experience and clinical outcomes (Asay & Lambert, 1999). Clients are more likely to experience change and benefits from counseling when they expect to be helped by the therapist. Furthermore, expectation has been identified as equally important as therapeutic technique (Asay & Lambert, 1999). Studies on hope have indicated that there is an inverse relationship between hope and mental distress and a positive relationship between hope and PTG (Long et al., 2020; Salloum et al., 2019). The concepts of hope and expectation, alongside communication and PTG, are supported by a biblical foundation built from various passages of scripture.

The Bible teaches that words possess power and can create life or death (*Holman Christian Standard Bible,* 2004/2020, Proverbs 18:21). Jesus conducted healing and supernatural acts through his words (2004/2020, Luke 8:22-25; Mark 10:52; Matthew 8:13), providing an example on earth for people to follow (Hadley, 2020). Although people are not God, as Jesus was God in the flesh (2004/2020, John 1:14), people were created in God's image (2004/2020, *Genesis* 1:26) to fulfill His agenda on the earth (Ware, 2021). People are empowered by God's spirit to promote life and function supernaturally on earth (2004/2020, Acts 1:8; Ephesians 1:22-

23). It is only through faith in God that people can speak forth change with their words (2004/2020, Matthew 17:14-16; Matthew 17: 20). Hebrews 11:1 (2004/2020) states, “Now faith is the reality of what is hoped for, the proof of what is not seen.” By expecting God to fulfill His will on earth, people are inspired to speak life in faith to see situations change. The Bible supports the concept of PTG by revealing God’s good will towards man (2004/2020, Psalms 23:2-3; 2 Timothy 1:7) and ability to use evil for good (2004/2020, Genesis 50:20; Romans 8:28). Furthermore, some Christians have grown because of their suffering, evidenced by strengthened hope, empathy, compassion, perseverance, and obedience (McMartin & Lewis-Hall, 2022).

Problem Statement

Experiencing trauma can impede life and result in traumatic stress symptoms (American Psychiatric Association, 2022; Vila-Badia et al., 2021). An estimated 70% of people worldwide have experienced trauma (Zhang et al., 2022) and the number of children who are now experiencing trauma is creating a global health threat (Jugessur et al., 2021). Injury and brokenness resulting from trauma occurs physically (Havermans et al., 2020, Agoratos et al., 2018; Paredes-Echeverri, et al., 2022), psychologically (Beilharz et al., 2020; Jugessur et al., 202; Mahlangu et al., 2023), and socially (Dunn et al., 2023; Noor et al., 2021; Simon et al., 2019). Without receiving appropriate attention and care, those who have lived through trauma may experience long-term impairments to their functioning (Dunn et al., 2023; Noor et al., 2021), develop disease, or even die prematurely (Agoratos et al., 2018; Havermans et al., 2020). Those who have experienced trauma require care and support to eliminate or reduce distressing symptoms (Bonnan-White et al., 2018; Noor et al., 2021). Not only is the reduction of traumatic stress imperative for the well-being of people and society but helping people transcend after

trauma is additionally important for humanity.

Trauma can provide the opportunity for a person to evolve and grow, conceptualized as PTG (Taku et al., 2021). PTG is more than recovering to a baseline condition prior to trauma, it is characterized by a change of priorities and a greater appreciation of life (Dickerson, 2021). There are therapeutic interventions for treating traumatic stress that may also facilitate PTG. Some interventions include cognitive behavioral therapy (CBT) (Belleville et al., 2018), cognitive processing therapy (CPT) (Murray et al., 2022; Thompson-Hollands et al., 2018), and prolonged exposure (Cherestal & Herts, 2021; Murray et al., 2022). Narrative therapies have also been effective for treating PTSD and may facilitate PTG (Bayes, 2022; Tedeschi et al., 2021). Novel interventions, such as SecondStory and The Posttraumatic Growth Path, have been created specifically for PTG (Roepke et al., 2018). However, several interventions created for PTG have utilized a pretest-posttest design. Therefore, more randomized controlled trials (RCT) are needed (Roepke et al., 2018). Additionally, only approximately half of the people who have been traumatized experience PTG (Wu et al., 2019). More effective treatment modalities are needed to increase the prevalence of PTG.

Attention has also been given to the relationship between PTG and communication patterns (Blackburn et al., 2021; Ziss, 2020). Positive communication trends have been identified for helping people experience PTG (Sherratt & Worrall, 2021; Tian & Solomon, 2020) through the management of emotions and the development of new cognitive appraisals (Zhen & Zhou, 2022). However, research is lacking regarding how hearing positive declarations of desired outcomes can influence PTG. Due to neuroplasticity (Ghen & Goodwill, 2022), epigenetics (Dyke et al., 2020), and constructed emotion (Gallois et al., 2021), positive declarations may help a person experience growth after trauma. Positive declarations through the application of a

new Positive Communication Approach (PCA) may help facilitate PTG. A pilot study implementing PCA during counseling sessions with the experimental group, and not the control group, provided insight into the relationship between PTG and positive declarations. The pilot study provided a foundation for continued exploration of a potential communication-based intervention for facilitating PTG.

Purpose of the Study

The purpose of this quantitative study was to examine if positive declarations facilitate PTG among those who have experienced trauma. The study also investigated if other mental health benefits were experienced because of using positive declarations through PCA, including increased hope, decreased anxiety, or decreased depression.

Research Questions and Hypotheses

RQ1: What is the difference in self-reported PTG between participants counseled with PCA and participants counseled without PCA?

H1$_0$: Participants within the experimental group who hear positive declarations will not experience higher levels of self-reported PTG compared to participants in the control group.

H1$_a$: Participants within the experimental group who hear positive declarations will experience higher levels of self-reported PTG compared to participants in the control group.

RQ2: Do positive declarations increase feelings of hope for participants counseled with PCA compared to those who were counseled without PCA?

H2$_0$: Participants within the experimental group who hear positive declarations will not experience an increased sense of hope compared to participants in the control group.

H2$_a$: Participants within the experimental group who hear positive declarations will experience an increased sense of hope compared to participants in the control group.

RQ3: Is there a self-reported decrease in anxiety symptoms experienced by participants counseled with PCA compared to participants counseled without PCA?

H3$_0$: Participants within the experimental group who hear positive declarations will not experience a self-reported decrease in symptoms of anxiety compared to participants in the control group.

H3$_a$: Participants within the experimental group who hear positive declarations will experience a self-reported decrease in symptoms of anxiety compared to participants in the control group.

RQ4: Is there a self-reported decrease in depression symptoms experienced by participants counseled with PCA compared to participants counseled without PCA?

H4$_0$: Participants within the experimental group who hear positive declarations will not experience a self-reported decrease in symptoms of depression compared to participants in the control group.

H4$_a$: Participants within the experimental group who hear positive declarations will experience a self-reported decrease in symptoms of depression compared to participants in the control group.

Assumptions and Limitations of the Study

Assumptions

Primary assumptions for the study included restricted recruitment, potential attrition, and participant accuracy and honesty with self-report measures. To participate, a history of trauma was required, but the trauma could longer be causing significant disruptions to daily living. It

was assumed that recruitment would be restricted due to such specific inclusion criteria. However, the inclusion criteria did not end up being as restrictive as anticipated and each participant met the qualifications. Potential attrition was also a concern due to participants being required to complete multiple counseling sessions and questionnaires. Busyness and the demands of life created the risk of participants failing to complete study requirements. However, due to convenience of telehealth counseling and digital questionnaires, all participants completed the study components. Another anticipated challenge was participant understanding of and honesty on self-report questionnaires. It was assumed that not all participants would complete self-report measures accurately, which would skew study data. Therefore, close monitoring and rapport was maintained surrounding completion of questionnaires. The assumption was accurate but mitigated, as confusion regarding questionnaires was expressed by some participants but resolved through additional explanation.

Limitations

Potential limitations of the study included the delivery method of interventions, influence of extraneous variables, generalizability, and participant predisposition toward growth. It was understood that participants may live far from the clinician, so counseling sessions were offered either in person or via Zoom. A possible limitation was that sessions provided in person versus Zoom would have different impacts on participants. However, all sessions were conducted through Zoom which eliminated discrepancies between delivery methods. Some challenges were identified with the use of a digital platform that are addressed as recommendations for future research. Extraneous variables were predicted as a limitation for understanding effectiveness of study interventions, as outside life events can impact mental health. The current study did not control extraneous variables to know if outcomes could fully be attributed to therapeutic

interventions. As predicted, the influence of extraneous variables did appear to be a limitation of the study, requiring attention for future research. Another predicted limitation of the study was generalizability. Generalizability was limited due to the small sample size of the study and minimal variation in participant demographics. Although randomization promoted equality of group assignments, several participants were from the same referral sources which hindered generalizability to society at large. Finally, participant personality types were not analyzed but may have influenced study outcomes. When considering the concept of PTG, personality has been viewed as a determinant of growth (Jayawickreme et al., 2021). It is not known whether participants in the experimental group were predisposed towards growth or if changes were the result of counseling with PCA.

Theoretical Foundation of the Study

Communication Theory

The current study was built upon theories that fuel the belief that PCA may facilitate PTG. The theoretical foundation of the proposed study includes communication theories, PTG theory, hope, and expectation theories. A biblical foundation is also presented that undergirds and supports the interpretation and use of secular philosophies. Different communication theories explain how communication can influence emotions, experiences, and behavior. The Theory of Constructed Emotion (Gallois et al., 2021) describes the phenomenon of language being paired with sensations to identify the emotion. Furthermore, emotional differentiation defines the ability to accurately explain emotional experiences within various contexts. Emotional differentiation has been linked with mental health. Specifically, a positive relationship has been recognized between differentiation and psychological well-being. (Gallois et al., 2021). The use of language to influence well-being through emotional expression supports the idea that positive

communication may help facilitate PTG after trauma. Greater variance in emotional descriptors improves mental health. Therefore, hearing positive language that may be less common surrounding trauma has the potential to perpetuate growth.

In addition to how language influences emotion, the theory of self-fulfilling prophecy suggests that communication can also influence situations and circumstances. Robert Merton's theory of self-fulfilling prophecy points to how words can influence and shape human experiences. The theory suggests that what people say can become reality (Schaedig, 2020). Words can create reality by provoking behaviors that cause a false statement to manifest as truth. The Barnesian performativity further explains that alignment with social situations is what contributes to change after the verbal expression of ideas (Marti & Gond, 2019). The concept of reality changing due to what people say inspires the practice of speaking desired outcomes of growth to facilitate PTG after trauma. Also, the concept of language style matching (LSM) drives the belief that speaking positive declarations over trauma survivors may model hopeful communication for them to mimic. LSM describes people subconsciously matching the speaking style of those they communicate with (Gasioreck et al., 2021). A benefit of LSM is the ability to manage and regulate social relationships and interactions. LSM may additionally assist counselors utilizing PCA by providing example speech for clients to match while striving for growth. A shift to PTG theory reveals how growth after trauma became a concept that continues to develop and evolve.

Posttraumatic Growth (PTG) Theory

Posttraumatic growth (PTG) is the positive psychological change that results from traumatic or highly stressful events (Allen et al., 2022; Taku et al., 2021). The clinical concept of PTG was developed in the 1990s by Richard Tedeschi and Lawrence Calhoun (Dell'Osso et al.,

2022). Calhoun and Tedeschi (2014) explained that the idea of loss and suffering resulting in positive change is an ancient assumption. For thousands of years, literature worldwide has attempted to capture the meaning and purpose of suffering. However, the practice of scholars systematically focusing on growth after trauma is a more recent trend. Significant work pertaining to traumatic growth was noted starting in the 1950's. During the 1990s, several articles were produced regarding trauma-related growth, including the development of the Posttraumatic Growth Inventory (PTGI) (Calhoun & Tedeschi, 2014). Different domains of PTG were determined by Tedeschi and Calhoun (1995) using qualitative data. There were initially three domains identified that were later expanded into five. The five domains include relationship quality and compassion, appreciation of life, spiritual change, personal strength, and new possibilities (Tedeschi, 2023). The interpretation of the relationship between PTG and psychological well-being varies.

Some scholars believe that psychological distress decreases as PTG increases. However, Tedeschi and Calhoun (2014) argue that the presence of PTG may not be associated with improved well-being and less distress, but rather experiencing life in more meaningful ways. The process for achieving PTG entails inquiring and responding to existential questions about how to live life fully. Pondering the meaning of life to live fully, and reducing psychological distress, are not mutually exclusive occurrences but are also not always related (Tedeschi & Calhoun, 2014). An explanation of how PTG occurs is further depicted through Tedeschi and Calhoun's (2014) model of PTG. Their model includes elements of character, the traumatic or stressful event, rumination, disclosure, sociocultural influence, narrative development, and wisdom. The components of Tedeschi and Calhoun's (2014) model influence how and if a person experiences PTG. Overall, studies have demonstrated that greater levels of PTG have been linked with

decreased psychological distress, greater life satisfaction, and greater positive emotions (Zhang et al., 2022). Furthermore, cognitive processes involved in PTG are a protective factor against future trauma and trauma-related mental illnesses (Pfeiffer et al., 2023). Building on a foundation of PTG, theory regarding hope and expectation is necessary for understanding how to cultivate positive change using words.

Hope/Expectation Theory

Hope and expectation abide at the core of human behavior and are important for growth after trauma. After years of research and study, the emotion and cognitive-based construct of hope can now be defined and measured (Gallagher et al., 2019). C.R. Synder's theory of hope defines hope as the state of motivation contingent on energy and plans to fulfill goals and desires. The emotions associated with the presence or lack of hope reinforce subsequent behavior (Gallagher et al., 2019). Hope theory is structured as a parallel system of both agency and pathways. Agency refers to the will of a person to achieve their goals and pathways are the means for someone to achieve goals. Successful integration of agency and pathways, and achievement of smaller goals, propels people to pursue larger goals. When integrated into people's lives, hope has been identified as beneficial for positive outcomes and personal growth (Schornick et al., 2023). Furthermore, Synder's theory of hope has been the predominant standard of empirical research about hope (Gallagher et al., 2019; Schornick et al., 2023).

Alongside hope, expectation has been theorized to influence behavior. Rotter's social learning theory (SLT) suggests that behavior is motivated by the level of expectation of a desired outcome (Mazur-Socha et al., 2023). Rotter takes behavior a step beyond goals and reinforcement to the level at which a person is expecting they will accomplish their goals. He promoted that expectations can be quantified and determined by previous experiences (Carton et

al., 2021). SLT consists of three basic components which are expectancies, reinforcement value, and the psychological situation. Expectancies refer to the belief that a behavior will cause a specific outcome, reinforcement value is the positive or negative likelihood for an outcome based on history, and the psychological situation is the subjective experience within a situation (Carton et al., 2021). The way hope and expectation drive behavior create a reason to believe that positive declarations may generate change by stirring hope and expectation for PTG. Additionally, many passages from the Bible support secular theories that undergird the current study.

Biblical Foundation

It was the Bible, the word of God, that inspired the development of PCA. Scripture teaches that words have power and when people speak in faith, they will have what they say. Understanding God's goodwill towards man is imperative for the implementation of PCA with those who have experienced trauma. Finally, secular theory and constructs regarding communication, PTG, hope, and expectancy confirm what scripture has already established as truth determined by God. Concerning communication theories, the theory of self-fulfilling prophecy is particularly supported by scripture. Proverbs 18:21 (*Holman Christian Standard Bible,* 2004/2020) highlights that the tongue possesses power by stating, "Death and life are in the power of the tongue, and those who love it will eat its fruit" (2004/2020). Scripture further describes how the tongue steers life through depictions of life activities. James 3:4 (2004/2020) explains that what people say determines the direction of their life, like the helm of a ship or the bit in a horse's mouth. Speech acts are also a core attribute of the Christian faith. The power of declaration moves God in the earth, invoking God's power, presence, and authority (Mohrmann, 2019). Moreover, Jesus was God in the flesh (2004/2020, John 1:14), and speaking life over

people was only one demonstration of the power of His words (Forger, 2020).

Like the theory of self-fulfilling prophecy, PTG is supported by scripture. God's will towards man is good and He can end distress, heal people, and use harm for good. God frees people from their trouble and distress (2004/2020, Psalms 107:13-14; 2 Timothy) and is referenced as savior, deliverer, refuge, and strong tower (2004/2020, Samuel 22:2-3). After God delivers people from distress, healing can then occur for those who have been wounded or hurt. In Psalms 23:2-3 (2004/2020), David described the Lord as one who leads to green pastures and quiet waters and restores the soul. Furthermore, PTG is evident by God's ability to use all things for a person's good (2004/2020, Romans 8:28). What was meant for evil, God uses for good, demonstrated through the enslavement and transformation of Joseph (2004/2020, Genesis 50:20). McMartin & Lewis-Hall (2022) confirmed that the Christian faith points to growth in character as the result of suffering. From a Christian perspective, increased compassion and empathy are ways people can grow after trials and tribulation (Martin & Lewis-Hall, 2022), which aligns with components of PTG.

Theories regarding hope and expectancy are also affirmed through scripture. The Bible reveals that through faith and expectation, speaking life can result in change. The ministry and life of Jesus were models of faith his followers could mimic on earth (Hadley, 2020). People were created in the image of God (2004/2020, Genesis 1:26) with the expectation to do works similar and even greater than Jesus did (2004/2020, John 14:12-13). Jesus made clear that it is by faith that people create change through the words they speak (2004/2020, Matthew 17:20). Hope and expectation are supported by the concept of faith defined in Hebrews 11:1 (2004/2020), that faith is what is hoped for and proof of what is not seen. Rompies & Hakh (2023) highlighted that people are given authority from God to perform supernatural acts through faith, but people are

not God and are still under submission to the power of God. God desires for humans to be his hands, feet, and mouthpiece on earth to fulfill his will. Hadley (2020) explained that it is the attitude of people that contributes to hope, but the steadfastness and loyalty of God result in expectancy. The scriptures presented about the power of the tongue, God's ability to use evil for good, and change resulting from faith and expectation establish the biblical foundation of the study.

Definition of Terms

The following list defines study terms.

ANCOVA – An ANCOVA is an analysis of covariance that blends ANOVA and regression to statistically account for covariates (Stanley, 2022).

Anxiety – An emotional state that is comprised of worried thoughts, feelings of tension, and possible physical symptoms such as changes in blood pressure (American Psychological Association, 2023).

Appreciation of life – The domain of PTG that encompasses new or increased gratitude for life after living through trauma (Tedeschi et al., 2021).

Automatization – Behavior becoming second nature as the result of practice and repetition (Alm, 2021).

Communication – An exchange of information and form of social behavior (Hedge, 2001).

Depression – Prolonged despair or extreme sadness that disrupts activities of daily living. Physical well-being can also be impacted by weight changes, sleep disruptions, altered energy levels, and symptoms of pain (APA, 2023).

Epigenetics – The study of how environment and behavior influence genes and DNA output (Dyke et al., 2020).

Expectation - The probability-driven perception regarding outcomes (Dowling & Rickwood, 2016).

Hope – An emotion and cognitive-based construct defined as a motivational state based on plans and energy to accomplish aspirations (Gallagher et al., 2019).

Narrative therapy – A form of therapy that strategically uses language to interpret experiences differently. Clinicians help clients examine their experience, with distance between themselves and the problem, to learn how meaning is ascribed through society and culture (Bayes, 2022).

Neuroplasticity – The brain's ability to modify neural networks through weakening, strengthening, or pruning synapses (Chen & Goodwill, 2022).

New of different path – The domain of PTG that references how people discover new ways to find fulfillment and purpose in their lives (Tedeschi et al., 2021).

Personal strength – The domain of PTG that references a person's understanding of their individual capabilities (Tedeschi et al., 2021).

Pilot study - A subset of feasibility studies that specifically look at a design feature proposed for the main trial, whether in part or in full, conducted on a smaller scale (Eldridge et al., 2016).

Positive Communication Approach (PCA) – A new intervention for facilitating PTG that entails positive declarations of desired psychological growth (Owen, 2024).[1]

Positive declarations – Verbal statements of psychological growth, or positive change, that a person desires to achieve (Owen, 2024).[2]

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[1] PCA is a new approach designed and referenced for the current study.

[2] Empirical definitions of positive declarations have not been previously determined. Positive affirmations are a similar concept of statements that evoke motivation and self-esteem. However, positive declarations are derived from the Biblical concept of declaring and decreeing in faith to establish change.

Posttraumatic Growth (PTG) – Positive psychological change after highly stressful or traumatic events (Allen et al., 2022).

Posttraumatic stress disorder (PTSD) – A debilitating psychiatric disorder that can result after trauma including prolonged and maladaptive trauma responses (American Psychiatric Association, 2022)

Relationship quality and compassion– The domain of PTG that captures the extent of relating to and engaging with others after traumatic experiences (Tedeschi et al., 2021).

Spiritual and Existential Change – The domain of PTG that references how people re-evaluate their spiritual belief system after trauma through a series of existential questions (Tedeschi et al., 2021).

Trauma – The response after stressful experiences that cause emotional, physical, or cognitive harm (Vila-Badia et al., 2021).

Significance of the Study

The significance of the current study includes both secular and spiritual implications for the field of psychology. From a secular perspective, the study has produced additional data about the relationship between communication and PTG. Research has indicated that various forms of positive communication can increase PTG (Blackburn et al., 2021; Haroosh & Freedman, 2017; Ziss, 2020). However, information has not been available regarding if how positive declarations help facilitate PTG. In addition to providing new information, study data also supports the Theory of Constructed Emotion (Gallois et al., 2021), the Theory of Self-fulfilling Prophecy (Schaedig, 2020), epigenetics (Dyke et al., 2020), and Rotter's Social Learning Theory (SLT) (Mazur-Socha et al., 2023). Spiritually, biblical principles are supported by the study due to exemplifying the power of words. For those who have experienced trauma, the ability of

words to stir expectancy for growth has been supported through this study. Ultimately, the current study provided the opportunity for biblical principles and psychological constructs to align.

The present study is also significant as one of the first to explore declaring desired outcomes to facilitate PTG in a therapeutic context. This study is significant clinically for therapists and those working to increase the prevalence of PTG among people who have experienced trauma. Many interventions created for PTG have been tested using pretest-posttest designs rather than RCT (Roepke et al., 2018). As an experiment, this study produced data collected using a control group. Study findings indicate a potential relationship between PCA and PTG. Therefore, PCA may be considered for additional exploration and study. Therapeutic modalities are sometimes difficult to implement, consisting of steps that are complex or ambiguous. As a potential therapeutic modality for PTG, PCA provides a straightforward and easily replicated intervention for counselors. This study also provides insight regarding the relationship between positive declarations, hope, anxiety, and depression. Positive declarations may be helpful for achieving various goals with clients other than PTG.

Summary

Experiencing PTG after trauma is important for propelling people forward in meaning and purpose. It is particularly important for humanity to function from a position of growth, versus impairment, as the prevalence of trauma is increasing (Jugessur et al., 2021). However, only approximately half of people experience PTG after trauma (Wu et al., 2019) and few interventions for PTG have been tested using RCT design (Roepke et al., 2018). Positive communication has been studied in relation to levels of PTG (Haroosh & Freedman, 2017; Sherratt & Worrall, 2021; Spialek et al., 2019). Yet, a gap in research has been identified as

declaring positive outcomes of growth has not been explored in relation to PTG. The present study explored the relationship between positive declarations and PTG though use of PCA with those who have experienced trauma. The theoretical foundation and synopsis of existing literature have been provided. The problem statement, purpose, research questions, and hypotheses were also reviewed. Additionally explained were the assumptions, limitations, and study significance. In chapter two, an extensive literature review of study constructs further supports and provides justification for the study.

CHAPTER 2: LITERATURE REVIEW

The current chapter presents background information on communication, posttraumatic growth (PTG), and how communication cultivates hope and expectation. Research provides evidence that communication can affect human emotions and well-being (Gallois et al., 2021; Schaedig, 2020). Communication can specifically influence the impact of trauma and a person's future after traumatic events (Sherratt & Worrall, 2021; Spialek et al., 2019). Trauma has debilitating effects on humanity that can lead to brokenness and the need for healing (Oakley et al., 2021; Vila-Badia et al., 2021). A step beyond healing from trauma is growth and personal transcendence, known as PTG (Allen et al., 2022; Taku et al., 2021). PTG can be facilitated by different therapeutic interventions (Lee et al., 2020; Gorman et al., 2020; Martin et al., Roepke et al., 2018), including the use of narrative therapy (Bayes, 2022; Tedeschi et al., 2021). A closer look at interactions that promote traumatic growth highlights which aspects of communication have been identified as effective for facilitating PTG.

Awareness that hope and expectation are evoked by positive speech provides insight into why words cultivate change (Burns, 2023; Gallagher et al., 2019; Vatne & Nåden, 2018). Scripture presents supporting evidence that words hold power (2004/2020, Mark 11:22-24; Proverbs 18:21) and verbal declarations can steer life (2004/2020, James 3:2-6). The concept of PTG as the ability to grow after trauma is also supported within the Bible (2004/2020, Genesis 50:20; Romans 8:28). Although various verbal approaches and word usage have been analyzed in relation to PTG (Blackburn et al., 2021; Ziss, 2020), the benefit of positive declarations of desired psychological growth have not been explored with PTG or in a therapeutic context. The lack of research on positive declarations and PTG provided an opportunity for additional study. A Positive Communication Approach (PCA) that incorporates positive declarations into

therapeutic discourse was created as a potential intervention for PTG.

Description of Search Strategy

The compilation of background information for study variables resulted from a review of existing literature. To retrieve current empirical evidence for study variables, electronic databases were used. The primary source for retrieving online articles was Liberty University's Jerry Falwell Library. The six primary databases searched were PsychARTICLES, EBSCO, SAGE Journals, APAPsycNET, ProQuest, and PsychINFO. A first-wave search included peer-reviewed journal articles, or book chapters, published within the last five years. When limited data was available, subsequent searches were expanded for publications beyond five years and to all databases. Google Scholar was used as an additional search engine to confirm available literature for study variables.

Terms searched were a combination of 'communication terms' (influential speech, healing words, positive talk, declarations, productive communication), 'trauma terms' (trauma, traumatic stress, PTSD, moral injury, psychological distress, mental disturbance), 'growth terms' (traumatic growth, PTG, resilience, positive change, psychological adjustment, stress-related growth) and 'intervention terms' (PTG therapeutic modalities, trauma treatment, narrative therapy, effective interventions for PTG, facilitating PTG, therapy for traumatic growth). The biblical search was conducted by reviewing scripture referencing main study terms. Books were reviewed by authors who extensively studied and wrote about the study constructs as well as an electronic search of biblical commentary.

Review of Literature

The power of communication has been confirmed through research (Bodie et al., 2021; Liebrecht et al., 2019), theory development (Gallois et al., 2021; Gasiorek et al., 2021; Schaedig,

2020), and physiological functioning (Alm, 2021; Dyke et al., 2020; Leaf, 2013). Communication theories, such as the Theory of Constructed Emotion (Gallois et al., 2021) and the theory of self-fulfilling prophecy (Schaedig, 2020), support how communication shapes life. Physiologically, epigenetics (Dyke et al., 2020) and neuroplasticity (Chen & Goodwill, 2022) explain how communication can influence personal experiences, particularly trauma and trauma-related growth. Trauma results from harmful experiences to a person's body or soul (Vila-Badia et al., 2021). Dysfunction and brokenness can result from trauma, impacting a person's individual well-being (Beilharz et al., 2020; Jugessur et al., 202; Mahlangu et al., 2023) and their social functioning (Dunn et al., 2023; Noor et al., 2021; Simon et al., 2019). Although trauma can lead to debilitation for some (Blackburn et al., 2021; Oakley et al., 2021), posttraumatic growth (PTG) can result for others (Taku et al., 2021).

The concept of PTG describes positive psychological change that occurs after highly stressful or traumatic events (Allen et al., 2022; Taku et al., 2021). There are different domains of life that PTG can impact, which provides evidence through daily living that growth has occurred (Zhang et al., 2022). PTG has been encouraged by using pre-existing therapeutic interventions (Lee et al., 2020; Gorman et al., 2020; Martin et al., 2021; Wen et al., 2021). Novel interventions have also been created to specifically help people achieve PTG (Roepke et al., 2018; Shochet et al., 2011). Narrative therapies are particularly effective in helping people achieve PTG (Bayes, 2022; Tedeschi et al., 2021). Strategically using language allows narrative therapies to help people view and capture their experiences differently. Specific aspects of communication that can specifically lead to growth after trauma have been explored. Previous research has indicated that positive communication can impact levels of PTG through discussions of rehabilitation (Spialek et al., 2019), healing narratives (Sherratt & Worrall, 2021),

and specific phrase and word usage (Blackburn et al., 2021; Ziss, 2020).

The ability to inspire hope and cultivate expectation is why words can facilitate healing and growth. People with high hopes typically experience positive emotions and are more confident regarding life challenges and goals (Gallagher et al., 2019). Level of expectation has been linked with the amount of therapeutic change for clients, revealing that higher expectations are linked with better outcomes (Asay & Lambert, 1999). The power of words and the ability to create change through expectancy can be observed throughout the Bible. A biblical foundation is present supporting communication as a source of power and direction for life (*Holman Christian Standard Bible.* 2004/2020, James 3:2-6; Mark 11:22-24; Proverbs 18:21). Within the Bible, supernatural acts were demonstrated by both Jesus and other people because of their declarations. Scripture supports the concepts of PTG as God not only delivers people from their distress (2004/2020, Psalms 107:13-14; 2 Samuel 22:2-3) but can use what was intended to be evil for good (2004/2020, Genesis 50:20). Research and biblical principles surrounding the power of words and growth after trauma has inspired a new therapeutic approach for PTG. A Positive Communication Approach (PCA), consisting of psychoeducation about communication and declarations of growth, may help people experience PTG.

Communication

Henry Wadsworth Longfellow (1839), an American poet and educator, described the human voice as the organ of the soul. Longfellow (1839) identified human speech as the bridge between one's inner life and the surrounding world (Hoegaerts, 2023). Furthermore, language is considered "the essence of human existence" (Hedge, 2001, p.3) and serves both biological survival and social functioning. The power of the tongue is demonstrated through problem resolution, team collaboration, and adjustment to various audiences (Hartman & McCambridge,

2011). Individual communication skills also translate to success within business, personal relationships, education, medicine, legal, and political systems (de Vries, 2013). Understanding the power of communication and its overarching impacts has fueled the study of individualized speech patterns and communication trends among people. Analysis of communication patterns and trends provides insight into how words can contribute to success or dysfunction in a person's life. Flow, awareness of others, and type of speech all influence conversational outcomes.

The flow of speech, through speaking turns and person-centeredness, creates various responses from recipients (Bodie et al., 2021). Person-centeredness (PC) describes the adaptation and awareness of the person speaking, determined at various levels. Higher PC and equal opportunities to speak have been linked with stronger feelings of support during conversations (Bodie et al., 2021). Positive and negative speech impact people differently (Liebrecht et al., 2019). Positive communication has been linked with increased quality of life and well-being, and less psychological burden (Zhang et al., 2023). Negative utterances have been found to evoke stronger emotions, draw more attention, and remain in human memory longer than positive utterances. The Pollyanna principle promotes that intense interpersonal responses, generated through negative communication, violate social norms and expectations (Liebrecht et al., 2019). Evidenced by the impact of speech, positive communication is necessary to replace or alleviate the negative impacts of dysfunctional communication. Observations of communication trends and patterns have led to the development of different communication theories.

Communication Theories

There are several theories that explain the consequences of speech on both human response and behavior. An aspect of the relationship between language and emotion is explained by the Theory of Constructed Emotion (Gallois et al., 2021). The brain constructs emotion by

developing speech surrounding a sensation. Experiences are labeled by others and reinforced with time, resulting in words for emotion. Moreover, emotional differentiation is the ability to discuss feelings using language in a discrete and specific manner. Weaker emotional differentiation has been linked to depression, borderline personality disorder, and substance abuse. Stronger emotional differentiation has been linked with mental and emotional health, as well as benefits in relationships (Gallois et al., 2021). The ability to express the emotional impact of experiences may help a person recover and heal after stress or hardship.

Alongside expression of emotion, language has been identified as being able to trigger and perpetuate events. The belief that words spoken can create realities is supported by Robert Merton's theory of self-fulfilling prophecy. The theory of self-fulfilling prophecy explains how statements can perpetuate events (Schaedig, 2020). A false statement can provoke behaviors and actions that align with the original statement. The psychological mechanisms that respond to fear and worry of future events can contribute to a false claim becoming true (Schaedig, 2020). Building upon the notion of self-fulfilling prophecies, the Barnesian performativity expounds that the self-fulfillment of spoken ideas is due to alignment with social events that contribute to change (Marti & Gond, 2019). The concepts of Barnesian performativity and self-fulfilling prophecy support the importance of speaking positively to promote health and well-being.

In addition to how communication can cause emotional and social alignment, a person's speech can be directly impacted by the communication of others (Schweitzer & Waytz, 2020). The concept of language style matching (LSM) is the phenomenon of people unconsciously matching the communication styles of those they speak with (Gasiorek et al., 2021). It is believed that the purpose of LSM is to accommodate self and others through regulating comprehension and managing social relationships (Gasiorek et al., 2021). Due to the influence of

others and LSM, being around positive and encouraging communication is important for promoting well-being and growth after trauma. Different theories suggest how communication influences emotional and social experiences. Furthermore, the influence of communication can be further demonstrated through epigenetics and neuroscience.

Epigenetics and the Brain

Communication has been confirmed as life-altering through the fields of epigenetics and neuroscience. The field of epigenetics explains how environmental influence alters genetic expression (Dyke et al., 2020; Lacagnina, 2018). Epigenetics has defied the notion that genetic expression is fixed by revealing that what people are exposed to strongly influences DNA output. Fear, worry, and anxiety send messages to our DNA and can become an automatic emotional response over time. Chronic stress can lead to changes within the brain, resulting in various impairments. However, the brain's capacity for neuroplasticity remains throughout the lifespan (Chen & Goodwill, 2022). Neuroplasticity is the modification of neuronal networks through strengthening, weakening, or pruning of synapses (Alm, 2021; Chen & Goodwill, 2022). Neuroplasticity of the brain allows for change through positive communication and speech creating new neural responses and expression.

What people say can become routine expressions with embedded consequences in the brain. Automatization is the occurrence of an action or behavior becoming second nature due to practice and repetition (Alm, 2021). Once automatization occurs, tasks can be performed with little attention and energy, as opposed to behaviors that require conscious focus and intent. Two to three 21-day cycles of thinking and behaving lead to automatization of the unconscious mind, which nourishes and supports conscious activity (Leaf, 2013). Stress is the body's reaction to toxic thinking that can be reduced through therapeutic strategies, decreasing the probability of

neuropsychiatric disorders (Leaf, 2013). Neurotransmitters and neuroplasticity are affected by a person's thoughts which can propel cellular activity in either a positive or negative direction (Leaf, 2013). Thoughts must first be implanted into a person's mind which then can then become verbalizations and actions (Leaf, 2013). Positive communication must become an automatic response that may help reshape a person's experience after trauma. Hearing declarations of growth is crucial for trauma survivors to first believe the possibility and then speak and act in a manner that supports growth.

Speaking positive declarations may activate the potential for a person's future that otherwise might not have been considered. Although the occurrence of trauma cannot be controlled, the response that follows the trauma is a series of choices. Mirror neurons are a type of neuron that activates when observing another person, particularly during the execution of a motor function (Heyes & Catmur, 2022). Mirror neurons play a role in speech perception and imitation (Heyes & Catmur, 2022). Understanding the activation of mirror neurons when observing behavior points to why people replicate the speech and communication patterns of those around them. Evidence of the brain's inclination to mimic behavior supports why it is important to engage with those who speak positively. Furthermore, the presence of others can activate the regions of the brain that are connected to reward processing and social evaluation (Laursen & Veenstra, 2021). The tendency to align with other people can be influenced by the brain activity that is concerned with social acceptance. The focus from theory and neurological response to communication now shifts to the exploration of trauma and PTG.

Trauma and PTSD

Trauma results from experiences that cause physical, emotional, or cognitive harm (Vila-Badia et al., 2021). Common forms of trauma are disaster, disease, war and terrorism, accidents,

violence, sexual abuse, and death (Kalisch et al., 2023; Williams & Williams, 2020). Additionally, a threat to one's resources or ability to obtain resources can be traumatic, particularly when sudden and rapid. Trauma is hindering and can change the trajectory of a person's life. Posttraumatic stress disorder (PTSD) can result after trauma, which is a debilitating psychiatric disorder with prolonged and maladaptive trauma responses (American Psychiatric Association, 2022). One in 11 people are predicted to be diagnosed with PTSD (APA, 2022). An estimated 100 million are believed to be impacted by posttraumatic stress within the workforce (Williams & Williams, 2020). PTSD creates a burden on both individual and collective levels due to decreased productivity, increased absenteeism, and needed medical interventions (Lee et al., 2020; Oakley et al., 2021). The National Institute of Mental Health reported that 7.4% of the disease burden in the United States is due to psychiatric disorders and the increasing prevalence of PTSD (Oakley et al., 2021). Furthermore, it is estimated that over 70% of people worldwide have experienced at least one traumatic event (Zhang et al., 2022). Due to both personal debilitation and national impacts of PTSD, it is crucial to alleviate traumatic stress symptoms for those affected.

There are different types of traumas with varying severity, frequency of occurrence, and impact (Birkeland et al, 2022). Type 1 traumas include single events that are life-threatening in nature, and type 2 traumas occur over an extended period. Predominant traumas are from natural events (Witt et al., 2022), interpersonal traumas caused by people (Kalisch et al., 2023), and trauma against a minority culture from a dominant group (Sublica & Link, 2022). Traumatic events are also classified as either intentional or unintentional (Blackburn et al., 2021). Intentional traumas are planned that an individual has control over, such as an abortion. A victim of an unintentional trauma has no prior awareness as the traumatic event is unplanned and occurs

unexpectedly. The type and frequency of trauma a person experiences can influence their recovery (Gleeson et al., 2022). The majority of trauma occurs by the age of 25 and approximately 60% of traumatic occurrences happen by the age of 18 (Dunn et al., 2023). Trauma can disrupt the way a person views themselves, others, and the world (Allen et al., 2022).

Although not everyone, certain people develop PTSD after experiencing trauma. Different variables influence the likelihood of a person developing PTSD, including the type of trauma, social support (Bonnan-White et al., 2018), self-perception, personality, and culture (Williams & Williams, 2020). The type of trauma can influence the severity of outcomes for survivors. Interpersonal trauma, compared to non-interpersonal trauma, tends to cause more distress due to the victim's self-blame and damaged trust in people and the world (Bonnan-White et al., 2018). Social support is formal support within the community, such as legal and religious agents, and informal support is provided by family members and friends. Informal support systems are often accessed first prior to the utilization of formal community support. If a positive response is received from social support, then the negative implications of trauma are often buffered. However, many trauma survivors receive negative responses from social support which can lead to adverse outcomes and revictimization for the survivor (Bonnan-White et al., 2018).

Concerning self-perception and personality, people who perceive themselves as loved and supported experience less PTSD (Williams & Williams, 2020). Those with higher self-esteem also tend to experience fewer PTSD symptoms. Neurotic personalities have been positively linked with the development of PTSD due to the tendency to fixate on the trauma. Furthermore, agreeableness is a personality trait that has been identified as a resilience factor against trauma (Williams & Williams, 2020). Culturally, certain collective worldviews

contribute to the development of PTSD. Cultures that encourage a sense of shame, self-blame, and pessimism perpetuate higher rates of PTSD. Some cultures also contribute to traumatic stress by believing trauma should be kept private and shunning those who seek outside help for trauma (Williams & Williams, 2020). Insight regarding predisposition and risk factors for developing traumatic stress guides understanding for why people are impacted differently by trauma. Building from trauma prevalence, type, and risk factors for traumatic stress is specific information about the repercussions of trauma.

Trauma and Brokenness

Various forms of distress and brokenness have resulted from trauma. Trauma can lead to dysfunctional habits or hindered development psychologically (Beilharz et al., 2020; Jugessur et al., 202; Mahlangu et al., 2023), physically (Havermans et al., 2020, Agoratos et al., 2018; Paredes-Echeverri, et al., 2022) and socially (Dunn et al., 2023; Noor et al., 2021; Simon et al., 2019). Childhood trauma is particularly influential as a person is not fully developed when the trauma occurs (Beilharz et al., 2020). Deviant behavior towards a person under the age of 18 constitutes childhood maltreatment and trauma. Forms of childhood trauma include physical, emotional, and sexual abuse, as well as emotional and physical neglect (Jugessur et al., 2021; Sun et al., 2023). Health concerns resulting from childhood trauma are creating a global threat, as an estimated one in every two children experiences some form of maltreatment (Jugessur et al., 2021). Long-term consequences linked with childhood trauma include struggles with academia, impaired mental health, and difficulties with work and personal relationships (Jugessur et al., 2021). Brokenness from trauma can be viewed as having repercussions from the inside out, beginning with psychological implications.

Psychological Implications

There are several negative impacts of trauma on a person's mental health. Examples of psychological impairments from trauma include mental health disturbance and withdrawal (Beilharz et al., 2020; Jugessur et al., 2021), intrusive thoughts, flashbacks, and difficulty sleeping (Mahlangu et al., 2023). In addition to PTSD, specific mental health issues related to trauma include depression, anxiety, somatic disorders, obsessive-compulsive disorders, and suicide attempts (Beilharz et al., 2020). Mental health disorders, such as depression, anxiety, and substance use disorders are often co-occurring with posttraumatic stress (PTS) (Bryant, 2019). Preexisting mental health disorders may increase the likelihood of developing PTSD, or PTSD may trigger the development of other disorders. To emphasize the damage that can result from trauma, a history of trauma is estimated for up to 90% of those with severe mental illness (SMI) (Noor et al., 2021). The chain reaction resulting from trauma can more specifically be observed through the occurrence of depression and suicide.

Depression is a primary contributor to psychiatric morbidity globally (Jugessur et al., 2021). People who have experienced childhood trauma are twice as likely to develop major depressive disorder (MDD). Dysfunctional attitudes are negative schemas that develop because of stress on the mind and body and are at the core of many mental pathologies. Negative thought processes impact beliefs about the world, oneself, and the future and frequently result from traumatic experiences (Jugessur et al., 2021). Suicide has been determined as a leading cause of death for young adults between the ages of 15-34 years old and is the tenth leading cause of death for people of all ages in the United States (Curtis et al., 2020). Suicidal ideation and attempts have often been linked with incidences of violence and sexual trauma. As the number of traumatic incidents continues to occur, the likelihood of suicide increases (Curtis et al., 2020;

Grandison et al., 2022). In addition to understanding the devastation caused by depression and suicide, examples from the COVID-19 pandemic of 2020 demonstrate psychological distress from trauma.

Interviews conducted with healthcare workers who aided with the COVID-19 pandemic provide insight into some of the psychological distress the pandemic caused. Mahlangu et al. (2023) conducted interviews with 44 frontline healthcare workers (FLHCWs) who worked in COVID-19 units during the pandemic. FLHCWs provided statements about their experiences, which most workers reported as highly stressful and traumatic. Themes of emotional distress, fear, sleeplessness, and heartbreak were noted from the interviews as the result of being a FHCW. A primary reason that FHCWs reported being traumatized was because of watching patients and colleagues dying almost daily. One doctor described vivid flashbacks of remembering each time they informed families of a loved one's death and the immense sadness it caused (Mahlangu et al., 2023). Many workers feared they would also contract the virus and faced the risk of potential death. Another layer of distress that results from trauma involves a person’s physiological health.

Physiological Health

Trauma can hinder a person physiologically due to direct bodily harm (Havermans et al., 2020), manifested stress within the body (Agoratos et al., 2018; Beilharz et al., 2020; Paredes-Echeverri, et al., 2022) and lack of access to appropriate health care (Subica & Link, 2022). Immediate physical harm from trauma results in many admissions to trauma centers. After trauma, some people experience short-term disabilities, long-term disabilities, or even death (Havermans et al., 2020). Early life stress and trauma can trigger a chain of health implications resulting in physiological disequilibrium, even decades after the traumatic occurrence (Agoratos

et al., 2018). During vital periods of brain development, trauma can have a programming effect on neural networks that regulate stress responses which results in negative neuroendocrine alterations. Furthermore, the prolonged physiological impacts of traumatic stress can lead to chronic head and spinal pain, arthritis, diabetes, asthma, and heart disease. In addition to physical ailments and disease, traumatic stress can also lead to eventual physical death (Agoratos et al., 2018).

Traumatized individuals have been found to experience disruptions in neurobiological mechanisms. Stress systems are affected by trauma which impacts brain function, particularly in the frontal cortex (Jugessur et al., 2021). Those who experience high levels of childhood trauma have been identified as having autonomic dysregulation. Within laboratory settings, notable changes in heart rate variability and nocturnal heart rate have been observed after trauma (Beilharz et al., 2020). A connection has been identified between people who have functional neurological disorder (FND) and former traumatic experiences (Paredes-Echeverri et al., 2022). FND is a neuropsychiatric condition characterized by sensory, motor, and cognitive symptoms. Childhood trauma has been positively associated with symptom severity of FND. In a study of 54 FND patients, those with a history of sexual abuse had an earlier onset and more severe seizures than those without sexual abuse. Also, compared to the FND patients without probable PTSD, the ones with traumatic stress were linked with decreased physical health (Paredes-Echeverri, et al., 2022).

Many groups of individuals experience trauma as the result of their culture being targeted. Cultural traumas can occur in the form of colonization, genocide, and hate crimes. Typically, cultural traumas are targeted toward indigenous persons, refugees, immigrants, and sexual minorities (Subica & Link, 2022). Additionally, minorities are at risk of experiencing

barriers to healthcare due to stigma, racism, and their socioeconomic status. The physical and mental health complications that result from cultural trauma can be exacerbated due to a prolonged lack of medical treatment (Subica & Link, 2022). An example is discrimination for ethnic minority veterans within the healthcare system. In 2017, approximately 11% of the six million veterans enrolled in VA health care had a diagnosis of PTSD (Spoont et al., 2021). Veterans who are ethnic minorities experience PTSD more than non-ethnic minority veterans. Ethnic minority veterans have encountered barriers to accessing appropriate care, have felt unwelcome in VA facilities, and have had negative experiences when accessing healthcare services (Spoont et al., 2021). Alongside psychological and physiological implications, social impairments can also result from traumatic experiences.

Social Impairments

Accompanying psychological and physiological brokenness, trauma can result in social impairments that impact a person's interpersonal success and quality of life (Dunn et al., 2023; Noor et al., 2021). As people grow, developmental milestones occur with emotional regulation, task management, relationships, and entering the workforce (Dunn et al., 2023). Natural development and milestones can be disrupted when trauma occurs which can result in dysregulation (Dunn et al., 2023). People suffering from traumatic stress may have more difficulty with their professional performance, parenting, family relationships, and other interpersonal engagements (Stuke et al., 2023). Several studies have established that psychosocial impairments are greater as traumatic stress symptoms increase. Social impairments after trauma are often due to depression, rumination, avoidance, numbing, and hyperarousal (Stuke et al., 2023). The presence of mental health complications that violate social norms often leads to social rejection and relationship instability (Noor et al., 2021). A prime avenue for

observing social impairments due to trauma is within personal relationships.

A fundamental way that trauma impacts functioning can be observed through both parenting and intimate partner relationships. If a parent has mental health challenges due to trauma, parenting sensitivities and a secure attachment with their child may be compromised (Erickson et al., 2019). The time that a child is in the womb through their first year of life is crucial for both the parent and child. During this phase, women who have experienced trauma are more susceptible to increased anxiety and mood disorders while their child is experiencing significant brain development. Maternal depression and anxiety have been linked with premature birth and low weight as well as cognitive, behavioral, and psychomotor deficits (Erickson et al., 2019). Concerning intimate partner relationships, when one or both partners battle traumatic stress, compared to no traumatic stress, there is often decreased relationship satisfaction (Marshall & Kuijer, 2017). Lower levels of warmth and higher levels of conflict have been noted within relationships with traumatic stress present. Intimate partners battling traumatic stress tend to experience exacerbated anger and anxiety during communication about conflict. For someone with a background of trauma, fear of intimacy with their partner may also exist (Marshall & Kuijer, 2017). Alongside relationship strain, functional impairments can additionally be experienced after trauma.

Increased functional impairments are noted for those who have experienced traumatic stress. Levels of employment are typically lower for those with PTSD and traumatic stress compared to those without (Simon et al., 2019). Functional impairment resulting from PTSD is often self-treated through avoidance and substance use. Avoidance and substance use are maladaptive coping strategies for mitigating functional impairment that feed the continuation of PTSD symptoms (McGuire et al., 2020). People with traumatic stress may struggle to trust

others. Those with serious mental illness (SMI) often distrust healthcare providers, resulting in less ongoing mental health maintenance and increased hospitalizations. Research shows that when those with SMI work together with healthcare providers to gain confidence, mental health disparities become more managed and substance abuse decreases (Noor et al., 2021). Brokenness caused by trauma is evident through the psychological, physiological, and social impairments reviewed. However, people are not only able to heal from trauma and brokenness but can grow and transcend because of their distress, a phenomenon known as PTG.

Posttraumatic Growth (PTG)

The concept of posttraumatic growth (PTG) was developed in the mid-1990s by Richard Tedeschi and Lawrence Calhoun (Dell'Osso et al., 2022). The occurrence of (PTG) is understood as a positive psychological change after highly stressful or traumatic events (Allen et al., 2022; Taku et al., 2021). Cognitive processing after trauma entails the mental search for meaning and understanding of the traumatic event. Two common thoughts for identifying purpose include reflecting on why the traumatic event happened and what impact the event has had on life (Henson et al., 2021). Engagement in cognitive processing is related to higher levels of PTG. Overarching changes due to PTG are observed through altered self-awareness, adjusted life philosophy, and improved interpersonal experiences (Wen et al., 2021). More specifically, PTG consists of five domains of growth including relationship quality and compassion, appreciation of life, spiritual and existential change, personal strength, and a new or different path (Taku et al., 2021; Tedeschi, 2023; Zhang et al., 2022).

When a person experiences trauma, worldviews and assumptions are disrupted (Allen et al., 2022). The development of new assumptions can result in PTG when cognitive processing is deliberately geared towards positivity, meaning, and purpose (Allen et al., 2022; Tedeschi,

2023). The process of achieving PTG is similar for all people regardless of the type of trauma they experienced (Tedeschi, 2023). Furthermore, if people do not receive adequate support and encouragement after trauma, negative changes can result in the same domains of PTG known as posttraumatic depreciation (PTD) (Zięba et al., 2019). Traumatic stress symptoms can be resolved prior to a person experiencing PTG. However, traumatic stress symptoms and PTG can occur simultaneously and PTG does not equate to the absence of emotional distress or psychological pain (Lee et al., 2020). Only 50% of people who have endured trauma are estimated to experience PTG (Wu et al., 2019). Longitudinal studies have revealed that the development of PTG can occur over years and is achievable for individuals, organizations, and entire communities (Pfeiffer et al., 2023).

The construct of PTG helps explain why those with high-risk professions, such as aid workers and first responders, can adjust to trauma and even maintain psychological health (Wen et al., 2021). People who experience higher levels of PTG are linked with greater positive emotions, greater life satisfaction, and decreased psychological distress. Better physical health has also been linked with PTG. Those with cancer who experienced PTG have been found to have stronger immune function, healthier neuroendocrine and diurnal cortisol rhythm (Zhang et al., 2022). The cognitive processes that are engaged in growing after trauma are found to help people be more resilient against future trauma and are a protective factor against trauma-related mental illness (Pfeiffer et al., 2023). A closer look at the five domains of PTG reveals how growth may appear within daily living for those who have experienced trauma. Each domain is defined and provided with an example of growth from a study by Zhai et al. (2019) as well as other relevant cases.

Five Domains of PTG

Relationship Quality and Compassion

The five domains of PTG have been defined for recognizing when a person has transcended from their traumatic experience. One of the five domains of PTG is relationship quality and compassion. Relationship quality and compassion refer to the change in how people experience their relationships with others (Tedeschi et al., 2021). A predominant way PTG is evident within relationships is when people report a deeper emotional quality during their interactions. Increased emotional quality is commonly present during disclosure of the trauma and increased openness with others. Respect and compassion often result after trauma because of personally understanding loss and emotional pain at a deeper level. As trauma survivors share their experiences, receiving compassion and empathy can help reshape their relationships and bring healing. Directly receiving compassion from others demonstrates the importance of being concerned for the suffering of other people (Tedeschi et al., 2021).

PTG within the domain of relationship quality and compassion was demonstrated through the study by Zhai et al. (2019) with women who were diagnosed with breast cancer. The women related more to others in several ways, as evidenced by desiring intimate relationships and more meaningful connections. For some women, relationships with others became more significant after their diagnosis. Increased closeness was experienced through enhanced compassion and sensitivity to other people's feelings. Other women felt particularly drawn and connected to those with similar experiences, or who were sick, as they gained personal insight from having breast cancer. The practice of engaging in altruistic acts also developed for many women because of their suffering. There was a notable increase in the desire to give back to society a year after their diagnosis (Zhai et al., 2019).

Additional studies have demonstrated growth within the domain of relationship quality and compassion. A study conducted with veterans and their siblings reflected PTG after trauma, evidenced by increased relationship quality (Zerach, 2020). The veteran's relationship with their biological sibling was analyzed with the presence of PTS due to combat. For veterans with higher levels of PTG, more warmth was present during interactions with their siblings, but more rivalry was present between siblings with less traumatic growth (Zerach, 2020). A study was also conducted by Doherty & Scannell (2022) with 15 women who lost a spouse. Study results highlighted that increased compassion was experienced as a result. One woman particularly expressed looking around and being able to notice other people hurting. Another woman felt more compassion after her husband died, which she expressed by supporting people who were alone and in need (Doherty & Scannell, 2022).

Appreciation of Life

Appreciation of life is another domain of PTG in which a person can experience growth. After trauma, this domain encompasses people gaining new or increased gratitude for aspects of their lives (Tedeschi et al., 2021). Greater appreciation of life can result from the pain of loss, or near loss, that a person experiences because of trauma. An expression of increased appreciation is an adjusted attitude that allows people to slow down how they live and no longer take life for granted (Tedeschi et al., 2021). Adjusted attitudes often result when trauma survivors slow down and restructure their priorities. Understanding that people and circumstances of life are not guaranteed beyond the present moment can help recenter life value and meaning. What was once insignificant may become important, and what was once a burden may no longer be perceived as such.

The study by Zhai et al. (2019) explored how women who fought breast cancer

experienced growth in the domain of appreciation of life. Examples of PTG regarding appreciation of life included the women's acknowledgment of life's beauty, recognition of new opportunities, and increased appreciation of friends and family. Many of the women enjoyed life more after receiving their diagnosis. Their battle with cancer created a desire to live each day to the fullest in ways they had not before being diagnosed. After their diagnosis and treatment, some responsibilities the women considered a priority were no longer as important. Surviving breast cancer caused many women to cherish life more and feel privileged to be alive. Several women expressed gratitude from perceiving their survival from cancer as a second chance to live. There was also more acknowledgment of the good in their lives that previously went unnoticed due to focusing on being more present in the current moment (Zhai et al., 2019). In addition to Zhai et al. (2019), other studies have explored PTG within the domain of appreciation of life.

Elderton et al. (2017) reviewed studies of people who had experienced a greater appreciation of life after interpersonal trauma. The interpersonal trauma included both physical and sexual violence for both men and women within 16 different studies, 12 quantitative and 4 qualitative. Within the domains of PTG, appreciation of life was identified as having the most growth for those who have experienced interpersonal trauma. The trauma survivors were noted for restructuring their priorities due to a shift in appreciation from before the trauma. A shift in priorities resulted from gaining a new perspective about themselves, others, and life in general (Elderton et al., 2017). Alongside those who have experienced interpersonal trauma, many disaster workers grow after the trauma of being submerged in crisis and catastrophe (Brooks et al., 2020). It has been noted that disaster workers often experience both personal and professional growth after trauma, including feeling that they value life more and desire to live

life more fully due to the trauma of their work (Brooks et al., 2020).

Spiritual and Existential Change

An additional domain of growth that can be experienced after trauma is spiritual and existential change. The spiritual and existential domain encompasses how trauma causes people to re-evaluate their spiritual belief system and purpose (Tedeschi et al., 2021). Such spiritual reevaluation occurs through a series of existential questions that the survivor of trauma considers. Spiritual people often question how the trauma aligns with their faith. Survivors of trauma who are not spiritual may reconsider the possibility of the divine or a higher power. An example of PTG occurring within the domain of spiritual and existential change can be observed following interpersonal trauma. If a person experiences betrayal, physical harm, or infidelity, demonstrations of spiritual growth may be observed as the person experiences and extends forgiveness (Tedeschi et al., 2021).

Zhai et al. (2019) studied how women with breast cancer have experienced PTG. Regarding spiritual and existential change, some women who completed cancer treatment reconnected with their faith in a higher power. Several of the women had established faith practices but became more committed to their faith after their cancer diagnosis. Expressions of increased activation of faith were also documented. Faith can be activated as women lean into spirituality, accept suffering, and release attachment to their temporal life. Many of the women who battled breast cancer shared that the diagnosis led them to a deepened understanding and awareness of spirituality and their purpose in life. Spiritual and existential change is also viewed as a cultural bond issue, meaning that expressions of spiritual growth may look different within various cultural contexts (Zhai et al., 2019). One woman may have faith in God, whereas another may have a stronger spiritual connection to the universe.

The experience of growing spiritually or existentially after trauma has also been explored through qualitative interviews and quantitative studies. Castella & Simmonds (2013) closely studied 10 women who experienced various traumas, including physical, emotional, sexual, and spiritual trauma. As a result of their experiences, the women were interviewed for spiritual and existential growth. Many participants felt that their spiritual life before the trauma was superficial, which was shattered by the disturbing event. Castella & Simmonds (2013) observed growth after trauma as strengthening of religious or spiritual beliefs and spiritual healing. They also noted that new spiritual and religious understanding from trauma can continue to grow and develop over time. Additionally, Greyson & Khanna (2014) studied the spiritual transformation of 230 people who had near-death experiences (NDEs) compared to those with no NDE. By using various scales, findings indicated that more spiritual growth was experienced by those with NDEs than those with no NDE. The level of spiritual growth experienced also correlated with the severity of the NDE (Greystone & Khanna, 2014).

Personal Strength

In addition to the spiritual changes a person may encounter, another domain of PTG is personal strength. Personal strength is the domain of PTG that encompasses an increased understanding of individual capabilities. People who live through trauma and tragedy are often surprised by their ability to survive. After trauma strikes, most people are focused on survival rather than growth. As time progresses, people typically begin to see themselves as more than victims and more than survivors. The perspective of being an overcomer requires strength to regain control after losing it. PTG within the domain of personal strength is often recognized as courage and empowerment, that people feel they can confidently face more than they could prior to trauma (Tedeschi et al., 2021). Without the hardship caused by trauma, strength might not be

exercised in a manner that reveals the depth and breadth of a person's capability.

The study by Zhai et al. (2019) also focused on the domain of personal strength when analyzing how women grew because of breast cancer. For several women, a sense of achievement after trauma resulted as a form of personal strength. PTG in the domain of personal strength was observed for many women as increased energy, a more positive life outlook, and a positive attitude about their future. The responses of women who had breast cancer often highlighted a sense of increased capability to accomplish future life demands and tasks. Women who had to cope with cancer experienced some increase in self-esteem and sense of competence. There were also certain aspects of their personality that felt renewed. Furthermore, the ability to be resilient and solve problems was enhanced for many of the breast cancer survivors (Zhai et al., 2019).

Jung and Han (2023) reviewed the experience of earthquake survivors and how their sense of personal strength grew as a result. Several survivors felt they found an inner strength through their experience, which allowed them to overcome and more confidently face their routine life. Prior to the earthquake, the feeling of being ordinary was common, but afterward people felt more significant and that their life was important. Strength was also identified as more than just a physical attribute but an intrinsic quality of the person (Jung & Han, 2023). Another reflection of enhanced personal strength after trauma was revealed in a study by (Kalaitzaki et al., 2022). The COVID-19 pandemic traumatized many healthcare workers in Greece. Some of the healthcare workers (HCWs) were able to grow within the domain of personal strength. The HCWs felt a heightened awareness of personal capabilities which ultimately bolstered their self-confidence when facing adversity (Kalaitzaki et al., 2022).

New or Different Path

Lastly, another domain in which a person can experience growth after trauma is a new or different path. A form of loss is attached to trauma whether loss of capabilities, relationships, roles, or expectations for the future (Tedeschi et al., 2021). Where a loss has been experienced, people are able to search for and discover new ways of finding purpose and life fulfillment. People do not always recognize or appreciate opportunities throughout their daily routines. Once something is lost, a heightened awareness of opportunities and consideration of new possibilities can arise. Within the domain of a new or different path, growth due to trauma starts with perception. People will first interpret circumstances as opportunities and then take steps to engage in new or diverse activities or relationships. After trauma, activities and interactions that were never viewed as an option may later be desired and considered (Tedeschi et al., 2021).

A new or different path was a domain of PTG experienced by the women who battled breast cancer in the study by Zhai et al. (2019). Experiencing a new path was noted through changes in the women's life philosophy, adjustment of priorities, and taking a new route. Priorities shifted due to a change in what was important to the women. After receiving their diagnosis, many of the cancer survivors focused more on living a life journey of joy rather than stress and worry about the future. Health and social activities also became a priority for many women as they realized the importance of valuing life while having fun. As the women gained a new awareness of possibilities, some expressed a shift in identity, creating the desire for a new life path. PTG was also evident as the women developed new friendships, started new hobbies, and considered foreign opportunities (Zhai et al., 2019). In addition to the study by Zhai et al. (2019), PTG through a new or different path is also supported by additional research.

Barskova & Oesterreich (2009) studied the experience of people who had received a

diagnosis of HIV/AIDS. Some individuals who received an HIV/AIDS diagnosis were motivated to take a new path in life by stopping bad habits. After unsuccessfully trying to stop using substances and partaking in risky behavior, receiving an HIV/AIDS diagnosis was the motivation needed for some people to successfully make the change (Barskova & Oesterreich, 2009). A study by Von Arcosy et al. (2023) explored if PTG was experienced by refugees, those who were forced to leave their country and relocate to another place. PTG was experienced as some refugees considered forced relocation as an opportunity to build a new life (Von Arcosy et al., 2023). As evidenced by refugees and those with HIV/AIDs, survivors of trauma can experience a new path in life by viewing the traumatic occurrence as an opportunity to make different choices. As evidenced by the study from Zhai et al. (2019) and others, PTG is achievable and expressed within all five domains. Furthermore, interventions for combating traumatic stress and encouraging PTG have been studied.

Interventions for PTSD and PTG

There are several interventions that have been utilized to reduce traumatic stress and PTSD. Trauma-informed care (TIC) is a framework incorporated into different treatments to help combat issues resulting from trauma. TIC aims to use a strength-based perspective by bringing awareness and opportunities of empowerment to those with a history of trauma (Noor et al., 2021). Interventions commonly used to treat PTSD include cognitive behavioral therapy (CBT) (Belleville et al., 2018), cognitive processing therapy (CPT) (Murray etl al., 2022; Thompson-Hollands et al., 2018), prolonged exposure (Cherestal & Herts, 2021; Murray etl al., 2022), and trauma-focused CBT (TF-CBT) (Murray etl al., 2022). However, although growth may occur while working to reduce traumatic stress, there are not as many valid and reliable interventions specific to PTG as for PTSD.

Methods for systematically facilitating PTG lack empirical evidence (Roepke et al., 2018). Clinicians have been informed that existing therapeutic techniques may encourage PTG, such as the use of Socratic questioning, emotional regulation, constructive rumination, and developing new views of vulnerability (Roepke et al., 2018). Other practices have also been implemented to facilitate PTG including mindfulness (Wen et al., 2021), acceptance techniques, positive reframing, and use of religion (Martin et al., 2021). Resilience is also a factor suggested to mediate the relationship between traumatic stress and growth (Williams & Williams, 2020), and interventions rooted in resilience-based practices may help promote PTG (Lee et al., 2020).

In addition to psychotherapeutic interventions, alternative methods of treating traumatic stress and facilitating PTG have also been explored. Such alternative treatments include administering controlled doses of illicit drugs (Gorman et al., 2020) and use of physical activity (Zhang et al., 2022). In 2017, the FDA approved the use of Methylenedioxymethamphetamine (MDMA) as a form of breakthrough therapy for life-threatening or serious conditions. Several studies explored the ability of MDMA to reduce PTSD symptoms, finding that the reduction of symptoms more than doubled from the placebo groups. Only recently was a study conducted to explore MDMA-assisted psychotherapy for PTG (Gorman et al., 2020). Study findings revealed that participants who received MDMA-assisted psychotherapy experienced more PTG and a larger reduction of PTSD symptoms than participants without MDMA-assisted psychotherapy.

There has also been a focus surrounding how PTG is impacted by physical exercise. Physical activity has been identified for positively altering affective, cognitive, and social processes that are engaged after trauma. PTG is developed as activity fuels self-empowerment and a sense of control, releases emotional distress, and strengthens meaningful relationships when active with others (Zhang et al., 2022). Both PTSD interventions that directly target the

psyche, as well as alternate interventions that target the body, have shown potential for encouraging PTG. Alongside the use of existing interventions, there are certain interventions specifically designed to promote PTG for survivors of trauma.

Interventions Designed for PTG

In recent years, more interventions have been designed to intentionally cultivate PTG and related constructs. Promoting Resilience Officers (PRO) has been utilized for new recruits at police academies. PRO draws from cognitive-behavioral and interpersonal therapies to promote positive mental health outcomes for a high-stress occupation (Shochet et al., 2011). Transforming Lives Through Resilience Education (TLTRE) is a cognitive behavioral based intervention that was used in a randomized control trial (RCT) with undergraduate students. Students who used TLTRE reflected greater gains on the Post-Traumatic Growth Inventory (PTGI) (Roepke et al., 2018). A resilience-based group intervention, SecondStory, is an intervention created to foster PTG. SecondStory is rooted in positive psychology, meaning-making, narrative therapy, and future-directed thinking. A randomized control trial was conducted with 112 bereaved women. Study results indicated that there were not greater levels of PTG for women who used SecondStory. However, a study follow-up revealed that participants who used SecondStory did experience greater decreases of depressive symptoms than the women who did not (Roepke et al., 2018).

Other interventions possess potential for promoting PTG, such as the Life Tape Project, Psycho-spiritual Integrative Therapy, The Life Review Group, and The Posttraumatic Growth Path (Roepke et al., 2018). The above-mentioned interventions consist of at least one or a combination of core components identified as appropriate for those desiring growth after trauma. Core components for promoting growth include educating clients about trauma responses and

emotional regulation, self-disclosure, creating new trauma narratives of growth, and focusing on new principles for life (Roepke et al., 2018). PTG interventions reviewed by Roepke et al. (2018) were primarily tested using pretest-posttest designs. Due to the limitations of pretest-posttest designs, more RCT are needed for exploring interventions for PTG. Additionally, the most frequently used assessment for measuring growth is the PTGI. The PTGI is a retrospective self-report measure that has been criticized for its inability to measure actual real versus illusory growth (Boals & Schuler, 2018; Boals & Schuler, 2019). Another therapeutic approach that is effective for facilitating PTG is the use of narrative therapy.

Narrative Therapies and PTG

Noted as a core component for promoting PTG, the use of narrative work for PTG has become a common practice (Roepke et al., 2018). Narrative therapy is an effective form of treatment that has been used extensively to alleviate traumatic stress symptoms and encourage PTG (Tedeschi et al., 2021). In 1990, Michael White and David Epston developed narrative therapy as a strategy to interpret experiences differently through strategic use of language (Bayes, 2022). For overcoming trauma, the use of narrative therapy creates a space for clients to safely reflect on their trauma to capture strength and gain empowerment. As the initial narrative of trauma continues, the development of a new story can unfold. Narrative therapy with a clinician helps a person move their story forward without carrying vulnerabilities and damage from trauma into their future (Bayes, 2022).

To minimize the likelihood of retraumatizing clients, narrative therapy allows clients to examine their experience with distance between themselves and the problem (Beaudoin, 2022; Tedeschi et al., 2021). Through narrative therapy, clients can learn how meaning is ascribed to problems through cultural and societal influence. Understanding how problems can shape

identity and saturate stories allows clients to see if their narratives have been filtered through a problem-oriented perspective (Beaudoin, 2022). Therapists can use narratives to help clients deconstruct problems and bring positive perspectives to light that have been overshadowed by trauma. Separation of self from events allows the integration of affective, cognitive, and physiological aspects of experience to develop new beliefs and PTG (Tedeschi et al., 2021).

Narrative therapy is usually applied in ten sessions, with components of re-authorizing, externalizing the problem, and deconstruction (Karibwende et al., 2022). A study evaluated the effectiveness of narrative therapy on resilience with abandoned and orphaned children in Rwanda. There were 72 children divided into a narrative therapy group or a non-narrative therapy group. Children attended 10, 55-minute sessions over 2.5 months. Resilience for the children studied in Rwanda was increased with a large effect size due to the application of narrative therapy with the intervention group. Findings mirrored similar studies with adults, including the use of narrative therapy with women who experienced sexual violence (Karibwende et al., 2022). Narrative therapies have also proven to be effective in promoting greater levels of PTG for Iraqi combat refugees who experienced PTSD (Tedeschi et al., 2021). The successful use of narrative therapy affirms that communication is powerful and can be used to promote personal growth and well-being.

Communication and PTG

Research demonstrates how personal and intimate aspects of life are impacted by communication. The connection between communication and relationship satisfaction (Kuster et al., 2015; Nguyen et al., 2020), intimate partner violence (Hammett et al, 2021), health management (Fisher et al., 2020), and successful aging (Bernhold, 2019) have all been examined. Current trends in language have also been identified such as increased use of profane

language publicly (DeFrank & Kahlbaugh, 2019) and increased tolerance and acceptance of discriminatory language and hate speech (Cervone et al., 2021). The wealth of information surrounding how communication directs other areas of human life indicates that a relationship may also exist between communication and trauma. Furthermore, current communication trends of discriminatory language and hate speech may be hindering growth or perpetuating trauma, creating an additional need for deliberate positive communication.

The relationship between positive communication and PTG has previously been studied. The impacts of communication have been monitored after various traumatic events including natural disasters (Spialek et al., 2019), acts of terrorism (Tucker et al., 2016), diseases (Sherratt & Worrall, 2021), and the recent COVID-19 pandemic (Zhen & Zou, 2022). A relationship between communication and PTG has also been explored with addiction (Haroosh & Freedman, 2017), physical occurrences of stroke (Sherratt & Worrall, 2021), miscarriage (Tian & Solomon, 2020), and abortions (Blackburn et al., 2021). Through study of communication trends after traumatic events, specific aspects of positive communication have been identified as instrumental for minimizing posttraumatic stress and encouraging PTG.

Positive communication has helped facilitate PTG by creating a sense of empowerment and new perspectives. Verbal encouragement and testimonies of people overcoming former struggles have also helped increase PTG (Haroosh & Freedman, 2017). Rather than reliving negative facts, those who communicated in terms of rehabilitation and recovery experienced higher PTG after a natural disaster (Spialet et al., 2019). Changing trauma narratives into verbalization of a “healing story” can be beneficial after trauma (Sherratt & Worrall, 2021). Positive communication about trauma helps develop new cognitive appraisals of past events (Zhen & Zhou, 2022). Through healthy discussion of traumatic stress psychological pressure can

be alleviated. Additionally, core beliefs can be altered, and emotions can be better managed through positive communication (Zhen & Zhou, 2022).

Focus has also been given to specific word usage when referencing trauma. The exchange of phrases surrounding stressful occurrences can create forward motion, such as an "unexpected event" rather than an "attack" (Ziss, 2020). The use of pronouns can also shift a person's level of traumatic stress to growth. Soon after a traumatic event, people are more likely to use first-person pronouns. First-person pronouns feed a sense of detachment from social networks of support (Blackburn et el., 2021). While progressing through the trauma, the use of second and third-person pronouns typically increases. The use of second and third-person pronouns helps create a sense of connection with others while also creating distance from the traumatic event. More inclusive pronouns have also been linked with less traumatic symptoms and strengthened psychological adjustment to the trauma (Blackburn et al., 2021). Through the sharing of testimonies and healing stories to specific word usage, communication helps facilitate growth through the ability to inspire hope and positive expectation.

Hope, Expectation, and Communication

Hope

Over the last 15 years, much attention has been given to help better understand, assess, and quantify hope. The concept of hope has been categorized as both an emotion-based and cognitive-based construct (Gallagher et al., 2019). C.R. Snyder's theory of hope has become a predominant model used for majority of research about hope and positive functioning. Snyder's theory of hope was originally built upon cognitions but has evolved to encompass an aspect of emotions. According to Snyder's theory, hope is defined as a motivational state based on plans and energy to accomplish aspirations. Years of research and study have allowed hope to evolve

from a mysterious construct to a phenomenon that can now be measured and increased with appropriate interventions (Gallagher et al., 2019).

The foundation for the definition of hope is the belief that human behavior is largely motivated by identifying and pursuing goals. Goals consist of both short and long-term objectives. However, a goal must possess a meaningful level of value for a person to pursue it (Gallagher et al., 2019). People can experience stress and negative emotions when barriers to accomplishing their goals are met. Positive emotion is often felt when success with goals is achieved. These emotions reinforce the lack or presence of hope, which drives subsequent behavior (Gallagher et al., 2019). People considered to be "high-hopers" tend to have more positive emotions, zest, and confidence in life than "low-hopers", who historically respond poorly to stress surrounding goal attainment. As people with high hopes face challenges with their goals, they usually revise their routes for achievement. Those with low hopes commonly feel stuck when challenged, often resulting in rumination and goal abandonment (Gallagher et al., 2019).

Expectation

In addition to hope, expectation is important for being able to grow after trauma. Where hope entails the motivation and pathways for what a person desires, expectation is the probability driven perception regarding outcomes (Dowling & Rickwood, 2016). Rotter's social learning theory (SLT), developed in 1954, suggests that expectancy is a predictor of behavior. If a particular behavior is expected to result in a certain outcome, the expectation ultimately drives the behavior (Mazur-Socha et al., 2023). Furthermore, difficulty responding to stressful events can lead to psychological suffering. Understanding coping strategies is important for alleviating psychological distress. One strategy for coping includes negative mood regulation expectancies

(NMRE), the belief that a person can terminate unpleasant moods (Mazur-Socha et al., 2023). Built upon Rotter's SLT, if a person believes a negative mood will dissipate after a coping response, people are likely to experience alleviation of their symptoms due to their expectancy.

The influence of expectation on therapeutic outcomes has been studied (Asay & Lambert, 1999). Loss of hope is what often brings clients to therapy, when they no longer have hope for resolving the problem on their own. Expectations in therapy have been identified as important as therapeutic technique. Offering hope that something can be done to help people is at the core of therapy as well as medicine and many religions. Clients are more likely to benefit from therapy when an expectation that they will be helped is present, particularly early in therapy. Level of expectation as well as level of distress are related to improvement. The ability for expectation to help clients can be limited when mental health disorders are more severe. However, hope and expectation are factors significant enough to promote client change for therapists who desire to maximize positive outcomes (Asay & Lambert, 1999). Several studies reflect the ability of hope and expectation to impact mental health outcomes for people.

Hope and Expectation Explored

Numerous studies have been conducted to examine the impact of hope and expectation on mental health. A cross-sectional study was conducted with 1033 young people concerning hope and expectation regarding online-chat counseling services (Dowling & Rickwood, 2016). Participants completed an online questionnaire that included feelings of hope and expectation for counseling. Findings revealed that clients had low levels of hope, high expectations for treatment outcomes, high psychological distress, and low life satisfaction. It was noted that hope and expectation are not always congruent, as many participants experienced little hope but high expectations. However, hope was identified as a protective factor as it was associated with the

level of psychological distress and life satisfaction (Dowling & Rickwood, 2016). Also, Salloum et al. (2019) conducted a study on hope, complicated grief, and posttraumatic growth (PTG) for children. A conceptual model of PTG for children suggests that hope and positive expectations for the future are keys for helping children cope after trauma. There were 85 bereaved children who participated in the study by completing measures for study variables. Salhoum et al. (2019) identified hope as a moderating factor between grief and PTG. An inverse relationship was found between depressive symptoms and hope, and a positive relationship between PTG and hope.

Another study was conducted by Long et al. (2020) to explore the influence of hope on mental health with 829 adults. The study participants were from Houston, Texas, and survived Hurricane Harvey in 2017. Participants were studied 1-3 months after the hurricane occurred as natural disasters can contribute to traumatic stress and psychological disorders (Long et al., 2020). Prior trauma, higher levels of disruption, and loss were studied because after trauma they all contribute to the development of mental illness. Measures were completed by participants for hope, resilience, loss and disruption, prior trauma, well-being, PTSD, and PTG. Study findings revealed that hope was associated with aspects of well-being. Specifically, hope had a positive relationship with PTG and an inverse relationship with PTSD levels. Hope was identified as a protective factor against traumatic stress and supported positive functioning. (Long et al., 2020). In addition to how hope and expectation relate to mental health, research also reveals how hope and expectation are cultivated through communication.

Building Hope & Expectation Through Communication

Positive expectations can be developed by helping people look forward in life. Temporal orientation defines how people form relationships with dimensions in time, which can occur consciously or unconsciously (Yapko, 2022). Temporal orientations can strongly influence

lifestyle and mental health which can be shaped by communication. Depression is linked to past-oriented thinking, evidenced by rumination about previous hurts. Present-oriented thinking has also been linked with impulse disorders. Future-oriented thinkers are often linked with anxiety due to increased worry about approaching events. However, a positive aspect of future-oriented thinkers is a connection with better health and higher levels of success (Yapko, 2022). The famous "marshmallow test" studied orientation through delayed and immediate gratification. For the experiment, children could either immediately eat one marshmallow or receive a second one if they waited for the experimenter to return. After the experiment, participants were monitored over the course of their lives. Future-oriented children who waited for the second marshmallow experienced long-term and higher-level successes in life. In relation to trauma and growth, helping people be future-oriented is helpful for treating trauma (Yapko, 2022). Language geared towards forward movement and future possibility may be helpful for facilitating PTG.

Therapeutic use of narrative therapy is an avenue that communication can flow through to propel people forward in hope. One of the components that makes narrative therapy successful is the implementation of hope theory (Burns, 2023). Therapists impart hope through narrative writings with clients. Therapists specifically develop hope by directing real or fictional writing that causes clients to think about goals and pathways. Eventually, narrative therapy becomes more personal as clients take control of their own stories of pursuing and attaining goals. The use of verbal communication to reflect upon goals and pathways may cultivate hope after trauma by redirecting life stories back to meaning and purpose (Burns, 2023). Furthermore, developing a practice of expressing gratitude may also be helpful for facilitating growth. Gratitude can increase levels of hope and positive expectations for the future (Witvliet et al., 2019). In addition to narrative therapies, beneficial use of positive communication has been recognized for stirring

hope for people recovering after self-harming.

A study conducted with people who had attempted suicide revealed how communication can be used to impart hope (Vatne & Nåden, 2018). Study participants had attempted to end their lives one or more times through use of drugs or alcohol. Immense loneliness was described by many participants as a main contributor to their suffering. Data was gathered through interviews with participants about their experience with receiving care after the suicide attempt. Healthcare providers who communicated in a compassionate and understanding manner helped create hope for the participants. Discussions with other patients who had similar experiences also decreased a sense of isolation and encouraged hope. Communication was not only used to stir hope within the patient but also to create a hopeful atmosphere around the patient. Open dialogue about the person's behavior and situation were used to inspire reflection and empower them with other options and possibilities for life (Vatne & Nåden, 2018). The ability for words to influence people and situations is confirmed through scripture from the Bible.

Biblical Foundation of the Study

People were made in the image of God (*Holman Christian Standard Bible*, 2004/2020, Genesis 1:26) and purposed to affirm the agenda of God (Ware, 2021). God empowers people to perform supernatural acts through His spirit (2004/2020, Ephesians 1:22-23) by stirring expectancy through faith. Jesus explained that his followers would perform similar and greater works than he did for the purpose of God being exalted in the earth (2004/2020, John 14:12-13). By expecting God to move through them, people in the Bible conducted supernatural acts through their declarations (2004/2020, Acts 3:2-5; 1 Kings 17:1). Change can occur by speaking in faith because the Bible indicates that words produce life or death (2004/2020, Proverbs 18:21) and steer the direction of life (2004/2020, James 3:4). Biblical descriptions of fruitful versus

destructive speech promote our understanding of effective communication (2004/2020, Colossians 3; Ephesians 4; James 3; 1 Peter 2). Not only does speech guide human life, but speech acts are used to invoke the power, authority, and presence of God (Mohrmann, 2019). The authority of God was verbally exercised through the ministry of Jesus, God in the flesh (2004/2020, John 1:14).

Jesus changed earthly situations with his words (2004/2020, Luke 8:22-25; Mark 11:23), demonstrating supreme power through the impossible (Balch, 2021). There were also supernatural healings that occurred as Jesus spoke life over people (2004/2020, John 11:43; Mark 10:52; Matthew 8:13). Calling forth healing was only one example of the power of Jesus' words as his speeches and teachings were also life altering (Forger, 2020). The life and ministry of Jesus provided a model of faith and behavior for his followers to imitate on earth (Hadley, 2020). In addition to the power of spoken word, the Bible confirms God's ability to transform people after trauma. God desires to deliver and heal people from distress (2004/2020, 2 Timothy 1:7; Psalms 107:13-14) and restore that which was lost (2004/2020, Joel 2:25; Psalms 23:2-3). Not only does God heal, but the concept of PTG is supported biblically because God can use all things for good (2004/2020, Romans 8:28). It is the presence of Christ through dialogue of love and restoration that brings healing (Rennebohm & Thoburn, 2021). A biblical foundation for the study demonstrates that expectation is cultivated through faith, that there is power in words, and God can heal people and cause growth after trauma.

Cultivating Expectation

Jesus was God in the flesh (*Holman Christian Standard Bible.* 2004/2020, John 1:14) and able to speak to situations without restraint (2004/2020, John 3:34) causing change to occur. People were created in the image and likeness of God (2004/2020, *Genesis* 1:26) and expected to

follow the example Jesus provided of doing good works on earth. Ware (2021) described human beings made in the image of God as having God at the center of our existence. Having a divine nature is the unique element that determines humanity. Being designed after God provides a purpose of not fulfilling our own agenda but affirming the agenda of God. Furthermore, Ware (2021) explained that being created in God's image allows for growth and development rather than having lives that are static and fixed. In John 14:12-13 (2004/2020), Jesus stated "Truly I tell you, the one who believes in me will also do the works that I do. And he will do even greater works than these, […] Whatever you ask in my name, I will do it so that the Father may be glorified in the Son." Jesus made clear that his followers would do similar works, and even greater, for God to be exalted in the earth.

God empowers people to execute his will. In 1 Corinthians 12:12-24 (2004/2020), Paul writes about followers of Christ being different parts of the same body. The one mission of the kingdom of God is carried out through one body and one spirit. God's power was demonstrated through Jesus and he "[…] appointed him as head over everything for the church, which is his body, the fullness of the one who fills all things in every way" (2004/2020, Ephesians 1:22-23). Working together for one purpose is fulfilled through functioning as one unit with Christ, who is the head, and we are the body. Furthermore, it is not through the power of man but by the spirit of God that people are able to speak forth life over circumstances. Acts 1:8 (2004/2020) states, "But you will receive power when the Holy Spirit has come on you, and you will be my witnesses in Jerusalem, in all Judea and Samaria, and to the ends of the earth." Rompies & Hakh (2023) clarify that people can have the same standard and potential as God but are not God. It is the all-powerful God who gives authority to humans, but human authority is still under submission to God's power. The will of God is good and God desires for man to function

according to his will and standards (Rompies & Hakh, 2023).

Scripture makes clear that through the spirit of God, people are to do great works as Jesus did. However, people are often unable to function as Jesus did. A man approached Jesus regarding his son who suffered from seizures, but the disciples were unable to heal him (2004/2020, Matthew 17: 14-16). Jesus then rebuked the demon and healed the boy. When the disciples inquired why they were unable to help the boy, Jesus replied, "Because of your little faith," he told them. "For truly I tell you, if you have faith the size of a mustard seed, you will tell this mountain, 'Move from here to there,' and it will move. Nothing will be impossible for you" (2004/2020, Matthew 17: 20). Evidenced by the inability to cast out the demon and heal the boy, faith is required to speak to situations and expect change to result. Spencer (2010) described the inability of the disciples to cast out the demon as a reminder that it is only through God that healing and deliverances are accomplished. As the disciples may have become confident from previous exorcisms, the moment they drifted from total dependence on God and sensitivity to his leading, the move of God was hindered (Spencer, 2010). Knowing what faith is, and how to walk in faith, is key to believing that spoken words will produce fruit.

Faith is at the core of Christianity and required for activating spiritual change that can be observed in the natural. Hebrews 11:1 (*Holman Christian Standard Bible.* 2004/2020) defines faith as "[…] the reality of what is hoped for, the proof of what is not seen." Hadley (2020) wrote about Christian faith, hope, and expectancy. Hebrews 11:1 (2004/2020) was referenced by Hadley (2020) as God's promise. Jesus has been referenced as the "pioneer and perfecter" of faith, providing the greatest measure of faith as a demonstration to his followers. Both humanness and faith were required for Jesus to face the cross. Jesus shared the faith of Abraham and his ancestors and then passed faith on to the church. Hadley (2020) explained it is the

attitude of people that stirs hope but the fidelity and steadfastness of God that creates expectation. Knowledge of the necessity of faith is a first step but people must then understand how to cultivate faith. Romans 10:17 (2004/2020) reads, “So faith comes from what is heard, and what is heard comes through the message about Christ.” Hearing the word of God is what builds faith. Furthermore, to grow and be strengthened spiritually, faith must be exercised. A body without a spirit is dead as faith without works is dead (2004/2020, James 2:26). A way to exercise faith is to use words to speak life to promote God’s will for humanity.

Power of Words

The notion promoted by Hedge (2001), that language is the essence of human existence, is supported by scripture. Throughout both the Old and New Testament the Bible explains that power is held in the tongue and how people speak influences their life. Within the book of Proverbs (2004/2020), Solomon writes extensively about the tongue and being mindful to control it. “Death and life are in the power of the tongue, and those who love it will eat its fruit” (2004/2020, Proverbs 18:21). Solomon further explained that good use of the tongue is like a tree of life (2004/2020, Proverbs 15:4) that can bring health (2004/2020, Proverbs 12:18), but when used poorly can pierce like a sword (2004/2020, Proverbs 12:18) and can trouble one’s soul (2004/2020, Proverbs 21:23). Robinson (2021) likened the fruit of the tongue to an apple tree from his childhood. From one season to the next, the apple tree changed from producing healthy apples to producing rotten apples. The change of fruit resulted from the tree dying at the root. Like the roots of a tree, the heart drives our speech. A healthy heart produces good fruit, but a diseased heart produces rotten spiritual fruit, evidenced by evil speech (Robinson, 2021).

In addition to understanding that the tongue produces fruit, other biblical analogies depict the tongue as directing a person’s life. James 3:3 (2004/2020) describes the tongue as having the

ability to pull people like the bit in a horse's mouth. James 3:4 (2004/2020) also explains that speech turns a person's life like the helm of a ship. The helm is small but can redirect the entire ship, determining the ship's destination. Furthermore, the tongue can be like a fire that is kindled and can cause the whole body to burn (2004/2020, James 3:6). Piper & Taylor (2009) wrote about the power of words. Within their text, Piper & Taylor (2009) addressed the book of James (2004/2020) as the most prominent text about speech in the New Testament. The agenda of James is to encourage spiritual maturity through control of the tongue, and that the words a person says can function as a gauge of their spiritual maturity. A person who has tamed their tongue to speak life and not death demonstrates spiritual maturity and self-mastery (Piper & Taylor, 2009). The phenomenon of speech directing life is not likely or probable but guaranteed. Once understanding that words determine the direction of life, knowing what words to speak is important.

Scripture informs what type of communication is good and desirable and what speech should be avoided. Ephesians 4:29 (2004/2020) states, "No foul language should come from your mouth, but only what is good for building up someone in need, so that it gives grace to those who hear." Within the book of Proverbs 8:6-8 (2004/2020), people are instructed to speak of excellent and right things, that words should be righteous and not deceptive or perverse. Negative speech causes poor repercussions (2004/2020, Colossians 3), "Therefore, rid yourselves of all malice, all deceit, hypocrisy, envy, and all slander" (2004/2020, 1 Peter 2:1 (2004/2020). Additionally, lying and producing false reports leads to punishment (2004/2020, Proverbs 19:5) and an unruly tongue is full of deadly poison (2004/2020, James 3:8). Dr. Caroline Leaf (2013) explained that people are what they think about and speak. When people think about toxic concepts and speak negatively, their brain, health, and functioning is literally

impacted. Leaf (2013) explained that God's redemptive power can be observed through the correction of a person's thoughts and speech. Although toxic thinking and speaking are damaging neurologically, the healthy state of a person can be restored through thinking and speaking about what is excellent and right (Leaf, 2013). Leaf's (2013) study of the human capacity to rewire the brain confirms God's creative ability imparted to people.

God created the world and people with his words (*Holman Christian Standard Bible,* 2004/2020, *Genesis* 1:1-5). People were created in the image and likeness of God (2004/2020, *Genesis* 1:26), expected in faith to believe and speak with expectation (2004/2020, Mark 11:24). In Romans 4:17 (2004/2020), Paul touches on the practice of speaking forth that which is not. Speaking what is desired for a circumstance is an act of faith for invoking change. Isaiah 55:11 (2004/2020) states, "So my word that comes from my mouth will not return to me empty, but it will accomplish what I please and will prosper in what I send it to do." Mohrmann (2019) addressed the power of proclamation being at the core of Christianity and the move of God in the earth. Some speech acts of faith include ordination, consecration, commission, confession, prayers, prophesying, oaths, rebukes, and blessings. Speech acts invoke God's power, presence, and authority. Speech creates social realities and institutional facts through repeated affirmations (Mohrmann, 2019). The creation of social reality is why consistent proclamations of God's truth and goodwill toward man are imperative. The ultimate example of faith to follow was demonstrated by Jesus.

Power of Jesus' Words

There are several examples of Jesus proclaiming change over situations. In Mark 11:12-14 (2004/2020), Jesus approached a fig tree and was surprised by the lack of figs and then cursed the tree. The following morning the disciples were astonished to find the same tree withered that

they heard Jesus curse. Jesus responded to their astonishment by stating, “Truly I tell you, if anyone says to this mountain, ‘Be lifted up and thrown into the sea,’ and does not doubt in his heart, but believes that what he says will happen, it will be done for him” (2004/2020, Mark 11:23). On another occasion, the disciples panicked when a storm began to overtake their boat. Jesus arose from his sleep and rebuked the storm with his words (2004/2020, Luke 8:22-25). Whether roots leading to lack, or a storm afflicting our soul, Jesus demonstrated clearly that circumstances can change when spoken to in faith. Caesar would often pose as God by ordering the impossible, such as commanding sailors to go through storms (Balch, 2021). However, Caesar was merely a man acting as God without the power of God present. Jesus established supreme power by supernaturally stopping the storm with his words. This demonstration of power was made before appointing disciples to spiritually lead the community by building credibility and faith for others to follow (Balch, 2021).

In addition to supernatural acts within nature, Jesus also conducted miracles by speaking life over people. A blind man called out to Jesus, desiring to be healed. Jesus responded, “[…] ‘Go, your faith has saved you.’ Immediately he could see and began to follow Jesus on the road” (2004/2020, Mark 10:52). Another example of Jesus healing through spoken word regarded the centurion in Matthew 8 (2004/2020). The centurion sought healing for his servant and explained that Jesus only had to speak the word without seeing the servant. Jesus marveled saying, “[…] ‘Go. As you have believed, let it be done for you.’ And his servant was healed that very moment” (2004/2020, Matthew 8:13). While he was traveling to Jerusalem, Jesus encountered a group of men with leprosy that sought his mercy and healing. From a distance, Jesus spoke to them and they received healing on their journey (2004/2020, Luke 17:11-19). In John 11:1-25 (2004/2020), Jesus used words to perform a miracle surrounding the death of Lazarus. Jesus was

notified that Lazarus had died but prophesied to Martha that Lazarus would rise again. Arriving at Lazarus' tomb four days later, Jesus cried, "[…] Lazarus, come out" (2004/2020, John 11:43). Lazarus proceeded to come forth as commanded by Jesus.

In the book of John, various healings and raising Lazarus from the dead were accomplished specifically from the spoken words of Jesus. Although Jesus healed through other means, such as touch or various instructions, the examples of healing through only speaking reveal how powerful words are. The gospel of John is notable for displaying the manner and frequency of Jesus' speech differently than the other gospels (Forger, 2020). Forger (2020) described Jesus as loquacious in the book of John, evidenced by his discourse, speeches, and miracles resulting from his words rather than actions. It was not just his personhood that created the embodiment of God, but the words Jesus spoke. When people heard Jesus, they experienced the very words of God (Forger, 2020). The examples of Jesus changing circumstances through declarations can be followed in faith. In addition to Jesus, other people have demonstrated faith by speaking life over various circumstances. Demonstrations of others who understood the power of words provides encouragement for others to speak life over situations to see God's glory displayed in the earth.

Others who Demonstrated the Power of Words

The power of spoken word by God's people has been demonstrated through supernatural occurrences in the earth, miraculous healings, and demonic deliverances. Supernatural influence over the natural earth was demonstrated by both Joshua and Elijah. Joshua led the Israelites in battle against the men of Gibeon. Joshua knew it was God's will for them to be victorious in battle, but they needed more daylight to obtain victory. "[…] Joshua spoke to the Lord in the presence of Israel: 'Sun, stand still over Gibeon, and moon, over the Valley of Aijalon.' And the

sun stood still and the moon stopped until the nation took vengeance on its enemies" (2004/2020, Joshua 10:12-13). Elijah also impacted the earth concerning a three-year drought. Elijah declared that there would be no rain except by his command (2004/2020, 1 Kings 17:1). James 5:17 (2004/2020) states, "Elijah was a man with a nature like ours; yet he prayed earnestly that it would not rain, and for three years and six months it did not rain on the land." Madueke (2021) referenced both Joshua and Elijah as using the voice of faith. It was not physical weapons that impacted the elements of the earth but the weapon of faith. Guns or weapons are not needed for spiritual battles, but words are what defeat the enemy of life (Madueke, 2021).

Walker (2016) emphasized that Jesus performed countless miracles in public which served a purpose for his ministry. The public demonstration of healing, deliverance, and other miracles provided a faith model for believers. Having a model of faith gave Christ's disciples something to emulate. Through faith and supernatural acts, Jesus demonstrated ideal character and behavior for the disciples (Walker, 2016). The book of Acts (2004/2020) contains many examples of God's miracles occurring through disciples who spoke in faith. In Acts 3:2-5 (2004/2020), a man who was disabled since birth sat by the gate called Beautiful. While the man begged for money, he encountered Peter and John as they entered the temple. Peter said, "I don't have silver or gold, but what I do have, I give you: In the name of Jesus Christ of Nazareth, get up and walk" (2004/2020, Acts 3:6). The man then got up and walked, astonishing those around him. It was Peter's understanding of God's desire for the man to be healed that fueled an expectation for God to move on his behalf. Similarly, the apostle Paul was also used by God for healing and deliverance.

Paul met a man in Lystra who had been lame since birth. After listening to him speak, Paul identified that the man had faith to be healed. He then said in a loud voice, "Stand up on

your feet" (2004/2020, Acts 14:8-10). The man was then healed by God and began to walk. Another powerful declaration was noted when disciples traveled to Philippi to minister the gospel. A girl began following the disciples proclaiming they were servants of God. The disciples recognized that the girl's intention was not pure, that she was operating out of a spirit of divination. Paul became greatly annoyed, turned to the girl, and spoke to the spirit saying, "'[…] I command you in the name of Jesus Christ to come out of her!' And it came out right away" (2004/2020, Acts 16:18). This example of God's deliverance executed through Paul demonstrates the Lord's authority through the body of Christ (Keener, 2023). Paul and the other disciples could be considered Jesus' agents who helped carry forth God's mission. Demonstrations of healing and supernatural acts are expressions of God's kingdom in the present moment (Keener, 2023). Alongside the power of words used to speak life, the Bible supports the concept of recovering and growing after trauma.

Trauma and Growth

Trauma was described by theologian Shelly Rambo (2016) as "suffering that remains" (p.3). Scripture proves that God did not create people to worry, and He frees people from their trouble. 2 Timothy 1:7 (2004/2020) states, "God has not given us a spirit of fear, but one of power, love, and sound judgment." Furthermore, God delivers people from distress as evidenced by Psalms 107:13-14 (2004/2020); "Then they cried out to the LORD in their trouble, and he saved them from their distresses. He brought them out of darkness and gloom and broke their chains apart." David specifically acknowledged God as a refuge, strong tower, shield, savior, and deliverer (2004/2020, 2 Samuel 22:2-3). Understanding God's intention for humanity is the precursor to a healthy mindset for growth. Belief systems that align with brokenness must be altered. Mindsets can be corrected by taking every thought captive that is raised against the

knowledge of God and make it obedient to Christ (2004/2020, 2 Corinthians10:5). Furthermore, the concept of moral injury, a violation of beliefs creating a non-physical wound, can be studied from a biblical perspective (Kelle, 2021). Stories in the Bible can be viewed as both containing morally injured people and practices connected to the morally injured. Analysis of scripture from such a lens can contribute to identifying, understanding, and healing moral injury (Kelle, 2021). Biblical concepts incorporated with moral repair include honesty about experiences, expression of feelings, confession, and forgiveness (Kelle, 2021).

In addition to delivering people from distress, the Lord desires healing and wholeness for people who have been hurt or traumatized. When referencing the people of Judah, the prophet Joel declared for the Lord, "I will repay you for the years that the swarming locust ate, the young locust, the destroying locust, and the devouring locust- my great army that I sent among you" (2004/2020, Joel 2:25). The statement by Joel also represents the recovery that can happen in individual lives after devastation or destruction. Restoration occurs because the Lord is a shepherd, "He lets me lie down in green pastures; he leads me beside quiet waters. He renews my life; he leads me along the right paths for his name's sake" (2004/2020, Psalms 23:2-3). Furthermore, the Lord is a God of comfort who comforts people in their affliction (2004/2020, 2 Corinthians 1:3-4). Integrating psychology and theology requires focusing on parallel concepts and data between the two disciplines (Rennebohm & Thonurn, 2021). One parallel concept is the use of relationships for healing. From a Christian perspective, it is the presence of Christ that is embraced as the relationship that brings healing. It is the manifestation of Christ through caring therapeutic relationships that present a dialogue of love and restoration.

The will for God's healing and restoration after destruction is evident in scripture. However, moving beyond restoration, God can use bad to propel people past who they were

prior to trauma. “We know that all things work together for the good of those who love God, who are called according to his purpose” (2004/2020, *Romans* 8:28). This scripture supports the concept of posttraumatic growth (PTG), that not only can people recover from trauma but they can grow as a result. McMartin & Lewis-Hall (2022) explained that hope, empathy, compassion, perseverance, and obedience are ways Christians can grow due to suffering. Romans 8:28 (2004/2020) supports the reality that because of suffering people can grow, comfort others, test their faith, gain testimonies, and identify with Christ (McMartin & Lewis-Hall, 2022). The story of Joseph demonstrates God’s ability to transform any situation. After being betrayed and sold into slavery by his brother, Joseph was later promoted in Egypt during a famine and able to help save multitudes of people. The transformation that resulted from his betrayal led Joseph to explain what man meant for evil was used by God for good (2004/2020, Genesis 50:20).

After people have suffered, God will settle, make perfect, and strengthen them (2004/2020, 1 Peter 5:10). As evidenced by the scripture about spoken words, PTG can result from speaking life and not death over people. Rather than remaining stuck in the past trauma the Lord will move a person forward in the newness of life. “Do not remember the past events; pay no attention to things of old. Look, I am about to do something new; even now it is coming. Do you not see it? Indeed, I will make a way in the wilderness, rivers in the desert” (2004/2020, Isaiah 43:18-19). Throughout the Bible, trauma and grief are not excluded (Klan, 2018). Compassion and the desire to heal are exemplified by God relating to human suffering through the price Jesus paid. The reality of suffering was demonstrated through the torture and crucifixion of Jesus, who was marked with violence and vulnerability. However, his torment led to a resurrected life as the “resurrected one” (Klan, 2018). The resurrection represents the ultimate demonstration of restoration after trauma, the ability to experience life after death. After

the crucifixion, Jesus was able to give eternal life to others for the price he paid. Because of growth after trauma, people can help others through their difficulty and suffering.

Biblical Conclusion

Numerous passages in the Bible create a foundation for understanding the power of words. Additionally, God's ability to create good out of evil supports the secular concept of PTG. The power of verbal declarations was demonstrated by Jesus and other people within the Old and New Testaments. Jesus was God in the flesh (2004/2020, John 1:14) but equipped people to perform similar acts as He did (2004/2020, John 14:12-13). People are not God but are empowered by God to perform supernatural acts (Rompies & Hakh, 2023). Supernatural acts of healing, deliverances, and miracles help to fulfill God's agenda on earth (Ware, 2021) and cause the name of the Lord to be exalted (2004/2020, Psalms 148:13). It is because of God's fidelity that faith and expectation are cultivated for Christ's followers to accomplish great works (Hadley, 2020). The steadfastness of the Lord, and knowledge of his goodwill towards man, inspire hope for troubling circumstances. For people who are hurting or in need, God functions as a refuge, deliverer, and strong tower (2004/2020, 2 Samuel 22:2-3).

The psychological concept of moral injury can be observed throughout scripture, including how to overcome and heal (Kelle, 2021). Recovery from trauma is possible as God heals the brokenhearted and binds up their wounds (2004/2020, Psalms 147:3). Not only does God deliver and heal people from distress, but the Lord is able to use the distress for good. The concept of PTG is spiritually substantiated by Romans 8:28 (2004/2020), that God works all things together for good for the people who love Him. Knowing words have power and that growth is possible after suffering indicates that verbal declarations of growth may help facilitate PTG. Existing research that shows a relationship between communication and PTG confirms the

truth of God's word. Exploration regarding positive declarations and PTG provided the opportunity for biblical principles and psychological concepts to further align. "You will know the truth, and the truth will set you free" (2004/2020, *John* 8:32). God's truth about the power of words and growth after trauma laid the foundation for a novel intervention to facilitate PTG, the Positive Communication Approach (PCA).

Positive Communication Approach (PCA)

Within the field of traumatology, PTSD and PTG are considered the most common psychological responses to trauma (Went et al., 2021). However, research indicates a lack of empirically supported interventions for PTG (Roepke et al., 2018) and that only approximately 50% of people experience PTG (Wu et al., 2019). It is imperative that strategies for increased prevalence of PTG continue to be explored and developed. There are three primary categories of interventions for PTG. There is self-expression and disclosure through verbal and written forms, cognitive-behavioral therapies, and new interventions for growth in need of empirical data (Roepke, 2015). A Positive Communication Approach (PCA) is categorized as a new intervention for growth in need of empirical data. PCA is designed to fill an identified gap regarding positive communication and PTG. Although several aspects of positive communication are understood as effective for facilitating PTG, positive declarations have not been explored in relation to PTG. Use of PCA will execute implementation of positive declarations of psychological outcomes for PTG in a therapeutic context.

Positive communication has helped facilitate PTG by alleviating psychological pressure, guiding better management of emotions, and altering core beliefs (Zhen & Zhou, 2022). Specific positive communication that has promoted PTG includes communication geared toward rehabilitation and recovery (Spialet et al., 2019), shifting narratives of trauma into healing stories

(Sherratt & Worrall, 202), and testimonies of recovery (Haroosh & Freedman, 2017). Narrative therapies are also frequently used for facilitating PTG (Tedeschi et al., 2021). Furthermore, specific words used to reference trauma are also connected with levels of growth, such as what type of descriptors (Ziss, 2020) and pronouns are used (Blackburn et al., 2021). Although different forms of positive communication can encourage PTG, the impact of positive declarations has not been studied. Positive declarations are verbal statements of psychological growth or positive change that a person desires to achieve. The driving force of PCA is speaking positive declarations of desired outcomes for the client.

Positive declarations have the potential to help propel people towards their goals by cultivating expectation. Expectation is a significant key to success within a therapeutic context. A client's level of expectation for change has been linked with improvement and expectation is considered equally as important as therapeutic technique (Asay & Lambert, 1999). An aspect of narrative therapy that contributes to client success is the ability to impart hope through use of language (Burns, 2023). Furthermore, thoughts and beliefs change a person's DNA expression, brain, and overall health (Leaf, 2013). The brain can be renewed after damage by the removal of toxic thinking and the development of positive perspectives (Leaf, 2013). For those who have survived trauma, positive declarations may help facilitate growth by cultivating positive expectations and rewiring a person for hopeful and healthier perspectives.

The foundation of PCA combines established therapeutic practices for PTG with the use of psychoeducation about words and positive declarations. Components of PCA emphasize the therapeutic relationship, cognitive-behavioral approaches, self-regulation techniques, narrative development, and positive declarations. A significant aspect of PCA is the therapeutic relationship between the therapist and the client. The therapeutic relationship and alliance

between patient and practitioner influence the client's response to treatment (Baier et al., 2020). Specifically, communication skills and empathy help create successful interactions in clinical practice (Moudatsou et al., 2020). Aspects of cognitive behavioral therapy (CBT) are used as the approach suggests maladaptive cognitions and behaviors are learned through conditioning and can be unlearned *(*Apolinário-Hagen et al., 2020). PCA utilizes CBT by helping clients break maladaptive thought and behavior cycles and form healthy ones. Being mindful of the present moment and self-regulating is another aspect of PCA. Self-regulation includes strategies to control responses to stimuli, both physically and emotionally, and develop situational flexibility (Cibrian et al., 2022). Narrative development is incorporated for trauma survivors to rewrite their stories from a perspective of overcoming rather than surviving (Bayes, 2022).

The core of PCA that distinguishes it from other therapeutic interventions is psychoeducation about the power of words and use of positive declarations. Psychoeducation about positive communication by the therapist will help clients understand the importance of what they say. Such education includes sharing scientific information and research that confirms the power of words. The educational component of PCA is important because survivors of trauma may not be aware of the importance of their communication. Positive declarations of desired psychological outcomes are spoken to cultivate hope and expectation for growth. Example declarations include, "You are growing and will continue to grow because of what you endured!", "Because of the trials, you are experiencing more meaning and purpose in life," and "New and positive perspectives are forming as the result of your former distress." Not only can positive declarations potentially cultivate hope and expectation for PTG, but they can also provide positive speech patterns for clients to mimic.

Summary

Research has confirmed the ability of communication to impact and shape humanity (Fisher et al., 2020; Liebrecht et al., 2019; Nguyen et al., 2020). Communication has been studied for generations and different theories explain how communication influences people. Emotions and language are dependent on one another (Gallois et al., 2021) and how circumstances evolve can be determined by what we say (Schaedig, 2020). Science has revealed that communication impacts people genetically (Dyke et al., 2020) and neurologically (Alm, 2021; Leaf, 2013). Understanding the impact of language on human experience leads to the relationship between trauma and growth. Trauma can result in physical (Havermans et al., 2020; Paredes-Echeverri, et al., 2022), psychological (Beilharz et al., 2020; Mahlangu et al., 2023), and social dysfunction (Dunn et al., 2023; Noor et al., 2021). People can heal and recover after trauma. However, not only do some people heal from impacts of trauma but they grow and transcend because of trauma. PTG is the phenomenon of experiencing growth after trauma that can occur within different domains of life (Allen et al., 2022; Taku et al., 2021).

Both pre-existing therapeutic interventions (Martin et al., 2021; Wen et al., 2021) and interventions designed for PTG (Roepke et al., 2018) are implemented with those desiring to achieve PTG. A way that language has strategically been used to facilitate PTG is through narrative therapy. Narrative therapy allows trauma survivors to see their stories from a strength-based perspective and recognize their vulnerabilities (Bayes, 2022). Delving deeper into the relationship between communication and PTG revealed the specific forms of positive communication that can encourage PTG. Transforming trauma narratives into stories of healing (Sherratt & Worrall, 2021), conversations about rehabilitation (Spialek et al., 2019), testimonies of overcoming (Haroosh & Freedman, 2017), and specific word usage (Blackburn et al., 2021;

Ziss, 2020) can all impact levels of PTG. The reason words can lead to growth and positive change after trauma is because of cultivating hope and expectation. Hope and expectation can lead to healthy emotions and confidence regarding goal attainment (Gallagher et al., 2019) as well as better outcomes with therapy (Asay & Lambert, 1999). Not only can the impact of hope be found within scripture, but the power of words and the ability to grow after trauma is also indicated in the Bible.

Power lies within the tongue, as the tongue can produce both life and death through spoken word (2004/2020, Proverbs 18:21). What a person says both reflects spiritual maturity (Piper & Taylor, 2009) and directs their life (2004/2020, James 3:4). Throughout scripture, supernatural acts occurred due to spoken words (2004/2020, Acts 14:8-10; 1 Kings 17:1; Matthew 8:13). People are made in the image and likeness of God (2004/2020, *Genesis* 1:26) and through faith can speak life over circumstances (2004/2020, Acts 1:8; John 14:12-13). Additionally, the concept of PTG is supported biblically because God can heal people after trauma (2004/2020, Psalms 107:13-14; 2 Samuel 22:2-3) and can also use evil for good (2004/2020, Genesis 50:20). To increase the prevalence of PTG more effective interventions are needed (Roepke et al., 2018). Although research has been conducted regarding different types of communication and PTG, exploration of positive declarations for PTG is lacking. Built upon positive declarations of desired psychological growth, PCA has been drafted as a novel intervention for promoting PTG. The current study provided the opportunity to explore PCA as a new intervention designed for PTG.

CHAPTER 3: RESEARCH METHOD

The current chapter contains pertinent information regarding study procedures. Research questions highlight four distinct goals of the study with a hypothesis that correlates with each. An experimental design, in the form of a small pilot study, was implemented to explore the research questions and hypotheses. Parameters for participation were determined through inclusion and exclusion criteria and the screening process. An explanation of study procedures further expounds on recruitment, randomization, assessment, and study interventions. Details are provided of the study instrumentation and measurements used to screen and collect pretest posttest data from participants. Study variables are operationalized, followed by the data analysis selection and the anticipated delimitations, assumptions, and limitations.

Research Questions and Hypotheses

RQ1: What is the difference in self-reported PTG between participants counseled with PCA and participants counseled without PCA?

H1$_0$: Participants within the experimental group who hear positive declarations will not experience higher levels of self-reported PTG compared to participants in the control group.

H1$_a$: Participants within the experimental group who hear positive declarations will experience higher levels of self-reported PTG compared to participants in the control group.

RQ2: Do positive declarations increase feelings of hope for participants counseled with PCA compared to those counseled without PCA?

H2$_0$: Participants within the experimental group who hear positive declarations will not experience an increased sense of hope compared to participants in the control group.

H2$_a$: Participants within the experimental group who hear positive declarations will experience an increased sense of hope compared to participants in the control group.

RQ3: Is there a self-reported decrease in anxiety symptoms experienced by participants counseled with PCA compared to participants counseled without PCA?

H3$_0$: Participants within the experimental group who hear positive declarations will not experience a self-reported decrease in symptoms of anxiety compared to participants in the control group.

H3$_a$: Participants within the experimental group who hear positive declarations will experience a self-reported decrease in symptoms of anxiety compared to participants in the control group.

RQ4: Is there a self-reported decrease in depression symptoms experienced by participants counseled with PCA compared to participants counseled without PCA?

H4$_0$: Participants within the experimental group who hear positive declarations will not experience a self-reported decrease in symptoms of depression compared to participants in the control group.

H4$_a$: Participants within the experimental group who hear positive declarations will experience a self-reported decrease in symptoms of depression compared to participants in the control group.

Research Design

The current study was a quantitative pilot study, an experimental research design. The study investigated how positive declarations influence PTG among those who have experienced trauma. An experimental design was selected so that participants could be randomly assigned to groups and the predictor variable could be manipulated. The study also investigated if other

mental health benefits were experienced because of positive declarations, including increased hope, decreased anxiety, and decreased depression. An experimental research design was selected to objectively gather data relevant to the theoretical framework and study variables. Experimental designs are needed for testing interventions created for PTG, as many have been tested using pretest-posttest designs (Roepke et al., 2018). Pilot studies are used to test intervention effectiveness that can then be used in larger studies (Morin, 2023). Testing interventions through pilot studies can help answer questions pertaining to study methods and procedures. A pilot study is recommended when investigating ease of participation and compliance as well as the implementation and effectiveness of interventions (Teresi et al., 2022).

Participants

Participant information includes a presentation of the desired characteristics of participants, inclusion and exclusion criteria, target sample size, study permissions, and recruitment strategy. Study participants were those who voluntarily agreed to be studied while striving for PTG. The target population for the study was those who have experienced trauma. Inclusion criteria was that participants had experienced traumatic stress and were 18 years of age or older. Any person could have participated regardless of race, ethnicity, socioeconomic status, or gender. Participants were required to have reduced traumatic stress symptoms and non-impaired daily functioning for experimental PTG work. This qualifier omitted ethical concerns of experimenting with people who were experiencing heightened traumatic stress.

Candidates' level of traumatic stress was measured before the study using the PCL-5 (see Appendix A). Exclusion criteria included those who scored 40 or higher on the PCL-5. Additional exclusions were altered cognitions or emotions due to substance use, personality disorders, psychotic disorders, TBI, or neurodegenerative diseases. The Psychological and

Cognitive Inventory form (see Appendix B) was also completed by candidates used to help capture information pertinent to exclusion criteria. A Brief Psychiatric Rating Scale (BPRS) (see Appendix C) was completed by the clinician as an additional safeguard for study appropriateness. The counseling services were conducted with a licensed clinician who is trained and certified to work with those who have experienced trauma. The goal was to obtain a heterogenous sample to increase generalizability. The aim for sample size was to have no more than 20 participants that could evenly be divided into two groups.

Recruitment began after approval was granted by Liberty University's Institutional Review Board (IRB). A flyer advertising the study was distributed through social media advertising, a health care group, a veteran's organization, and dispersed to individuals. Psychiatric hospitals, acute care, and trauma centers were not pursued to avoid those experiencing heightened traumatic symptoms or psychological distress. Once candidates were identified, the pre-screening assessed appropriateness for participation. Components of the pre-screening included discussion of study objectives, obtaining proof of age, completion of the Psychological and Cognitive Inventory, and completion of the PCL-5. Once appropriate candidates were identified, informed consent was completed by participants prior to study initiation. Study procedures outline the process for study execution and data collection.

Study Procedures

Procedures for the study entailed recruitment, randomization, assessment, and intervention. Recruitment describes the process of identifying candidates and determining participants. For an experiment, randomization is important for promoting balance between groups by eliminating selection bias (Zabor et al., 2020). Participants were randomly assigned to the control or experimental group. Before and after study interventions, questionnaires were

completed by participants to measure dependent variables. These four questionnaires are explained and confirmed as valid and reliable for the study. Finally, the steps for providing interventions through a series of counseling sessions are described in depth. All participants received counseling to facilitate PTG, but positive declarations were only incorporated with the experimental group through the implementation of PCA.

Recruitment

Candidates were recruited through the dissemination of a study flyer to referral sources. Once candidates expressed an interest in the study, a pre-screening was completed to identify appropriate participants. Before engaging in the study, participants then completed informed consent. An overview of study procedures was also shared with participants before their first session, including the frequency and duration of counseling sessions and methods for data collection. The goal of testing a novel approach for PTG through a pilot study was disclosed to participants. However, participants did not know if they were in the control or experimental group during the study. It was after completing all counseling sessions and questionnaires that participants were informed of their group status. Participants were also debriefed regarding the study objectives and were allowed time to process their experience and ask questions.

Randomization

There was a total of 16 participants ($N = 16$) for the study. Participants were randomly divided into two groups, a control group ($n = 8$) and an experimental group ($n = 8$). Random group assignments were made using Excel's RAND function. Participant names were entered into an Excel worksheet and then randomly assigned numbers. The numbers and correlating names were then sorted from the least to the greatest value. The participants listed as 1-10 were assigned to the control group (group C), and participants listed as 11-20 were assigned to the

experimental group (group E). The researcher was privy to random assignments to implement the appropriate interventions assigned to each group. However, group status was concealed from the participants until the conclusion of the study.

Assessment

Mental health questionnaires were utilized to assess the participants' levels of PTG, hope, anxiety, and depression. Data was collected before and after treatment for both groups. The PCL-5 (see Appendix A), the Psychological and Cognitive Inventory (see Appendix B), and the BPRS (see Appendix C) were used to prescreen candidates for study appropriateness. All other questionnaires were administered the week prior to the first counseling session. The SRGS-R (see Appendix D), AHS (see Appendix E), GAD-7 (see Appendix F), and PHQ-9 (see Appendix G) were administered to measure pretreatment levels of PTG, hope, anxiety, and depression. The four questionnaires were administered a second time after the six therapy sessions were completed. Questionnaires were administered and completed online, via Docusign. The last item completed by participants was the Concluding Remarks Question (see appendix L).

Intervention

Once participants completed the consent paperwork, study briefing, and initial questionnaires, the intervention was implemented. Study experimentation occurred through the form of individual counseling sessions. Group C (n = 8) and group E (n = 8) consisted of randomly assigned participants. The licensed clinician conducted a total of six, 50-minute counseling sessions with each participant, one session a week for six weeks, with a focus on PTG (see appendix H). In addition to their sessions, participants had at-home assignments to further help facilitate PTG. Counseling without implementation of PCA (see appendix I) was conducted with group C. Counseling with the implementation of PCA (see appendix J) was conducted with

group E. To facilitate PTG for all participants, both groups received the same interventions except for the communication components of PCA, psychoeducation about the power of words and positive declarations. When beginning to work with each participant, the clinician focused on creating a therapeutic alliance to influence the participant's response to treatment. It was through rapport building and empathy with participants that the clinician aimed to increase the likelihood of success with outcomes. Therapeutic techniques that were used to facilitate PTG for both groups included education about trauma and PTG, self-regulation techniques, cognitive reframing from perspectives of growth, and the use of narrative therapy.

Education was provided about trauma and PTG to teach participants about the impacts of trauma as well as opportunities for growth. Self-regulation techniques were taught to guide participants in how to regulate themselves emotionally and physically. Cognitive reframing was used to show participants their experiences from a perspective of growth and transformation. The benefit of narrative development was discussed and assigned as physical writing for participants at home. The PCA approach was only utilized with group E and included psychoeducation about words and positive declarations of desired growth. Examples of positive declarations include, “You are growing within your personal relationships and will continue to grow,” and “Your appreciation for life is becoming stronger because of what you endured.” The clinician monitored participants for an increase of traumatic stress symptoms as they addressed previous trauma. However, there were no accounts of retraumatization witnessed by the clinician.

All participants had at-home assignments each week to help reinforce session content. Homework assignments included paragraph writings and daily self-regulation. The writings served the purpose of drafting a narrative of growth and helping participants become more aware of transformation that they may have already experienced. A writing assignment was assigned

for each of the six weeks (see Appendix K). The first week's assignment was about what participants understood PTG to be and hoped to accomplish throughout the study. The remaining five weeks correlated with the five domains of PTG. These domains included relationship quality and compassion, appreciation of life, spiritual and existential change, personal strength, and a new or different path (Tedeschi, 2023; Zhang et al., 2022). Group E was instructed to incorporate written positive declarations of growth within their weekly assignments. Additionally, members of group E were instructed to speak positive declarations of growth over their self each day between sessions.

Instrumentation and Measurement

Instruments for data collection were used to pre-screen participants and collect study data. The PCL-5 (see Appendix A), the Psychological and Cognitive Inventory (see Appendix B), and the Brief Psychiatric Rating Scale (BPRS) (see Appendix C) were utilized to determine which candidates could participate in the study. Once participants were identified, they completed mental health questionnaires before and after treatment to answer research questions. Questionnaires that were completed by participants included the SRGS-R (PTG), AHS (hope), GAD-7 (anxiety), and PHQ-9 (depression). A clear description of the purpose and content of each instrument and questionnaire follows.

Prescreening Measures

To determine study participants, candidates were pre-screened using the PCL-5 (trauma), the Psychological and Cognitive Inventory form, and the BPRS (psychiatric). Prescreening was required to ensure appropriateness for the study by assessing inclusion and exclusion criteria. The PCL-5 helped determine the candidate's current level of traumatic stress while the Psychological and Cognitive Inventory and BPRS helped identify disqualifying conditions. The

Psychological and Cognitive Inventory (see Appendix B) was created by the researcher to gather information about the candidate's psychological and cognitive functioning. The form is comprised of five items to collect information about the person's psychological and cognitive health. Example items include, "What mental health diagnoses have you received?", "Describe any emotional or cognitive impairments you experience," and "Have you recently experienced forgetfulness or difficulty comprehending information?" In addition to instruments for prescreening, the candidate provided proof of identification that confirmed they were 18 years of age.

The PCL-5, PTSD Checklist for DSM-5, (see Appendix A) is a self-report checklist that assesses the severity of PTSD symptoms through 20 items (Weathers et al., 2013). Options range from "0" (not at all), to "4" (extremely), totaling 80 possible points (Bovin et al., 2016). Some example questions for measuring within the past month are, "repeated, disturbing, and unwanted memories of the stressful experience?", "loss of interest in activities that you used to enjoy?", and "trouble falling asleep or staying asleep?" A 10-point change on the PCL-5 is considered significant on subsequent completions. The PCL-5 is the most widely used self-report measurement tool for assessing PTSD. Furthermore, PCL-5 has been tried through research and confirmed as both valid and reliable (Ibrahim et al., 2018). Studies that tested the validity of the PCL-5 indicated high internal consistency (Cohen et al., 2015), test-retest reliability (r =.84), and interval consistency of (a = .96) (Bovin et al., 2016). Candidates who scored 40 or less could participate, as a score above 31 indicates potential PTSD (Bovin et al., 2016). Those who scored above 40 required further alleviation of traumatic stress symptoms prior to participating in the PTG study.

Since the PCL-5 and the Psychological and Cognitive Inventory relied on self-report

data, the clinician completed the Brief Psychiatric Rating Scale (BPRS) (see Appendix C) as part of the pre-screening for study participation. The anchored version of the BPRS was created to measure symptoms present in major psychiatric diagnoses and contains 18 groupings of symptom constructs. The items are rated on a Likert scale ranging from “1” (not present) to “7” (extremely severe). The total score can range between 18-126 and more severe symptomatology is represented by a higher score (Hofmann et al., 2022). In addition to the candidate's self-reported history, the use of the BPRS was strictly to function as a guide for identifying disqualifying conditions encompassed in the exclusion criteria. The therapist completed the scale during the pre-screening interaction. The four dependent study variables were measured using established mental health questionnaires.

Posttraumatic Growth (PTG)

RQ1: What is the difference in self-reported PTG between participants counseled with PCA and participants counseled without PCA?

To address RQ1, participant levels of PTG were measured before and after treatment. The revised Stress-Related Growth Scale (SRGS-R) (see Appendix D) was administered prior to the first session and again after the sixth session. The SRGS-R is a 15-item bipolar scale used to measure growth related to stress or trauma. The 15 items can be answered with seven possible options, ranging from “+3” (a very positive change), to “-3” (a very negative change), a possible total ranging from -45 to 45 (Boals & Schuler, 2018). Example items include, “I experienced a change in the extent to which I find meaning in life,” and “I experienced a change in my belief that I have something of value to teach others about life.” The SRGS-R has been identified as having excellent internal reliability (a = .93) and acceptable convergent validity (Boals & Schuler, 2018).

The SRGS-R was selected due to the decreased probability of reporting illusory growth compared to the Post Traumatic Growth Inventory (PTGI) (Boals & Schuler, 2018; Boals & Schuler, 2019; Zachry & Jayawickreme, 2022). The PTGI and original SRGS are commonly used for measuring levels of PTG. There are two distinctions of the SRGS-R from the SRGS, without revision. One distinction is neutral-worded questions instead of positive-worded questions. The second distinction is that in addition to a score of zero, representing no change, the SRGS-R allows for a negative score representing post-traumatic depreciation. Furthermore, the PTGI has been identified as containing biased wording and is believed to not accurately measure PTG. When the PTGI, SRGS, and SRGS-R have been compared through studies, the SRGS-R has lower levels of growth reported than the PTGI and SRGS. These findings suggest that the PTGI and SRGS encourage overreporting of PTG more than the SRGS-R (Boals & Schuler, 2018).

Hope

RQ2: Do positive declarations increase feelings of hope for participants counseled with PCA compared to those who were counseled without PCA?

To address RQ2, the Adult Hope Scale (AHS) (see Appendix E) was used. The AHS was created by C. R. Snyder et al. (1991) based on his cognitive model of hope. AHS consists of 12 items that measure the respondent's degree of hope. The 12 items include three subsets of four questions comprised of agency questions, pathway questions, and filler questions. A Likert-type scale, ranging from "1" (definitely false), to "8" (definitely true), is used for answering each question. Example questions include, "I energetically pursue my goals," "There are lots of ways around any problem," and "I usually find myself worrying about something." Filler questions are not counted when scoring participant answers. Scores can measure just agency (range: 4-32), just

pathway (range: 4-32), or can be combined for a total hope score (range: 8-64). Higher scores are representative of higher levels of hope. The AHS was studied and identified as having acceptable test-retest reliability and internal consistency, and construct validity is supported (Snyder et al., 1991).

Anxiety

RQ3: Is there a self-reported decrease in anxiety symptoms experienced by participants counseled with PCA compared to participants counseled without PCA?

To address RQ3, symptoms of anxiety were measured with the Generalized Anxiety Disorder 7-item scale (GAD-7) (Spitzer et al., 2006). The GAD-7 (see Appendix F) is a seven-item questionnaire that measures anxiety severity by rating various problems over the last two weeks. Responders can select either "0" (not at all), "1" (several days), "2" (over half the days), or "3" (nearly every day). Example items on the GAD-7 include "feeling nervous, anxious, or on edge," "not being able to stop or control worrying," and "becoming easily annoyed or irritable." Rating severity ranges from minimal (0-4), mild (5-9), moderate (10-14), and severe (15-19). The GAD-7 possesses a test-retest reliability of .82, good specificity, good sensitivity, and strong internal consistency (Cronbach's a = .92) (Jordan et al., 2017).

Depression

RQ4: Is there a self-reported decrease in depression symptoms experienced by participants counseled with PCA compared to participants counseled without PCA?

To address RQ4, depressive symptoms were measured using the Patient Health Questionnaire-9 (PHQ-9) (see Appendix G). The PHQ-9 is an established and valid psychometric measurement tool used to screen for major depressive disorder and measure depression severity (Kroenke et al., 1999). A set of nine questions is answered by the respondent

to measure depressive symptoms spanning over the last two weeks. Answer options are “0” (not at all), “1” (several days), “2” (more than half the days), and “3” (nearly every day). Rating severity on the PHQ-9 ranges from minimal (0-4), mild (5-9), moderate (10-14), moderately severe (15-19), to severe depression (20-27). The PHQ-9 references how often the person has been bothered the past two weeks by various problems. Example items include, “Poor appetite or overeating,” “little interest or pleasure in doing things,” “feeling bad about yourself- or that you’re a failure or have let yourself or your family down.” The PHQ-9 has been studied extensively and determined to have an internal reliability (a= 0.86) and test-retest reliability was 0.84 (Kroenke et al., 2001).

Operationalization of Variables

PCA: This variable is a nominal variable implemented in counseling sessions with the experimental group. A minimum threshold of seven positive declarations will be verbalized each session, and five positive declarations over self each day will be assigned for at-home work.

PTG: This variable is a ratio variable and will be measured by the total score on the SRGS-R.

Hope: This variable is an interval variable and will be measured by the total score on the AHS.

Anxiety: This variable is a ratio variable and will be measured by the total score on the GAD-7.

Depression: This variable is a ratio variable and will be measured by the total score on the PHQ-9.

Data Analysis

Statistical analysis was conducted using the data collected before and after counseling sessions. The answers to RQ1, RQ2, RQ3, and RQ4 were determined by conducting an analysis of covariance (ANCOVA). Data analysis was completed using Intellectus Statistics, a statistics software program. An ANCOVA is a statistical test that combines analysis of variance

(ANOVA) and linear regression. Through use of an ANCOVA, the ability to detect differences increases by analyzing covariates that may cause unwanted variability in data (Stanley, 2022). For RQ1, PTG was measured using the SRGS-R. Rather than scores of individual items, the total SRGS-R score was used for the ANCOVA. Two scores, pretest and posttest data, were entered for both the control and experimental group. After conducting the ANCOVA, group means were compared to determine if significant differences were experienced after treatment. A preexisting significance level was not discovered within literature about the SRGS-R. Therefore, a positive change of seven points was determined as clinically significant for the present study. This significance level was referenced when reviewing direct scores on the SRGS-R. Although changes that exceed seven points were desired on the SRGS-R, seven points were considered significant during a limited time frame of only six weeks of treatment.

The process of using the total assessment score for the ANCOVA and comparison of means to determine treatment outcomes were repeated for the three subsequent research questions. For RQ2, the amount of participant hope was measured using the AHS. Two scores were entered for the AHS, which were the pretest and posttest scores for both the control and experimental group. When reviewing literature regarding the AHS an existing significance level was not found. For the present study, a six-point difference in pretest and posttest scores on the AHS constituted a clinically significant change. Changes beyond six points were desired on the AHS, but six points were considered significant due to condensed treatment over the time frame of six weeks. An ANCOVA was conducted to compare the means of pretest and posttest data for the control and experimental group.

Regarding anxiety levels, exploration of RQ3 was measured using the GAD-7. GAD-7 scores were entered before and after treatment for the control and experimental group. A study to

determine the clinical significance of the GAD-7 concluded that a change of six or more points, while also moving across a cutoff score of 10, is considered significant. If a six-point change occurs without crossing the cutoff score, the difference is considered a reliable improvement but not significant (Bischoff et al., 2020). The point standard for clinically significant change by Bischoff et al. (2020) was applied to the present study. However, a cutoff score of 10 was not required. If a participant's pretest score on the GAD-7 was 18, and then the posttest score was 11, then the change resulting from treatment was considered significant.

Lastly, to answer RQ4, the participants' depression levels were measured using the PHQ-9. Pretest and posttest scores were entered for both groups. The clinical significance of the PHQ-9 has been examined when comparing pretest and posttest data. Since a score of 10 and above represents substantial depression levels, Kroenke (2001) suggests that post-intervention scores of 9 or less, combined with a 50% decrease, represent a significant change. However, there has been debate whether significant scores should be less than ten with a 50% improvement, or a five-point reduction (McMillan et al., 2010). For the present study, change was considered significant when a five-point decrease in depression level was documented. If a participant's pretest score was 19, and their posttest score was 13, the change was considered significant. Following the format for data analysis, the current chapter concludes with a discussion of delimitations, assumptions, and limitations of the study.

Delimitations, Assumptions, and Limitations

This section discusses the delimitations, assumptions, and anticipated limitations of current study. Delimitations, deliberate boundaries placed on the study, included selection of the study sample, requirements of participation, and selection of the study design. The assumptions highlight what was believed to be true regarding the process of collecting study data.

Assumptions included potential attrition, participant honesty regarding experience, and participant accuracy when completing self-report assessments. Furthermore, anticipated limitations of the study related to factors that compromise the validity of study results. Such limitations included the influence of extraneous variables, the delivery method of study intervention, generalizability of findings, and participation personality type.

Delimitations

The target sample, requirements of participation, and study design were delimitations of the study. Rather than studying the impact of positive declarations on any person, the target population was those who have experienced trauma. Those who have experienced trauma were the study focus due to their potential to experience PTG. Requirements of participation were set to protect participants and promote accurate data. The inclusion criteria of former traumatic stress, that is no longer impairing daily functioning, was to protect the participant. People do not have to have a complete resolution of traumatic stress to experience PTG (Lee et al., 2020; Wu et al., 2019). However, it is unethical to discuss growth and positive consequences of trauma for those who are actively suffering from trauma and experiencing impairments to their daily functioning.

Exclusion criteria of not having certain mental health diagnoses or cognitive impairments was to ensure participation from those who could comprehend the study's purpose and goals. Study findings would have been skewed if participants did not fully understand the goal of their therapy sessions. Finally, the design of a small pilot study was intended to guarantee continuity of services. Training additional clinicians to duplicate services with more participants might have diminished the quality of interventions. Having the same clinician for all participants ensured that a consistent approach and level of care was maintained during sessions. An expansion with

more participants and additional clinicians can be conducted for future repetition of the study.

Assumptions

Issues with recruitment and attrition of participants, honesty regarding experience, and accuracy of self-report measures were assumptions of the current study. Because a requirement was that participants must have experienced traumatic stress that is now resolved enough to ethically strive for growth, this specific criterion was assumed to severely restrict the candidate pool. The specific requirements of participation did require additional attention and screening. However, there was not a problem with findings participants who successfully met the inclusion criteria. Due to the risk of participants beginning the study but not completing all six sessions, potential attrition was another assumption of the study. Although receiving counseling services at no cost is a benefit, participants may have had busy schedules, or life demands that caused them not to complete all sessions. However, contrary to this assumption, all participants fully completed the study requirements.

A prior diagnosis of PTSD was not required to provide those without a formal diagnosis the opportunity to strive for PTG. Also, for those who have received a previous diagnosis of PTSD, tracking and obtaining the record of a diagnosis is not always feasible. It was assumed that participants would be honest about their history of traumatic stress. During the prescreening process, discussions with candidates helped to decipher actual versus a perceived history of trauma. Another assumption pertained to participant responses on self-report measures. Research questions were answered through completion of self-report measures, which required participants to understand their experience and be truthful when capturing it. The clinician attempted to avoid collecting skewed data by educating participants about study constructs and the importance of accurate responses on questionnaires.

Limitations

The influence of extraneous variables, delivery method, generalizability, and participant personalities were potential limitations of the study. During the timeframe of the study, several participants had outside life experiences that may have impacted their response to therapy and study interventions. Although selection bias was reduced due to randomization, outside experiences that occurred during the six weeks were not controlled for or captured by the therapist. It is possible that stressful or positive events could have contributed to exaggerated responses on questionnaires. However, the clinician educated participants about such influence and directed them to complete assessments according to their routine versus outlying experiences.

To accommodate potential distance from the clinician, participants had the option to complete counseling sessions in person or via Zoom. However, all sessions were conducted electronically via Zoom due to either distance from the clinician or a scheduling conflict. It is unknown if counseling services provided in person would have had a different impact than those provided electronically. Furthermore, the small sample size of the study limited generalizability. Since several participants came from similar recruitment sources, generalizability was prevented due to concentrated sub-populations rather than a diverse sample of participants. Finally, participant personality type may also have limited the study. Personality types were not assessed for the study. Therefore, it was not clear whether the changes in PTG, hope, anxiety, and depression were experienced because of implementation of PCA or because of participant predisposition toward growth.

Summary

The method for implementing study interventions and data collection was presented in

the current chapter. Research questions and correlating hypotheses highlighted study goals and anticipated outcomes. The research questions proposed if positive declarations would influence levels of PTG, hope, anxiety, and depression. A quantitative experiment was designed to test study hypotheses. Those who have experienced trauma were recruited for the study and exclusion criteria ensured participant comprehension of the study's purpose. Details were provided regarding recruitment, randomization, assessments, and study interventions. Variables were also operationalized and defined as measurable for the study. Furthermore, the format for data analysis was reviewed as well as the delimitations, assumptions, and anticipated limitations of the study. Descriptive results and study findings are reviewed in chapter four.

CHAPTER 4: RESULTS

The current chapter describes study outcomes and results. A recap of the study purpose lays the foundation for the data collection process, descriptive results, and study findings. Details regarding study execution include study screening, structure, and instrumentation. The study purpose highlights the goal of exploring the relationship between positive declarations and posttraumatic growth (PTG). Secondary to PTG, other mental health benefits were explored in relation to positive declarations. Data collection occurred through an experiment to explore differences between group outcomes in response to study interventions. Candidates were identified, screened, and registered for participation in the study. After being randomly assigned to a group, all participants completed pretest measures, counseling sessions, and posttest measures. Participants also provided closing remarks and were debriefed regarding their participation.

Descriptive results include both participant demographics and scores of mental health questionnaires. Participant demographics provide detailed information about the whole sample and participants by group. An inventory of participant demographics includes information about gender, race, and age. The quantitative data collected from participants was reviewed prior to statistical analysis. A review of non-analyzed data reveals effectiveness of treatment from a clinical perspective. Empirical significance was then examined through statistical analysis of study data. An analysis of covariance (ANCOVA) was conducted to explore each RQ with output and interpretation of findings. For each RQ, study hypotheses were referenced with decision to either accept or reject the null hypothesis. The data from participant closing remarks was compared to ANCOVA output to further support or refute quantitative findings.

Purpose of the Study

Only a portion of people who have lived through trauma experience PTG (Wu et al., 2019). There are numerous interventions for treating PTSD (Belleville et al., 2018; Cherestal & Herts, 2021; Murray et al., 2022) but not as many interventions specifically designed for PTG (Roepke et al., 2018). Furthermore, the majority of PTG studies are quasi-experimental designs creating a need for more randomized control studies (Roepke et al., 2018). The purpose of this quantitative study was to examine if positive declarations facilitate PTG among those who have experienced trauma. The study also investigated if other mental health benefits were experienced because of using positive declarations through PCA, including increased hope, decreased anxiety, and decreased depression. An additional goal of the study was to create a user-friendly, easy-to-replicate intervention for clinicians. If study findings are significant, positive declarations of desired psychological outcomes in a therapeutic context should be further examined.

Data Collection

Data collection was accomplished by conducting an experiment, a quantitative pilot study. The study investigated how positive declarations influenced PTG, hope, anxiety, and depression levels for those who have experienced trauma. There were 16 individuals ($N = 16$) who were successfully recruited, screened, and registered for the study. Recruitment was completed through verbal advertising, social media platforms, and local organizations. All measures, forms, and paperwork were completed electronically via Docusign. Candidates were screened for appropriateness by completing the PCL-5 (see Appendix A) and the Psychological and Cognitive Inventory (see Appendix B). The researcher also completed a BPRS (see Appendix C) for each candidate to verify their mental status and behavior. Identification and

informed consent were obtained from candidates who were deemed appropriate for the study. Each participant completed pretest and posttest measures, had six counseling sessions, and provided closing remarks. Four questionnaires were administered to participants including the SRGS-R for PTG (see appendix D), AHS for hope (see Appendix E), GAD-7 for anxiety (see Appendix F), and the PHQ-9 for depression (see appendix G). The first set of questionnaires were administered before participants received any counseling. Participants were randomly assigned to either the control group (group C) or experimental group (group E) using Excel's RAND function. Six, 50-minute counseling sessions (see Appendix H) were conducted via Zoom by a licensed and trauma-certified clinician.

All participants received the same interventions (see Appendix I), except for communication components of the Positive Communication Approach (PCA) which were only implemented with group E. The therapeutic techniques implemented for both groups include psychoeducation about PTG, regulation techniques, CBT, new life principles (Roepke et al., 2018), and narratives of growth (Bayes, 2022; Beaudoin, 2022; Tedeschi et al., 2021). The only difference between group interventions was that PCA included psychoeducation about the power of words and positive declarations of desired psychological outcomes (see Appendix J). Expressions of PCA during sessions were noted with a participant who became paralyzed after a traumatic accident. The therapist helped the participant identify how their patience and level of compassion had increased. The clinician stated, "You are growing in how you relate to others! You will continue to experience more depth in connections as you press into new aspects of your relationships". With another participant, who survived child abuse due to parental mental illness, it was declared that "Mental health is not taken for granted because you understand how important it is. You are developing a greater appreciation for life because now you can perceive

challenges as opportunities for growth."

After the counseling sessions, participants completed the four questionnaires again as posttest measures. Participants also provided concluding remarks (see Appendix M) in response to an open-ended question about their experience (see Appendix L). The question was, "Please describe your experience in response to participating in the study and how you feel after completing the counseling sessions." After completion of all study requirements, a debriefing was conducted with participants. The purpose of the debriefing was to reveal study details, including group assignments, and discuss any questions or feelings of participants. A core component of the debriefing was to provide education about the experimental structure and why group assignment was concealed. Also, pretest and posttest scores were disclosed for those who were interested. Sharing changes in measurement scores encouraged many of the participants by revealing their growth from the counseling sessions. Furthermore, participant demographics and descriptive results help paint a picture of study details.

Descriptive Results

Descriptive results of the study are revealed through sample demographics, questionnaire means, and descriptive results of data prior to statistical analysis. Sixteen individuals ($N = 16$) were appropriate for the study by meeting study inclusion criteria. Five individuals ($n = 5$) expressed interest but did not meet study criteria. When interviewed prior to the study, all participants were familiar with trauma and PTSD. However, none of the participants were familiar with PTG and considered it a new concept. Participants ($N = 16$) were randomized 1:1 to either group E (PCA) ($n = 8$) or group C (non-PCA) ($n = 8$). No participants dropped out of the study and all completed screening and study requirements. Study requirements included prescreening measures, consent and identification, pretest posttest

questionnaires, six counseling sessions, closing remarks, and a study debriefing.

Demographic information gathered for each participant included gender, race, and age. For gender, the participants consisted of females (*n* = 13, 81.25%) and males (*n* = 3, 18.75%). Pertaining to race, participants were either African American (*n* = 5, 31.25%) or Caucasian (*n* = 11, 68.75%). The youngest participant was 32, and the oldest was 54, with a mean age of 43.4 years. Demographics for group C (control) included female (*n* = 6, 75%) to male (*n* = 2, 25%), African American (*n* = 2, 25%) to Caucasian (*n* = 6, 75%), and a mean age of 42.88 years old. Demographics for group E (experimental) included female (*n* = 7, 87.50%) to male (*n* = 1, 12.50%), African American (*n* = 3, 37.50%) to Caucasian (*n* = 5, 62.50%), and a mean age of 43.88 years old. Group demographics are presented in Table 1 (GENDER), Table 2 (RACE), and Table 3 (AGE).

Table 1

Frequency Table for Nominal Variables

	GROUP		
Variable	C	E	Missing
GENDER			
F	6 (75.00%)	7 (87.50%)	0 (0.00%)
M	2 (25.00%)	1 (12.50%)	0 (0.00%)
Missing	0 (0.00%)	0 (0.00%)	0 (0.00%)
Total	8 (100.00%)	8 (100.00%)	0 (100.00%)

Note. Due to rounding error, percentages may not sum to 100%.

Table 2

Frequency Table for Nominal Variables

	GROUP		
Variable	C	E	Missing
RACE			
Caucasian	6 (75.00%)	5 (62.50%)	0 (0.00%)
African American	2 (25.00%)	3 (37.50%)	0 (0.00%)
Missing	0 (0.00%)	0 (0.00%)	0 (0.00%)
Total	8 (100.00%)	8 (100.00%)	0 (100.00%)

Note. Due to rounding error, percentages may not sum to 100%.

Table 3

Summary Statistics Table for Interval and Ratio Variables by GROUP

Variable	*M*	*SD*	*n*	SE_M	Min	Max	Skewness	Kurtosis
AGE								
C	42.88	8.97	8	3.17	32.00	54.00	0.009	-1.59
E	43.88	5.99	8	2.12	35.00	54.00	0.14	-0.67

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

Each participant completed the SRGS-R (PTG), AHS (hope), GAD-7 (anxiety), and the PHQ-9 (depression). Questionnaires were completed before the participants began their counseling sessions and again after sessions were finished. Scores were tallied and recorded for each questionnaire. The cumulative baseline scores for group C were SRGS-R (158), AHS (556), GAD-7 (28), and the PHQ-9 (51). The cumulative baseline scores for group E were SRGS-R

(97), AHS (484), GAD-7 (47), and PHQ-9 (63). Cumulative scores for group C, post-intervention, were SRGS-R (285), AHS (575), GAD-7 (15), and PHQ-9 (19). Post-intervention score totals for group E were SRGS-R (295), AHS (548), GAD-7 (17), and PHQ-9 (30).

After treatment, change was observed within both groups for PTG. Desired change for level of PTG is reflected by a point increase on the SRGS-R. Regarding PTG, descriptives for the SRGS-R are provided prior to pretest scores being controlled through the ANCOVA. After treatment, group C experienced a 127-point cumulative increase reflected by the starting SRGS-R average (M = 19.75) and ending SRGS-R average (M = 35.62). Group E experienced a 198-point cumulative increase reflected by the starting SRGS-R average (M = 12.12) and ending SRGS-R average (M = 35.62). After treatment, group E cumulatively experienced a greater increase (71 points) from pretest scores than group C. Descriptive statistics for the SRGS-R by group are presented in Table 4.

Table 4

Summary Statistics Table for Interval and Ratio Variables by GROUP

Variable	*M*	*SD*	*n*	SE_M	Min	Max	Skewness	Kurtosis
SRGS_R_1								
C	19.75	15.21	8	5.38	6.00	45.00	0.67	-1.03
E	12.12	29.19	8	10.32	-43.00	43.00	-0.76	-0.50
SRGS_R_2								
C	35.62	11.04	8	3.90	14.00	45.00	-0.98	-0.27
E	36.88	6.90	8	2.44	25.00	45.00	-0.49	-0.88

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

After treatment, increased hope was indicated by improved scores on the AHS for both groups. Desired change for level of hope is reflected by a point increase on the AHS. Descriptives reflect data prior to pretest scores being controlled through the ANCOVA. After completion of counseling sessions, group C experienced a 19-point cumulative increase reflected by a starting AHS average (M = 69.50) and ending AHS average (M = 71.88). Group E experienced a 64-point cumulative increase reflected by the starting AHS average (M = 60.50) and ending AHS average (M = 68.50). Group E cumulatively experienced a greater increase (45 points) from pretest scores than group C. The AHS descriptive statistics by group are presented in Table 5.

Table 5

Summary Statistics Table for Interval and Ratio Variables by GROUP

Variable	*M*	*SD*	*n*	SE_M	Min	Max	Skewness	Kurtosis
AHS_1								
C	69.50	13.72	8	4.85	44.00	86.00	-0.81	-0.45
E	60.50	13.55	8	4.79	39.00	80.00	-0.33	-0.94
AHS2								
C	71.88	6.51	8	2.30	64.00	80.00	0.27	-1.58
E	68.50	6.46	8	2.28	55.00	74.00	-1.18	0.34

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

Once counseling sessions were completed, a change was observed within both group C and group E for anxiety. Desired change for anxiety is reflected by a point decrease on the GAD-7. Regarding the GAD-7, descriptives show data prior to controlling pretest scores by conducting the ANCOVA. After treatment, group C experienced a (-13) cumulative point change reflected

by the starting GAD-7 average (*M* = 3.50) and ending GAD-7 average (*M* = 1.88). Group E experienced a (-30) cumulative point change reflected by the starting GAD-7 average (*M* = 5.88) and ending SRGS-R average (*M* = 2.12). When comparing differences between groups, group E cumulatively experienced a greater decrease (17-points) from pretest scores than group C. Descriptive statistics for the GAD-7 by group are presented in Table 6.

Table 6

Summary Statistics Table for Interval and Ratio Variables by GROUP

Variable	*M*	*SD*	*n*	SE_M	Min	Max	Skewness	Kurtosis
GAD_7_1								
C	3.50	3.66	8	1.30	0.00	11.00	1.01	0.19
E	5.88	5.03	8	1.78	1.00	15.00	0.72	-0.70
GAD_7_2								
C	1.88	2.03	8	0.72	0.00	6.00	1.27	0.12
E	2.12	2.59	8	0.91	0.00	8.00	1.60	1.50

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

Lastly, a decrease in depression after treatment was also reflected by score changes on the PHQ-9 for both groups. A reduction of depressive symptoms is reflected by a point decrease on the PHQ-9. Descriptives for the PHQ-9 show data prior to controlling pretest scores through the ANCOVA. Once participants completed counseling sessions, group C experienced a (-32) cumulative point change reflected by the starting PHQ-9 average (*M* = 6.38) and ending PHQ-9 average (*M* = 2.38). Group E experienced a (-33) cumulative point change reflected by the starting PHQ-9 average (*M* = 7.88) and ending SRGS-R average (*M* = 3.75). A greater decrease

in scores (1-point) on the PHQ-9 was experienced by group E than group C. The descriptive statistics for the PHQ-9 by group are presented in Table 7.

Table 7

Summary Statistics Table for Interval and Ratio Variables by GROUP

Variable	*M*	*SD*	*n*	SE_M	Min	Max	Skewness	Kurtosis
PHQ_9_1								
C	6.38	6.39	8	2.26	0.00	19.00	0.96	-0.09
E	7.88	4.76	8	1.68	1.00	15.00	-0.002	-1.15
PHQ_9_2								
C	2.38	2.13	8	0.75	0.00	6.00	0.70	-0.93
E	3.75	3.49	8	1.24	0.00	10.00	0.54	-0.71

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

For each target area (PTG/hope/anxiety/depression), both group C and group E experienced improvements, as evidenced by scores on mental health questionnaires. Furthermore, the group E experienced greater change than group C for each area. Compared to group C, group E scored higher on the SRGS-R (71-points), higher on the AHS (45-points), lower on the GAD-7 (17-points), and lower on the PHQ-9 (1-point). From a clinical standpoint, the differences between the SRGS-R and the AHS were both substantial, as well as a moderate change for the GAD-7. To determine if differences were considered empirically significant, further exploration was conducted through statistical analysis of study data.

Study Findings

Relevant statistics are reviewed for the present study. To answer research questions, statistical analysis was conducted using the pretest and posttest scores from each participant. Findings are shared for each RQ which include numerical data and tables. In addition to quantitative data, closing remarks from participants are referenced as supportive qualitative data. The qualitative data provides direct feedback from participants that was compared with the data from mental health questionnaires. The combination of quantitative and qualitative data revealed the impact of PCA on the level of PTG, hope, anxiety, and depression of participants.

An ANCOVA, analysis of covariance, was conducted to examine the impact of counseling interventions on participant PTG and mental health. Totals from participant answers on mental health questionnaires were collected and used for data analysis. An ANCOVA was selected to analyze posttest data while removing the effects of covariate factors, the pretest measurement scores. Additionally, when conducting an ANCOVA unexplained variability is decreased to strengthen the probability of discovering differences between groups. Data analysis software, Intellectus Statistics, was utilized to conduct an ANCOVA for each research question. Participant closing remarks were reviewed for direct statements that aligned with quantitative data.

Research Question 1

RQ1: What is the difference in self-reported PTG between participants counseled with PCA and participants counseled without PCA?

While controlling for pretest scores using an ANCOVA, differences of self-reported PTG on the SRGS-R after treatment were examined by group. Assumptions of normality, homoscedasticity, outliers, homogeneity of regression slopes, and covariate-IV independence

were met. Approximately 5% of variance, eta square of .05, in SRGS-R posttest scores were explained by GROUP. However, there was not a significant difference between the control and experimental group scores after controlling for the pretest scores, $F(1,13) = 0.67$, p =.429, demonstrated in Table 8. Means for group C ($M = 34.69$) and group E ($M = 37.81$) are represented in Table 9.

Table 8

Analysis of Variance Table for SRGS_R_2 by GROUP

Term	*SS*	*df*	*F*	*p*	η_p^2
GROUP	37.60	1	0.67	.429	0.05
SRGS_R_1	452.54	1	8.01	.014	0.38
Residuals	734.21	13			

Table 9

Marginal Means, Standard Error, and Sample Size for SRGS_R_2 by GROUP Controlling for SRGS_R_1

Combination	Marginal Means	*SE*	*n*
C	34.69	2.68	8
E	37.81	2.68	8

The mean scores on the SRGS-R (Table 9) reveal that group E did score higher than group C, but the results of the ANCOVA indicated that the difference in scores was not significant. This finding answers RQ1 in that there was not a greater difference on the SRGS-R for those counseled with PCA than for those counseled without PCA. $H1_a$ states, “Participants

within the experimental group who hear positive declarations will experience higher levels of self-reported PTG compared to participants in the control group." Therefore, we fail to reject $H1_0$ and cannot accept $H1_a$. Participant closing remarks provided after the study were reviewed for alignment with quantitative findings. Each participant's response was examined for expressions of feeling that posttraumatic growth had occurred.

Eleven out of 16 participants (n = 11, 68.75%) referenced believing that they have grown due to trauma as a result of participating in the study. Furthermore, when investigating responses by group, five people (n = 5, 31.25%) in group C made expressions about perceived growth, whereas six people (n = 6, 37.5%) in group E referenced growth. The overall percentage supports substantial achievement with PTG (n = 11, 68.75%) as the result of the study. One participant from group C stated:

> The study was absolutely amazing! It was all very user friendly and I do truly feel even better than when I started. This whole experience has given me some new tools to use in day to day life to stay more grounded and in the moment. It was also an excellent exercise in looking back to see just how much I've grown since and from the trauma.

A participant from group E expressed:

> I had an enlightening experience participating in the study. It was very insightful and therapeutic to revisit the past trauma that I experienced from a different time and perspective. I am aware of how common and subconsciously it is to forget or block out undesirable experiences. However, after willingly being put in a position to have to reflect on the past; it turns out it was both powerful and even rewarding to be my own witness of how far by the Grace of God I have come.

Group percentages also reflect a greater difference of PTG experienced by those counseled with PCA than those counseled without PCA. When comparing comments by group, the larger percentage of participants who verbalized PTG in group E aligns with *H1*a. However, although the percentage is greater, it does not appear significant, which supports ANCOVA findings about group differences.

Research Question 2

RQ2: Do positive declarations increase feelings of hope for participants counseled with PCA compared to those counseled without PCA?

The differences in self-reported levels of hope on the AHS after treatment were examined by group, while controlling for pretest scores using an ANCOVA. Assumptions of normality, homoscedasticity, outliers, homogeneity of regression slopes, and covariate-IV independence were met. Demonstrated in Table 10, approximately 1% of variance, eta square of .01, in AHS post-test scores were explained by GROUP. There was not a significant difference between the control and experimental group scores after controlling for pretest scores, $F(1,13) = 0.07$, $p = .797$, demonstrated in Table 10. Means for group C ($M = 70.56$) and group E ($M = 69.82$) are represented in Table 11.

Table 10

Analysis of Variance Table for AHS_2 by GROUP

Term	*SS*	*df*	*F*	*p*	η_p^2
GROUP	1.95	1	0.07	.797	0.01
AHS_1	223.27	1	7.94	.015	0.38
Residuals	365.60	13			

Table 11

Marginal Means, Standard Error, and Sample Size for AHS_2 by GROUP Controlling for AHS_1

Combination	Marginal Means	*SE*	*n*
C	70.56	1.93	8
E	69.82	1.93	8

Unadjusted group means for pretest and posttest scores revealed greater changes on the AHS within group E than group C. However, the mean scores on the AHS after controlling for pretest scores through the ANCOVA indicated no significant differences between group E and group C. This finding answers RQ2 in that there was not a greater difference on the AHS for those counseled with PCA than for those counseled without PCA. $H2_a$ states, "Participants within the experimental group who hear positive declarations will experience an increased sense of hope compared to participants in the control group." Therefore, we failed to reject the null hypothesis, $H2_0$, and the alternative hypothesis, $H2_a$, cannot be accepted. Participant closing remarks were reviewed for comments about increased hope for alignment with RQ2.

Participant closing remarks supported quantitative findings. Each participant's response was reviewed for expressions of increased hope. Two out of 16 participants (n = 2, 12.5%) referenced feeling more hopeful because of their participation in the study. When investigating responses by group, zero people (n = 0, 0%) in group C made expressions about increased hope and two people (n = 2, 12.5%) in group E did express feelings of increased hope. In reference to feeling more hopeful, a participant from group E wrote:

> My experience in this study has been great. In the beginning I was nervous due to not knowing what to expect. However, that changed by week 2 due to the fact that I was already on a journey to heal past trauma. I tend to think that my personality is a bit more on the pessimist side and I have been working on changing that. Within these 6 sessions I realized that I'm not as pessimistic as I thought I was, how much more hopeful I've become and it just felt nice to have another perspective and not from a direct peer.

Although there was no overall significance in verbal reports of hope, the two participants in group E represent more increased feelings of hope by those counseled with PCA than those counseled without PCA. However, even though hope was greater for group E, the group differences reported by participants were not significant, as indicated by ANCOVA output.

Research Question 3

RQ3: Is there a self-reported decrease in anxiety symptoms experienced by participants counseled with PCA compared to participants counseled without PCA?

While controlling for pretest scores by conducting an ANCOVA, the differences in self-reported anxiety on the GAD-7 after treatment were examined by group. Assumptions of normality, homoscedasticity, outliers, homogeneity of regression slopes, and covariate-IV independence were met. As demonstrated in Table 12, approximately 1% of variance, eta square of .01, in posttest scores were explained by GROUP. The GROUP main effect was not significant by level after controlling for pretest scores, $F(1, 13) = 0.07$, $p = .795$. The means for group C ($M = 2.15$) and group E ($M = 1.85$) are captured in Table 13.

Table 12

Analysis of Variance Table for GAD_7_2 by GROUP

Term	*SS*	*df*	*F*	*p*	η_p^2
GROUP	0.33	1	0.07	.795	0.01
GAD_7_1	14.48	1	3.07	.103	0.19
Residuals	61.27	13			

Table 13

Marginal Means, Standard Error, and Sample Size for GAD_7_2 by GROUP Controlling for GAD_7_1

Combination	Marginal Means	*SE*	*n*
C	2.15	0.78	8
E	1.85	0.78	8

The mean scores on the GAD-7 reveal that the experimental group did experience more improvement than the control group, as a decrease in score represents an improvement. However, results of the ANCOVA indicated the difference was not significant. This finding answers RQ3, that there was not a greater difference on the GAD-7 for those counseled with PCA than those counseled without PCA. The alternative hypothesis, $H3_a$, states, "Participants within the experimental group who hear positive declarations will experience a self-reported decrease in symptoms of anxiety compared to participants in the control group." Therefore, we fail to reject the null hypothesis, $H3_0$, and cannot accept $H3_a$. Participant closing remarks were analyzed for comments about decreased anxiety for potential alignment with RQ3.

Closing remarks from participants did align with quantitative findings. Each participant's response was reviewed for expressions of decreased anxiety. Three out of 16 participants (n = 3, 18.75%) referenced feeling less anxious because of participating in the study. When investigating responses by group, one person (n = 1, 6.25%) in group C and two people (n = 2, 12.5%) in group E referenced feeling less anxious. A participant in group C stated:

> As I reflect back to 6 weeks ago I was an emotional wreck anxiety was at an all time high. My mind created false narratives and I thought the worst. I could not accept the traumatic events that took place in my life. […] I can say with an honest heart that the past 6 weeks were very refreshing for me. I was able to speak on the things that took place in my life not to hide from what happened but able to accept and own it. Even if I reflect back on what I went through now, it doesn't hold an emotional bondage on me as much. I'm able to use the coping mechanism I learned in the past 6 weeks. I'm able to focus on the accomplishment and not the traumas and enjoy what is now and what is to come. […] I now have a positive outlook on life."

An additional statement concerning anxiety was shared by a participant from group E:

> I feel much more confident after completing the sessions. I'm grateful that I have a few new tools to guide me throughout the rest of my lifespan. I'm much more relaxed and I dont feel a great sense of anxiousness as I did prior to. I feel seen and heard…. Just hearing someone speak life into me and to guide me through relaxation allowed me to feel safe and vulnerable to expand. I sincerely feel relief.

The two participants in group E represent more of a decrease in anxiety experienced by those counseled with PCA than those counseled without PCA, which supports RQ3. However, the

number of participants who verbalized a decrease of anxiety was not significant between groups, which aligns with ANCOVA output.

Research Question 4

RQ4: Is there a self-reported decrease in depression symptoms experienced by participants counseled with PCA compared to participants counseled without PCA?

The differences in self-reported depression on the PHQ-9 after treatment were examined by group, while controlling for pretest scores through an ANCOVA. Assumptions of normality, homoscedasticity, outliers, homogeneity of regression slopes, and covariate-IV independence were met. Revealed in Table 14, approximately 4% of the variance, eta square of .04, in posttest scores were explained by GROUP. The GROUP main effect between levels was not significant, $F(1, 13) = 0.59$, $p = .454$, after controlling pretest scores demonstrated in Table 14. Group means for C ($M = 2.52$) and E ($M = 3.60$) are captured in Table 15.

Table 14

Analysis of Variance Table for PHQ_9_2 by GROUP

Term	*SS*	*df*	*F*	*p*	η_p^2
GROUP	4.60	1	0.59	.454	0.04
PHQ_9_1	16.87	1	2.18	.163	0.14
Residuals	100.50	13			

Table 15

Marginal Means, Standard Error, and Sample Size for PHQ_9_2 by GROUP Controlling for PHQ_9_1

Combination	Marginal Means	*SE*	*n*
C	2.52	0.99	8
E	3.60	0.99	8

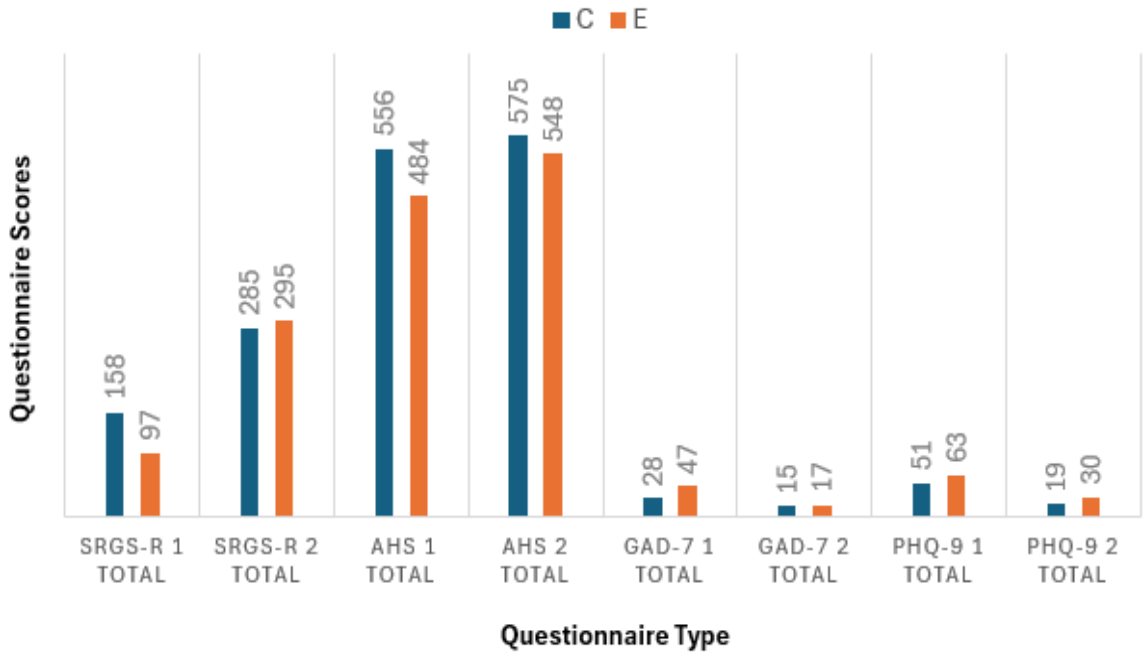
Group means before conducting an ANCOVA indicated an almost identical change in depressive symptoms between groups, with group E demonstrating slightly more improvement. However, after controlling for pretest scores through the ANCOVA, the mean scores on the PHQ-9 revealed that the experimental group did not experience a greater decrease in depression than the control group, as a decrease in score represents an improvement. This finding answers RQ4 in that there was not a significant difference on the PHQ-9 for those counseled with PCA than those counseled without PCA. $H4_a$ states, "Participants within the experimental group who hear positive declarations will experience a self-reported decrease in symptoms of depression compared to participants in the control group." Therefore, we fail to reject the null hypothesis, $H4_0$, and cannot accept the alternative hypothesis, $H4_a$. Closing remarks from participants were examined for a decrease in depressive symptoms in support of RQ4.

The participant's closing remarks were reviewed for differences in responses between group C and group E regarding decreased depression. Zero participants (n = 0, 0%) referenced feeling less depressed because of participating in the study. From before to after treatment, there was no greater difference in depression referenced by a particular group. This finding aligns with minimal numerical change between group means, C (M = 4.0) and E (M = 4.13). Furthermore, participant statements also align with ANCOVA findings in that there was not a significant

difference between the amount of change from those counseled with PCA than those counseled without PCA. For RQ4, raw data, ANCOVA output, and participant responses all indicate a failure to reject the null hypothesis, $H4_0$.

Figure 1

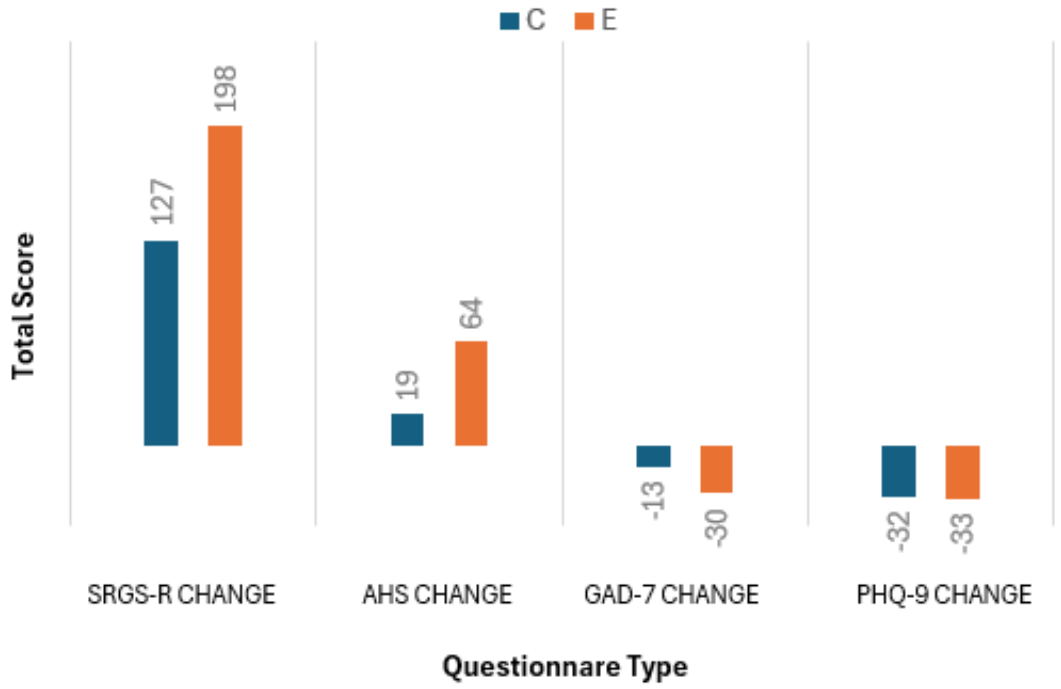
Summary of Participant Pretest and Posttest Scores



Note: Cumulative group scores are shown for each mental health questionnaire before and after treatment: SRGS-R (PTG), AHS (hope), GAD-7(anxiety), and PHQ-9 (depression).

Figure 2

Summary of Change in Group Scores



Note: Amount of change in group score from before to after treatment is shown for each mental health questionnaire: SRGS-R (PTG), AHS (hope), GAD-7(anxiety), and PHQ-9 (depression).

Participant closing remarks to the open-ended question about their experience were reviewed in relation to each RQ. Participant responses were analyzed for references of PTG, hope, anxiety, and depression. Qualitative feedback from participants revealed that the most participants (n = 11, 68.75%) experienced PTG, followed by decreased anxiety (n = 3, 18.75%), then increased hope (n = 2, 12.5%), and no changes noted in depression (n = 0, 0%). Furthermore, when assessed by group, reports of greater change were observed within group E for RQ1, RQ2, and RQ3. PTG for group C (n = 5, 31.25%) and E (n = 6, 37.5%), hope for group C (n = 0, 0%) and E (n = 2, 12.5%), and anxiety for group C (n = 1, 6.25%) and E (n = 2, 12.5%). These findings align with the alternative hypotheses regarding greater differences

between those counseled with PCA and those counseled without PCA. However, the differences in group responses were too small to be considered significant. The finding of non-significance between group levels also aligns with ANCOVA output, indicating no significance by group when controlling for pretest scores.

Summary

The present chapter provided information about data collection, descriptive results, and study findings. The purpose of the study was to examine if positive declarations facilitate PTG among those who have experienced trauma. In addition to PTG, the study explored if other aspects of mental health were influenced by positive declarations, including increased hope, decreased anxiety, or decreased depression. An experiment in the form of a small pilot study was conducted with 16 participants (N = 16). When the study began, all participants met inclusion criteria of experiencing past trauma, but none knew about the concept of PTG. There were three males (n = 3, 18.75%) and 13 females (n = 13, 81.25%), five African Americans (n = 5, 31.25%) and 11 Caucasians (n = 11, 68.75%), and the mean age of participants was 43.4 years old. No attrition occurred as all participants (N = 16) completed the counseling sessions and required mental health questionnaires. Participants were randomly assigned to either the control group (no PCA) (n = 8) or the experimental group (PCA) (n = 8).

Pretest posttest study data was collected from participants who completed six, 50-minute counseling sessions using Zoom. Scores from the SRGS-R (PTG), AHS (hope), GAD-7 (anxiety), and PHQ-9 (depression) were tallied for each participant and used for cumulative group totals. From cumulative totals, group E showed more improvement for all four measures than group C. The scores varied from a large to small difference, by 71-points for PTG and only a 1-point for depression. An ANCOVA was conducted to statistically analyze study posttest

scores while controlling for pretest scores. ANCOVA results indicated the difference in scores between groups was not significant for PTG, hope, anxiety, or depression. Participant closing remarks revealed that many participants (n = 11, 68.75%) experienced PTG because of the study and more of these participants were in group E. The number of participants who discussed benefits for hope, anxiety, or depression was not significant, but greater for group E regarding hope and anxiety. Chapter 5 discusses study implications, limitations, and future recommendations for research.

CHAPTER 5: DISCUSSION

Chapter five presents a summary and discussion of the study findings, implications, limitations, and recommendations for future research. The purpose of this quantitative pilot study was to examine if positive declarations facilitate posttraumatic growth (PTG) among those who have experienced trauma. The study also investigated if increased hope, decreased anxiety, or decreased depression was experienced because of the Positive Communication Approach (PCA). A brief review of study findings provides highlights for each RQ. Following a recap of study data, a discussion of findings dissects the meaning of outcomes and how they align with existing theories. The biblical foundation of the study is revisited for how outcomes support scriptural principles about communication, hope, and PTG. Implications of the study are noted for the scientific community, psychological practice, and the church or faith organizations. Study limitations pertain to delivery method of interventions, extraneous variables, generalizability, participant personality, and compliance with study obligations. Potential solutions for limitations are addressed as recommendations for future research.

Summary of Findings

Research Question 1

RQ1: What is the difference in self-reported PTG between participants counseled with PCA and participants counseled without PCA?

The findings for RQ1 indicated that there was not a significant difference between groups statistically, but that there was a substantial difference between groups clinically. An ANCOVA was conducted to assess differences in posttest scores between groups on the SRGS-R. Interpretation of ANCOVA results indicated that there was not a significant difference between group C and group E. Although a significant difference was not noted statistically, a substantial

difference was noted clinically based solely on participants' scores. After counseling sessions, group C experienced significant growth (M = 15.88) and the average growth for group E (M = 24.75) was also significant. A significance level of a seven-point increase was predetermined before study interventions were provided. From before to after treatment, a greater cumulative growth (by 71-points) was experienced collectively by group E compared to group C. In conclusion, the ANCOVA results were not significant but participant scores before analysis reflected substantial growth for both groups, and more so for group E. Qualitative feedback from participant closing remarks contained more comments referencing perceived PTG from participants (n = 11, 68.75%) than the other explored variables. Furthermore, there were more comments about PTG from participants in group E (n = 6, 37.5%) than group C (n = 5, 31.25%).

Research Question 2

RQ2: Do positive declarations increase feelings of hope for participants counseled with PCA compared to those counseled without PCA?

Findings to RQ2 suggest that statistically there was no significant difference between groups, but clinical differences were substantial. Differences in posttest scores on the AHS were analyzed through an ANCOVA. ANCOVA results indicated that there was not a significant difference in levels of hope between group C and group E. However, even though a significant difference was not found statistically, a substantial change in level of hope was identified from group E questionnaires. Significance levels were predetermined as a six-point or higher increase on the AHS. After treatment, group C experienced non-significant changes in hope (M = 2.38), but a significant increase in hope was noted for group E (M = 8). From before to after treatment, overall greater growth (45-points) was experienced collectively by group E compared to group C. In conclusion, the ANCOVA results were not significant, but direct participant scores

reflected a more substantial change for group E than group C. Participant qualitative feedback from closing remarks contained only a small percentage of participants (n = 2, 12.5%) who referenced feelings more hopeful. However, the participants who did feel more hopeful were in group E (n = 2, 12.5%) compared to group C (n = 0, 0%).

Research Question 3

RQ3: Is there a self-reported decrease in anxiety symptoms experienced by participants counseled with PCA compared to participants counseled without PCA?

The findings to RQ3 indicated that there was not a significant difference between groups statistically or clinically. An ANCOVA was conducted to assess differences in posttest scores, on the GAD-7, between groups after controlling pretest scores. Interpretation of ANCOVA results indicated that there was not a significant difference between group C and group E. Although a significant difference was not noted statistically, questionnaires were reviewed for a substantial difference based on participants' non-analyzed scores. After counseling sessions, group C did not experience a significant decrease in anxiety (M = -1.6) nor did group E (M = -3.75), according to a predetermined significance of a six-point decrease on the GAD-7. From before to after treatment, a greater decrease (17-points) was experienced collectively by group E, compared to group C. In conclusion, ANCOVA results indicated no significant difference in anxiety between groups and direct participant scores also revealed no significant difference in anxiety between groups. When reviewing participant feedback regarding perceptions of decreased anxiety, a small percentage of participants (n = 3, 18.75%) referenced feeling less anxious. However, more participants who felt less anxious were in group E (n = 2, 12.5%) compared to group C (n = 1, 6.25%).

Research Question 4

RQ4: Is there a self-reported decrease in depression symptoms experienced by participants counseled with PCA compared to participants counseled without PCA?

The findings of RQ4 indicated no significant difference between groups statistically or clinically. Statistical analysis was conducted using an ANCOVA to assess differences between groups in PHQ-9 scores. ANCOVA results implied that there was not a significant difference between group C and group E. The clinical difference between groups was explored by reviewing participant scores on the PHQ-9 without statistical analysis. Before counseling sessions, a significance level was determined as a 5-point reduction on the PHQ-9. The average decrease in depression was not significant for group C (M = -4) or for group E (M = -4.13). Overall, only a slightly higher decrease (1-point) was experienced collectively by group E compared to group C. In conclusion, there were no significant findings in differences of depression between groups from either ANCOVA output or direct participant scores on the PHQ-9. The qualitative feedback from participant closing remarks contained no participants (n = 0, 0%) who referenced feeling less depressed because of the study. Qualitative feedback supports quantitative findings in that there was less change in depression levels than PTG or hope.

Discussion of Findings

Meaning of Findings

Study findings suggest that there may be a potential benefit from using PCA in counseling with clients striving for PTG. There was a discrepancy between what participant questionnaires indicated and what the ANCOVA output revealed for PTG and hope. Direct questionnaire scores suggested that group E did experience a more substantial change in level of PTG and hope compared to group C. However, the ANCOVA output indicated no significant

difference between group levels. The discrepancy can most likely be attributed to the study's small sample size ($N = 16$). Due to only having eight participants per group ($n = 8$), results of the statistical analysis were not significant. A predetermined level of significant change on questionnaires was achieved by both groups for PTG, but group E experienced greater growth than group C. For hope, only group E met clinical significance and experienced greater hope than group C. Neither group's changes were significant statistically or substantial clinically for anxiety or depression. However, although not all scores were considered clinically significant, all four target areas had higher cumulative scores for group E compared to group C.

The only difference in treatment for the two groups was the component of PCA that focuses on the strategic use of words. PCA consists of psychoeducation about the power of words and positive declarations of desired psychological outcomes. For all cumulative scores to be higher for group E indicates that the use of PCA may be beneficial for PTG and mental health. Although group E had higher cumulative scores for each variable than group C, the differences were more significant for PTG and hope and less significant for anxiety and depression. The variation in outcomes appears to be the direct result of the study structure. Counseling sessions were designed to target PTG through psychoeducation and exercises to facilitate growth after trauma. Sessions did cause a decrease in anxiety and depression for both groups, but the amount of change was not considered significant. The suspected reason is that anxiety and depression were not the primary focus but were examined as additional mental health benefits of counseling. Self-regulation strategies were taught to both groups, which aids in reducing symptoms of anxiety. Furthermore, the reduction of depression experienced may have been the result of increased hope and encouragement felt by participants.

Education about PTG brought awareness to participants that people can benefit after trauma. Such awareness created hope and contributed to change for all participants on the PTG and hope questionnaires. However, the positive declarations implemented with group E appeared to have a greater impact when combined with other interventions, as group E scored higher than group C on questionnaires. Results of greater scores on mental health questionnaires for group E indicate that the use of positive declarations may also be beneficial for other mental health concerns. This assumption could be tested through studies designed to target other aspects of well-being. An example is if declarations of change using PCA were pertaining to anxiety as the focal point of sessions. Like the SRGS-R, a more significant decrease in scores on the GAD-7 would probably be achieved. The use of positive declarations while working to facilitate PTG appears to flow with the direction of existing literature about communication, PTG, and hope. Study findings also align with the biblical principles that inspired the use of positive declarations to facilitate PTG with those who have suffered from trauma.

Alignment with Theory

Communication Theory

The current study provided an opportunity to compare findings with existing theories about communication. Several theories of communication describe how speech can shape life, which were confirmed through interactions with participants during counseling sessions. The theory of constructed emotion explains the tie between language and emotion. Speech develops around a sensation which is labeled and reinforced by others (Gallois et al., 2021). Emotional differentiation occurs as people expand their language base to separate and describe specific emotions, which has been linked with mental health (Gallois et al., 2021). Constructed emotion and emotional differentiation were observed as participants learned how to reference trauma in

terms of growth. Although growth was understood by all participants, growth was a foreign concept concerning trauma. Each participant was educated about PTG and their trauma was processed through a lens of growth. Rather than only referencing the destructive aspects of trauma, a stronger ability to differentiate the emotional impacts of trauma appeared beneficial for participants. The benefits of constructed emotion and differentiation were evident by increased scores on the SRGS-R (PTG) and AHS (hope) for both groups after treatment.

In addition to how language influences emotion, the theory of self-fulfilling prophecy proposes that language influences situations. Robert Merton's theory of self-fulfilling prophecy suggests that language provokes behavior that perpetuates events, which fulfill statements made in a person's life (Schaedig, 2020). The influence of communication on a person's beliefs and behavior can additionally be explained by language style matching (LSM). LSM is the unconscious matching and mirroring of other people's communication styles to help regulate comprehension and manage social relationships (Gasiorek et al., 2021). As for PCA used with group E, the positive declarations of desired outcomes exemplified the theory of self-fulfilling prophecy and LSM. The counselor helped all participants identify the ways they had already grown after trauma. However, it was observed that members of group E began discussing aspects of their lives that they anticipated future growth, demonstrating the concept of self-fulfilling prophecy. By the conclusion of the study, LSM was demonstrated as several participants in group E made declarations over themselves in a similar manner as the clinician. An example is when a participant in group E said, "I see now that I have already changed, but I will be even stronger in my future."

The impact of communication on a person's life is additionally explained by the field of epigenetics. Epigenetics has revealed that environment can alter DNA output and genetic

expression (Dyke et al., 2020; Lacagnina, 2018). Human routine can lead to embedded and automized responses in the brain, resulting in negative or positive consequences (Alm, 2021). Toxic thinking causes a stress reaction in the body that can increase neuropsychiatric disorders (Leaf, 2013), but neuroplasticity allows for the modification of negative neuronal networks (Alm, 2021; Chen & Goodwill, 2022). Study interventions may have helped participants create new beliefs in place of maladaptive perceptions. Although a six-week program is not long enough for full development, hearing declarations of growth may have helped group E create new or strengthen existing neural pathways for hope and expectancy. Brain scans were not conducted to collect an inventory of the participant's neurological activity. However, cognitive shifts of participants seemed apparent by transformed behaviors. Shifts in some of the participants' mentalities were not only apparent by their verbal comments, but evident by a livelier demeanor, a more pleasant affect, and more relaxed body language.

Posttraumatic Growth (PTG) Theory

The current study produced information that supports existing PTG theory. Traumatic experiences to a person's body or soul can lead to brokenness and dysfunction (Vila-Badia et al., 2021). After trauma occurs, people can experience distress individually (Beilharz et al., 2020; Mahlangu et al., 2023) and socially (Dunn et al., 2023; Noor et al., 2021) resulting in the need for support and healing (Oakley et al., 2021). As determined by inclusion criteria, past trauma was required for study participation. The devastating impacts of participant trauma were noted during the first session when their stories were shared. The negative consequences of trauma varied depending on the type, duration, and severity of the experiences. Some participants experienced single episodes of trauma, such as a sudden accident, whereas some people experienced continuous trauma, such as reoccurring childhood abuse. Participants achieved

different levels of healing depending on additional factors such as time since the trauma, support received, and subsequent life events following the trauma. However, a step beyond healing after trauma is transcendence and growth. PTG theory proposes that positive psychological change can result from trauma or highly stressful events (Allen et al., 2022; Taku et al., 2021). Throughout the world, purpose found through suffering has been an ancient concept experienced for thousands of years. The clinical practice of systematically focusing on growth after trauma was developed by Richard Tedeschi and Lawrence Calhoun (Dell'Osso et al., 2022). A model of PTG was created by Tedeschi and Calhoun (2014) that captures how and if a person is likely to experience PTG.

The PTG model incorporates factors of character, the traumatic event, rumination, disclosure, sociocultural influence, narrative development, and wisdom. A relationship has been identified between greater PTG and decreased psychological distress, increased positive emotions, and increased life satisfaction (Zhang et al., 2022). Also, five domains encompass the different ways that PTG can be experienced including relationship quality and compassion, appreciation of life, spiritual and existential change, personal strength, and a new or different path (Taku et al., 2021; Tedeschi, 2023; Zhang et al., 2022). Through interactions with participants, Tedeschi and Calhoun's (2014) model of PTG appeared valid. An example pertains to a participant who previously completed trauma therapy and narrative work through journaling. This participant was highly receptive in response to PTG work and achieved significant levels of PTG per their scores on the SRGS-R. An inverse relationship between PTG and psychological distress, and a positive relationship between PTG and life satisfaction, did seem evident as many participants who scored higher on the SRGS-R scored lower on the GAD-7 and PHQ-9. Each domain of PTG was explored with participants during sessions two through six. All participants

were able to identify growth within at least two domains, and several participants identified growth within all five domains.

Additional therapeutic techniques that may encourage PTG are emotional regulation, constructive rumination (Roepke et al., 2018), mindfulness (Wen et al., 2021), acceptance techniques, and positive reframing (Martin et al., 2021). Narrative therapy has been useful for PTG work (Bayes, 2022; Tedeschi et al., 2021). A person's future after trauma can be impacted by specific communication (Sherratt & Worrall, 2021; Spialek et al., 2019). Therefore, creating narratives of growth after trauma is important. Existing interventions for PTG appeared to be effective when implemented during the current study. Both group C and group E responded positively to psychoeducation about PTG, self-regulation techniques, new life principles, cognitive reframing, and narratives for growth. Positive communication intertwined with established interventions for PTG was confirmed as effective for both groups, particularly through positive reframing techniques and narrative development of growth. The benefits of the existing interventions were verbalized by participants and confirmed through improvements on mental health questionnaires. Some participants shared that the self-regulation techniques felt life-changing by resetting their nervous system from feeling "stuck" to being able to move forward. Other participants valued cognitive reframing as they had "never thought of their experience like that."

Hope/Expectation Theory

Study findings support theories regarding hope and expectation. Words and positive speech can evoke change because of the hope and expectation they cultivate (Burns, 2023; Gallagher et al., 2019). C.R. Synder's theory of hope defines hope as a state of motivation that drives the behavior to achieve goals (Gallagher et al., 2019). People with high hopes often

possess more confidence and positive emotions than those identified as having low hopes (Gallagher et al., 2019). Rotter's social learning theory (SLT) promotes that behavior is determined by the expectation of a desired outcome (Mazur-Socha et al., 2023). Rotter also suggested that expectations can be quantified and predicted by previous experiences (Carton et al., 2021). During the study sessions, participants did appear to experience more hope as the clinician spoke positively and encouraged them. Influence of expectation was witnessed as participants with "high hopes," who had accomplished many goals in the past, appeared confident in their ability to identify and experience PTG. Whereas participants who appeared to have "low hopes" were less expectant, gauging the likelihood of PTG upon past disappointments and failures. Use of the AHS (hope) scale confirmed that words do facilitate change through building hope and expectation. This was evident after counseling by increased AHS scores for all participants and even higher scores for those in group E.

Expectancy has been studied in therapeutic contexts and is proven to benefit therapeutic outcomes (Asay & Lambert, 1999). Clients often seek therapy when they have experienced a loss or decrease in hope for resolving their problem independently. When compared to therapeutic techniques, expectancy has been identified as equally important for positive outcomes. The more expectation the client has for change, the more likely they will benefit from clinical services (Asay & Lambert, 1999). For the current study, the participants did seem drawn to the study due to some aspect of hope, either a lack of hope or hope that they could be helped. If the participants had not experienced an increase in their level of hope, they may not have simultaneously experienced PTG. Furthermore, the use of PCA with group E, compared to group C, appeared to have cultivated more hope and growth as evidenced by higher cumulative scores on the AHS and SRGS-R. After hearing positive declarations of growth, hope and expectation were also evident

by decreased anxiety and decreased depression for group E. As suggested by Asay & Lambert (1999), the influence of expectation on therapeutic outcomes was confirmed by the current study.

Existing literature highlights specific forms of positive communication that build hope and facilitate PTG. Such positive communication includes discussions of rehabilitation and recovery (Spialet et al., 2019), phrases creating forward motion for life (Ziss, 2020), and pronoun usage that promote a sense of community versus isolation (Blackburn et al., 2021). The effectiveness of narrative therapy for PTG after trauma is also due to imparting hope through narratives of strength and empowerment (Bayes, 2022; Tedeschi et al., 2021). Throughout the study, speaking with participants about their former trauma in terms of recovery and forward motion was beneficial. The clinician was also mindful to use pronouns and words to increase a sense of community and decrease isolation. Benefits of positive communication with all participants were evident through questionnaire scores, participant verbal expressions, and participant closing remarks. The use of positive declarations in a therapeutic context demonstrated a different form of positive communication that may be effective for PTG, evident by group E SRGS-R scores. Implementation of PCA with group E appeared to also facilitate hope, evidenced by AHS scores. Use of positive communication during counseling extends existing literature about positive language facilitating PTG. Use of PCA to facilitate PTG for those who have experienced trauma may be a novel therapeutic approach in need of further exploration.

Biblical Alignment

Cultivating Expectation

The need for hope and expectation is observed throughout the Bible, particularly in reference to faith. Faith is defined in scripture as "[…] the reality of what is hoped for, the proof

of what is not seen" (*Holman Christian Standard Bible.* 2004/2020, Hebrews 11:1). Hadley (2020) shared that hope is stirred by the attitude of the person, but the steadfastness and fidelity of God creates expectation. Understanding faith as an integral aspect of Christianity is only a start because people must then know how to cultivate faith. Romans 10:17 (2004/2020) states, "So faith comes from what is heard, and what is heard comes through the message about Christ." Through hearing the word of God faith starts to build, but faith must be exercised through choices and actions. Scripture confirms the need for faith to be exercised. James 2:26 (2004/2020) explains that a body without a spirit is dead, as faith without works is dead. For the current study, faith regarding healing and transcendence after trauma was exercised by speaking life and growth over participants.

The current study aligns with biblical concepts of hope and expectation. Although the study was not Christian, faith can be identified throughout the counseling sessions with participants. An element of faith was present with both groups by belief in growth and willingness to act upon new knowledge. While completing the study, all participants learned about PTG for the first time. For participants to have considered PTG as a possibility required hope that meaning can be found in suffering and expectation that they can grow. Like faith built through hearing the word, each participant learned by hearing about self-regulation strategies. It required hope and expectation that regulation strategies would be effective for the participants to incorporate the exercises into their daily lives, which led to great results for many. For the study, effective self-regulation practices sparked and kept hope alive for several participants, like faith without works which is dead (20024/2020, James 2:26). Observing participants benefit from new approaches for their mental health appeared to create an expectant mentality.

Power of the Tongue

Throughout the Bible, it is stated that words have the power to create life or death (2004/2020, Proverbs 18:21) and determine the direction of our lives (2004/2020, James 3:3). People are instructed in Ephesians 4:29 (2004/2020) that "No foul language should come from your mouth, but only what is good for building up someone in need, so that it gives grace to those who hear." Jesus built people up by conducting supernatural acts and healings with the words that he spoke (2004/2020, Luke 8:22-25; Mark 10:52; Matthew 8:13). The way Jesus spoke in faith over people and situations provided an example on earth for people to emulate (Hadley, 2020). Only Jesus was God in the flesh (2004/2020, John 1:14), but people were created in the image of God (2004/2020, *Genesis* 1:26) to promote His will on the earth (Ware, 2021). The ability to act supernaturally and carry out God's will is through the empowerment of God's spirit (2004/2020, Acts 1:8; Ephesians 1:22-23). Speaking forth change with words is only possible through faith in God (2004/2020, Matthew 17:14-16; Matthew 17: 20). For God to be exalted in the earth, Jesus stated, "Truly I tell you, the one who believes in me will also do the works that I do. And he will do even greater works than these, […] Whatever you ask in my name, I will do it so that the Father may be glorified in the Son" (2004/2020, John 14:12-13).

During the present study, the biblical explanation of power abiding in the tongue was evident. The weight of destructive words previously heard by participants was observed by their hurt and emotional pain. The ability of words to create life was also observed by the transformation of participants from the start to the conclusion of the study. No physical contact or pharmaceutical interventions were provided during therapy. Verbal communication was the sole tool used to support and guide participants with their mental health. God's will to promote the well-being of others was exemplified through the clinician's attempt to facilitate PTG for the

participants. Through faith, the clinician spoke confidently with participants regarding their ability to experience growth after trauma. Confidence that positive declarations would result in increased growth and hope for participants was confirmed as effective by scores on the SRGS-R & AHS.

Trauma and Growth

The concept of PTG is supported biblically regarding God's goodwill towards man (2004/2020, Psalms 23:2-3; 2 Timothy 1:7) and use of evil for good (2004/2020, Genesis 50:20; Romans 8:28). God will settle, make perfect, and strengthen people who have suffered (2004/2020, 1 Peter 5:10). When considering scripture about spoken words, PTG growth may be propelled by speaking life and not death over people. After trauma, the Lord can move a person forward in newness of life. Isaiah 43:18-19 (2004/2020) expresses, "Do not remember the past events; pay no attention to things of old. Look, I am about to do something new; even now it is coming. Do you not see it? Indeed, I will make a way in the wilderness, rivers in the desert." Like rivers in the desert, positive change after trauma is possible for God who is supernaturally able to do what people cannot. Application of growth after suffering can be observed in Christians who experience hope, empathy, compassion, perseverance, and increased obedience after trauma (McMartin & Lewis-Hall, 2022).

Throughout the study, God's ability to use evil for good was observed. As indicated in Isaiah 43:18-19 (2004/2020), newness of life was experienced by many participants. The clinician spoke with expectancy over the clients, but it was clearly God who caused the growth. 1 Corinthians 3:6 (2004/2020) explains that one person plants, another person waters, but it is God that brings the increase. It was apparent that God moves through people as some of the participant's trauma may have been too severe for a counselor to facilitate perspectives of PTG.

However, God brought revelation and stirred hope and expectation through his spirit. To conclude the discussion of findings, study outcomes reveal discrepancies between direct participant scores and ANCOVA findings. ANCOVA findings were not statistically significant, but some questionnaire scores were clinically significant. The discrepancy between study findings was likely due to the small sample size. Participant posttest questionnaires revealed a more substantial change for PTG and hope than anxiety and depression. This outcome was likely because the study was designed for PTG. Alignment was identified when comparing study findings with existing literature and theory about study variables. The biblical foundation of the study was also confirmed by the interactions and responses from participants.

Implications

The current study has confirmed and extended theories and research surrounding positive communication and PTG. Study findings have implications for the scientific community, psychological practice, and within the church or faith-based organizations. The methodology of the current study appeared to be a novel approach in research as the relationship between positive declarations and PTG has not been studied. Studies of positive declarations in a therapeutic context were also not discoverable by the researcher. Communication is a robust topic and field, but the direct influence of spoken words can be challenging to quantify. Although there is research about the influence of certain positive communication, more data is needed to truly understand the impact of positive communication on PTG and mental health. The methodology of this study produced a process for examining the relationship between positive declarations and PTG that can be replicated for future research.

There have been qualitative and quasi-experimental designs to study positive communication and PTG, but there is a need for more randomized experiments. Through use of

PCA, the current study contributed a new method for conducting experiments to examine the relationship between positive declarations and mental health. In addition to a new intervention for PTG, existing therapeutic approaches for PTG were confirmed as effective. The effectiveness of interventions such as regulation techniques, CBT, new life principles, and narrative therapy was indicated by participant scores on the SRGS-R and participant closing remarks. Furthermore, the study implied a relationship between PTG and hope. Literature regarding hope and expectation was referenced to provide an understanding of how words create change. The present study did not purposefully investigate if there was a relationship between PTG and hope, but the findings highlight the appearance of a relationship between the two variables.

Psychological practice may be influenced by the therapeutic use of positive declarations. A study goal was to create a user-friendly, easy-to-replicate intervention for therapy. Additional study is necessary to confirm the effectiveness and validity of using positive declarations in a therapeutic context. However, the study findings are encouraging for the potential use of PCA. Therapeutic modalities and interventions can be complex, consisting of multiple steps and phases. Clinicians may have difficulty comprehending all aspects of a therapeutic modality causing decreased confidence when implementing such techniques with clients. An expectation of studying positive declarations and PTG was to confirm a simple and straightforward intervention for PTG that clinicians can replicate. Speaking positive declarations of desired outcomes over a person appears to be a simple practice but requires skill and discretion to be effective. Not every moment and situation is appropriate for the use of PCA. The therapist must recognize which situations are possible to change and not declare change over fixed variables. Moreover, discernment is necessary for what aspects of a person’s life are appropriate to make

positive declarations without causing offense or harm. Equivalent levels of assessment and clinical judgment are required for the use of PCA as with any other therapeutic intervention.

The current study content and findings provide information that could be used within the church or faith-based organizations. Through this dissertation, members of the Christian faith are offered an empirically driven source of support for biblical theory regarding communication and PTG. The Bible exemplifies how communication created change for people who were suffering. The current study offers a relevant application of scripture demonstrated in our present day. Participant SRGS-R (PTG) and AHS (hope) scores were higher for group E than group C, which enables the church to confidently discuss the power of words in a secular context. In a society prone to debate the validity of a concept, this study provides data and empirical evidence regarding the power of words. This study may also encourage pastoral and faith-based counselors to place more emphasis on communication and how people speak. Also, teaching about PTG within the church could bring more awareness to the concept. This dissertation provides a compilation of current research, theory, and scripture regarding communication and PTG. Overall, the present study provides an understanding for how positive communication, hope, and PTG can occur in a manner that aligns with scripture.

Limitations

Several limitations of the study were identified both before study execution and after data collection. Limitations include delivery method of interventions, influence of extraneous variables, generalizability, compliance with study obligations, and participant personalities. Regarding delivery method of interventions, all participants completed their counseling sessions via Zoom, a digital platform, rather than in-person sessions. Zoom sessions provided some benefits for participants, such as accessibility and avoidance of long commutes. However,

counseling via Zoom also presented some distractions that in-person counseling would have eliminated. Several participants connected over Zoom in atmospheres that created periodic disruptions, such as sitting in their car or somewhere that family members could enter the room. Some participants also experienced connectivity problems due to internet failure or malfunctions with personal devices. Although there were clear benefits from using a digital platform, the issues with digital counseling sessions may have hindered the full impact of study interventions.

The influence of extraneous variables was another limitation of the study. An inventory of impactful life events, that occurred simultaneously as the study, was not completed by the participant or the clinician. Since the study was executed over six weeks, many participants had experiences that influenced their mental health. These events were often verbally disclosed at the beginning of sessions but not tracked as study data. Example occurences that impacted participants' mental health were sickness, relationship strain, family imprisonment, and the death of a close friend. It is unknown if the stressful events experienced by participants thwarted the effectiveness of PTG work. On the contrary, positive life events also occurred simultaneously as the study. Examples of such events were participants taking vacations, celebrating special occasions, and visiting with loved ones. There is a possibility that pleasurable life events contributed to improvements on posttest measures that were not attributed to therapeutic interventions.

Generalizability was also a limitation of the study due to sample size and referral sources. The study sample (N = 16) was not representative of society at large. The small sample size caused discrepancies between clinically significant questionnaire scores and non-significant ANCOVA output. As for referral sources, several participants were recruited from the same organization. Due to coming from the same organization, like-mindedness of similar interests

and perspectives may have been shared by participants. If similar mindsets were shared by the participants, then the sample would be even less generalizable to the public. Another limitation of the study was participant compliance with assignments. All sixteen participants completed the pretest measures, posttest measures, and six counseling sessions. However, not all participants completed the weekly homework assignments. The weekly assignments included self-regulation exercises and paragraph writings for all participants, and additional positive declarations over self for group E. Study interventions may have produced different outcomes if implemented at home as directed.

Lastly, personality type and participant beliefs were another limitation of the study. It is unknown if personality type, or a predisposition toward growth, influenced participant responses to interventions. Some participants appeared to be optimistic people desiring to grow and change, as evidenced by their attitude entering the study. Some participants appeared less enthusiastic about experiencing change, with more fixed attitudes and perceptions. It is unknown whether higher cumulative questionnaire scores for group E can be attributed to PCA or the personalities of participants. Furthermore, believing words hold power could not be restricted solely to group E. Before the study, participants were not interviewed regarding beliefs about positive declarations and divided into groups based on their response. Instead, participants were randomly assigned to either group C or group E without knowledge of their beliefs regarding communication. During sessions, three people in group C voluntarily described believing words have power without awareness of the experimental intervention. This mixed perspective within the control group could have contributed to questionnaire scores being different than if participants did not already believe words possess power.

Recommendations for Future Research

As PTG continues to be studied, recommendations for future research include further exploration of the relationship between positive declarations and PTG. The primary recommendation is to replicate the current study methodology but with alterations to study details. Several adjustments to the study would help fill gaps to more accurately understand the effectiveness of PCA. Recommended adjustments include strengthened generalizability, more education regarding telehealth, accounting for extraneous variables, and accounting for participant personalities. To strengthen generalizability, a larger sample size is recommended with a more diverse population. Participant scores on the SRGS-R (PTG) and AHS (hope) revealed a significant difference between outcomes for group C compared to group E. However, because the sample size was small, ANCOVA output indicated no difference between groups for RQ1, RQ2, RQ3, & RQ4. A larger sample may cause ANCOVA findings to align with direct data from participant questionnaires. To increase sample diversity, selecting candidates from different areas and professions may be beneficial. Although several avenues were utilized for recruitment, many participants came from one organization. Recruiting from a wider variety of organizations or regions may reduce the potential like-mindedness of participants.

Concerning the implementation of interventions, a digital platform had some negative consequences but is recommended for subsequent studies. To reach a more diverse sample, telehealth can engage those beyond the surrounding area who are further away from the clinician. The telehealth method is recommended but with more education and parameters before the first session. Participants were given instructions for connecting to Zoom but were not educated about troubleshooting and navigating glitches. Furthermore, instructions for selecting a private space with minimal distraction are important for reducing interruptions during sessions.

Accounting for the influence of extraneous variables is another recommendation. Over the six-week course, participants shared various events that impacted their mental state. It is unknown if outside events influenced study outcomes. Due to the volume of forms already required for the study, a caution is not to require another form to be completed by participants. Instead, it may be beneficial for the clinician to maintain a log while verbally inquiring about life events during sessions. Extraneous variables could be factored into the statistical analysis, but at minimum should be incorporated into the discussion of study findings.

Finally, accounting for participant personalities and beliefs is recommended. Inquiring about personality traits and beliefs regarding communication could be incorporated into the prescreening process. A brief questionnaire about personality traits related to a growth mindset is advised. Beliefs about communication could be measured through a short questionnaire created by the researcher. Learning that three people in group C already believed that words hold power could have skewed data. The goal was to have two groups of people for the experiment, a group that did and a group that did not consider the power of words concerning PTG. A cleaner grouping increases the probability of attributing outcomes to study interventions. For a truly randomized experiment, participants could not be grouped based on their personalities or beliefs. Also, adding certain personality types and beliefs as exclusion criteria may be too stringent. A recommendation is to incorporate these characteristics into the statistical analysis. At a minimum, the data could guide a discussion about identified personality traits and beliefs about communication. Regardless of how the information is specifically used, collecting an inventory of these characteristics is recommended.

Summary

The purpose of this quantitative pilot study was to examine if the use of PCA during counseling sessions facilitated PTG, increased hope, decreased anxiety, or decreased depression. Study findings were encouraging and provide reason to further investigate the relationship between positive declarations of desired psychological outcomes and PTG. Participant scores on mental health questionnaires, particularly the SRGS-R (PTG) and AHS (hope), revealed a substantial difference between outcomes for group C compared to group E. Levels of PTG and hope were higher for group E and represented a substantial change according to predetermined significance levels. However, because the sample size was small, statistical analysis from the ANCOVA indicated otherwise. The null hypothesis for each RQ could not be rejected due to ANCOVA findings, that there was not a significant difference between group outcomes for PTG, hope, anxiety, or depression. The substantial difference between groups for PTG and hope questionnaires provides reason to believe that ANCOVA output may have been significant with a larger sample size.

Due to the encouraging findings on participant questionnaires, further exploration of PCA to facilitate PTG is advised. Based on study limitations, alterations to study details are recommended to help close notable gaps in the research. Recommended alterations include changes to strengthen generalizability, improved use of telehealth, and added inventories of extraneous variables and personality traits. Although ANCOVA findings indicated no significant difference between group levels after treatment, several positive implications of the study were identified. For the scientific community, the study supported existing literature and theories about positive communication and PTG. Also, a new method for exploring the power of words in a therapeutic setting was created. Through additional study, an easy-to-replicate intervention for

PTG may be on the horizon for psychological practice. Furthermore, the Christian community now has a resource containing both empirical and biblical information about communication and PTG. Affirming works that combine science with faith empowers the church to share scripture in a relevant manner within today's society.

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APPENDIX A: PTSD CHECKLIST FOR DSM-5 (PCL-5)

PCL-5

Instructions: Below is a list of problems that people sometimes have in response to a very stressful experience. Please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing, and unwanted memories of the stressful experience?	0	1	2	3	4
2. Repeated, disturbing dreams of the stressful experience?	0	1	2	3	4
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	0	1	2	3	4
4. Feeling very upset when something reminded you of the stressful experience?	0	1	2	3	4
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0	1	2	3	4
6. Avoiding memories, thoughts, or feelings related to the stressful experience?	0	1	2	3	4
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	0	1	2	3	4
8. Trouble remembering important parts of the stressful experience?	0	1	2	3	4
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	0	1	2	3	4
10. Blaming yourself or someone else for the stressful experience or what happened after it?	0	1	2	3	4
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	1	2	3	4
12. Loss of interest in activities that you used to enjoy?	0	1	2	3	4
13. Feeling distant or cut off from other people?	0	1	2	3	4
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	0	1	2	3	4
15. Irritable behavior, angry outbursts, or acting aggressively?	0	1	2	3	4
16. Taking too many risks or doing things that could cause you harm?	0	1	2	3	4
17. Being "superalert" or watchful or on guard?	0	1	2	3	4
18. Feeling jumpy or easily startled?	0	1	2	3	4
19. Having difficulty concentrating?	0	1	2	3	4
20. Trouble falling or staying asleep?	0	1	2	3	4

APPENDIX B: PSYCHOLOGICAL & COGNITIVE INVENTORY

Psychological & Cognitive Inventory

Name: _____

Date: _____

1. What mental health diagnoses have you received?
   a. _____
   b. _____
   c. _____
   d. _____

2. Please circle any of the following applicable conditions:

Schizophrenia/Psychosis	Dissociative Disorders	Personality Disorders
Substance Abuse	Bipolar 1 Disorder	Neurodegenerative Disease

3. Describe any emotional or cognitive impairments you experience.
   _____
   _____
   _____
   _____
   _____

4. Do you have a history of traumatic brain injury, cognitive delays, stroke, or dementia?
   _____
   _____

5. Have you recently experienced forgetfulness or difficulty comprehending information?
   _____
   _____

APPENDIX C: BRIEF PSYCHIATRIC RATING SCALE (BPRS)

NAME: _____ DATE: _____
PATIENT ID#: _____ MD: _____

BRIEF PSYCHIATRIC RATING SCALE (BPRS)

Please enter the score for the term which best describes the patient's condition.

0 = not assessed, 1 = not present, 2 = very mild, 3 = mild, 4 = moderate, 5 = moderately severe, 6 = severe, 7 = extremely severe

1. **SOMATIC CONCERN** Degree of concern over present bodily health. Rate the degree to which physical health is perceived as a problem by the patient, whether complaints have a realistic basis or not. SCORE ☐	10. **HOSTILITY** Animosity, contempt, belligerence, disdain for other people outside the interview situation. Rate solely on the basis of the verbal report of feelings and actions of the patient toward others; do not infer hostility from neurotic defenses, anxiety, nor somatic complaints. (*Rate attitude toward interviewer under "uncooperativeness"*). SCORE ☐
2. **ANXIETY** Worry, fear, or over-concern for present or future. Rate solely on the basis of verbal report of patient's own subjective experiences. Do not infer anxiety from physical signs or from neurotic defense mechanisms. SCORE ☐	11. **SUSPICIOUSNESS** Brief *(delusional or otherwise)* that others have now, or have had in the past, malicious or discriminatory intent toward the patient. On the basis of verbal report, rate only those suspicions which are currently held whether they concern past or present circumstances. SCORE ☐
3. **EMOTIONAL WITHDRAWAL** Deficiency in relating to the interviewer and to the interviewer situation. Rate only the degree to which the patient gives the impression of failing to be in emotional contact with other people in the interview situation. SCORE ☐	12. **HALLUCINATORY BEHAVIOR** Perceptions without normal external stimulus correspondence. Rate only those experiences which are reported to have occurred within the last week and which are described as distinctly different from the thought and imagery processes of normal people. SCORE ☐
4. **CONCEPTUAL DISORGANIZATION** Degree to which the thought processes are confused, disconnected, or disorganized. Rate on the basis of integration of the verbal products of the patient; do not rate on the basis of patient's subjective impression of his own level of functioning. SCORE ☐	13. **MOTOR RETARDATION** Reduction in energy level evidenced in slowed movements. Rate on the basis of observed behavior of the patient only; do not rate on the basis of patient's subjective impression of own energy level. SCORE ☐
5. **GUILT FEELINGS** Over-concern or remorse for past behavior. Rate on the basis of the patient's subjective experiences of guilt as evidenced by verbal report with appropriate affect; do not infer guilt feelings from depression, anxiety or neurotic defenses. SCORE ☐	14. **UNCOOPERATIVENESS** Evidence of resistance, unfriendliness, resentment, and lack of readiness to cooperate with the interviewer. Rate only on the basis of the patient's attitude and responses to the interviewer and the interview situation; do not rate on basis of reported resentment or uncooperativeness outside the interview situation. SCORE ☐
6. **TENSION** Physical and motor manifestations of tension "nervousness", and heightened activation level. Tension should be rated solely on the basis of physical signs and motor behavior and not on the basis of subjective experiences of tension reported by the patient. SCORE ☐	15. **UNUSUAL THOUGHT CONTENT** Unusual, odd, strange or bizarre thought content. Rate here the degree of unusualness, not the degree of disorganization of thought processes. SCORE ☐
7. **MANNERISMS AND POSTURING** Unusual and unnatural motor benavior, the type of motor behavior which causes certain mental patients to stand out in a crowd of normal people. Rate only abnormality of movements; do not rate simple heightened motor activity here. SCORE ☐	16. **BLUNTED AFFECT** Reduced emotional tone, apparent lack of normal feeling or involvement. SCORE ☐
8. **GRANDIOSITY** Exaggerated self-opinion, conviction of unusual ability or powers. Rate only on the basis of patient's statements about himself or self-in-relation-to-others, not on the basis of his demeanor in the interview situation. SCORE ☐	17. **EXCITEMENT** Heightened emotional tone, agitation, increased reactivity. SCORE ☐
9. **DEPRESSIVE MOOD** Despondency in mood, sadness. Rate only degree of despondency; do not rate on the basis of inferences concerning depression based upon general retardation and somatic complaints. SCORE ☐	18. **DISORIENTATION** Confusion or lack of proper association for person, place or time. SCORE ☐

APPENDIX D: STRESS RELATED GROWTH SCALE REVISED (SRGS-R)

Supplemental Materials

Reducing Reports of Illusory Posttraumatic Growth: A Revised Version of the Stress-Related Growth Scale (SRGS-R)

by A. Boals & K. L. Schuler, 2017, *Psychological Trauma: Theory, Research, Practice, and Policy*

http://dx.doi.org/10.1037/tra0000267

SRG-R

For each of the following statements, indicate how much change you experienced, if any change at all, as a result of the negative event that you nominated earlier. Please use the following scale:

+3 = A very positive change
+2 = A moderate positive change
+1 = A somewhat positive change
0 = No change
-1 = A somewhat negative change
-2 = A moderate negative change
-3 = A very negative change

Because of this event…

1. I experienced a change in how I treat others.
2. I experienced a change in the extent to which I feel free to make my own decisions.
3. I experienced a change in my belief that I have something of value to teach others about life.
4. I experienced a change in the extent to which I can be myself and not try to be what others want me to be.
5. I experienced a change in the extent to which I work through problems and not just give up.
6. I experienced a change in the extent to which I find meaning in life.
7. I experienced a change in the extent to which I reach out and help others.
8. I experienced a change in the extent to which I am a confident person.
9. I experienced a change in the extent to which I listen when others talk to me.
10. I experienced a change in the extent to which I am open to new information and ideas.
11. I experienced a change in the extent to which I communicate honestly with others.
12. I experienced a change in my desire to have some impact on the world.
13. I experienced a change in my belief that it's OK to ask others for help.
14. I experienced a change in the extent to which I stand up for my personal rights.
15. I experienced a change in my belief about how many people care about me.

APPENDIX E: ADULT HOPE SCALE (AHS)

Adult Hope Scale

(Developed by Rick Snyder, 1991. Reference: Gwinn, C. and Hellman, C. (2019) Hope Rising, How the Science of Hope Can Change Your Life. Morgan James Publishing).

Directions: Read each item carefully.
Using the scale shown below, please circle the number that best describes YOU.

	Definitely False	Mostly False	Somewhat False	Slightly False	Slightly True	Somewhat True	Mostly True	Definitely True
1. I can think of many ways to get out of a jam.	1	2	3	4	5	6	7	8
2. I energetically pursue my goals.	1	2	3	4	5	6	7	8
3. I feel tired most of the time.	1	2	3	4	5	6	7	8
4. There are lots of ways around any problem.	1	2	3	4	5	6	7	8
5. I am easily downed in an argument.	1	2	3	4	5	6	7	8
6. I can think of many ways to get the things in life that are important to me.	1	2	3	4	5	6	7	8
7. I worry about my health.	1	2	3	4	5	6	7	8
8. Even when others get discouraged, I know I can find a way to solve the problem.	1	2	3	4	5	6	7	8
9. My past experiences have prepared me well for my future.	1	2	3	4	5	6	7	8
10. I've been pretty successful in life.	1	2	3	4	5	6	7	8
11. I usually find myself worrying about something.	1	2	3	4	5	6	7	8
12. I meet the goals that I set for myself.	1	2	3	4	5	6	7	8

Agency/Willpower

Add scores for questions:

2 _____
9 _____
10 _____
12 _____

Total:_____ (range: 4-32)

Higher scores reflect higher agency.

Pathways/Waypower

Add scores for questions:

1 _____
4 _____
6 _____
8 _____

Total: _____ (range: 4-32)

Higher scores reflect higher pathways thinking.

Total Hope Score

Add score for Agency and Pathways

Agency _____
Pathways _____

Total: _____

Scores of 40-48 are hopeful, 48-56 are moderately hopeful, 56 or higher are high hope.

Research shows that Hope is made up of two qualities: Agency (or Willpower) and Pathways (or Waypower). Willpower is determined, in part, by your brain having enough fuel, or nutrients. Waypower is the ability to make small steps toward your goal and comes, in part, from having support to continue towards your goals. Use this scale to measure your Hope over time.

APPENDIX F: GENERALIZED ANXIETY DISORDER (GAD-7)

GAD-7 Anxiety

Over the last two weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	◯ 0	◯ 1	◯ 2	◯ 3
2. Not being able to stop or control worrying	◯ 0	◯ 1	◯ 2	◯ 3
3. Worrying too much about different things	◯ 0	◯ 1	◯ 2	◯ 3
4. Trouble relaxing	◯ 0	◯ 1	◯ 2	◯ 3
5. Being so restless that it is hard to sit still	◯ 0	◯ 1	◯ 2	◯ 3
6. Becoming easily annoyed or irritable	◯ 0	◯ 1	◯ 2	◯ 3
7. Feeling afraid, as if something awful might happen	◯ 0	◯ 1	◯ 2	◯ 3

Column totals _____ + _____ + _____ + _____ =

Total score _____

If you checked any problems, how difficult have they made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
◯	◯	◯	◯

Source: Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PRIME-MD-PHQ). The PHQ was developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke, and colleagues. For research information, contact Dr. Spitzer at ris8@columbia.edu. PRIME-MD® is a trademark of Pfizer Inc. Copyright© 1999 Pfizer Inc. All rights reserved. Reproduced with permission

Scoring GAD-7 Anxiety Severity

This is calculated by assigning scores of 0, 1, 2, and 3 to the response categories, respectively, of "not at all," "several days," "more than half the days," and "nearly every day."
GAD-7 total score for the seven items ranges from 0 to 21.

0–4: minimal anxiety

5–9: mild anxiety

10–14: moderate anxiety

15–21: severe anxiety

APPENDIX G: PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

ID #: _____ **DATE:** _____

Over the last *2 weeks*, how often have you been bothered by any of the following problems?
(use "✓" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	◯ 0	◯ 1	◯ 2	◯ 3
2. Feeling down, depressed, or hopeless	◯ 0	◯ 1	◯ 2	◯ 3
3. Trouble falling or staying asleep, or sleeping too much	◯ 0	◯ 1	◯ 2	◯ 3
4. Feeling tired or having little energy	◯ 0	◯ 1	◯ 2	◯ 3
5. Poor appetite or overeating	◯ 0	◯ 1	◯ 2	◯ 3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	◯ 0	◯ 1	◯ 2	◯ 3
7. Trouble concentrating on things, such as reading the newspaper or watching television	◯ 0	◯ 1	◯ 2	◯ 3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so figety or restless that you have been moving around a lot more than usual	◯ 0	◯ 1	◯ 2	◯ 3
9. Thoughts that you would be better off dead, or of hurting yourself	◯ 0	◯ 1	◯ 2	◯ 3
	add columns		+	+

(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card). TOTAL: _____

10. If you checked off *any problems*, how *difficult* have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all ◯ Somewhat difficult ◯ Very difficult ◯ Extremely difficult ◯

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APPENDIX H: SESSION FOCUS

Session Focus

Session 1: This session will be focused on building rapport and therapeutic alliance with participants to help them feel comfortable during their sessions. The purpose and structure of the study will be reiterated, that PTG work will be the focus of sessions. Education about trauma and basic trauma work will be provided. Participants will share their stories to receive support and guidance regarding their experience. Homework will be assigned at the conclusion of the session.
*The experimental group will receive additional education about the power of words and importance of what people say and listen to.

Session 2: This session will be focused on discussing PTG and helpful steps for achieving PTG. The first domain of PTG, relationship quality and compassion, will also be explored. Education and examples will be provided by the therapist about how this type of growth has been accomplished by others. The remaining session time will be devoted to helping the client identify ways they may have already experienced this type of growth and apply techniques to help cultivate additional growth. Homework will be assigned at the conclusion of the session.
*Positive declarations of desired outcomes will be used with group E. They will be reminded of the impact of words.

Session 3: This session will be focused on discussing the domain of PTG, appreciation of life. Education will be provided by the therapist about this domain including examples of how this type of growth has been accomplished by others. The remaining session time will be devoted to helping the client identify ways they may have already experienced this type of growth and apply techniques to help cultivate additional growth. Homework will be assigned at the conclusion of the session.
*Positive declarations of desired outcomes will be used with group E. They will be reminded of the impact of words.

Session 4: This session will be focused on discussing the domain of PTG, spiritual and existential change. Education will be provided by the therapist about this domain including examples of how this type of growth has been accomplished by others. The remaining session time will be devoted to helping the client identify ways they may have already experienced this type of growth and apply techniques to help cultivate additional growth. Homework will be assigned at the conclusion of the session.
*Positive declarations of desired outcomes will be used with group E. They will be reminded of the impact of words.

Session 5: This session will be focused on discussing the domain of PTG, personal strength. Education will be provided by the therapist about this domain including examples of how this type of growth has been accomplished by others. The remaining session time will be devoted to helping the client identify ways they may have already experienced this type of growth and apply techniques to help cultivate additional growth. Homework will be assigned at the conclusion of the session.
*Positive declarations of desired outcomes will be used with group E. They will be reminded of the impact of words.

Session 6: This session will be focused on discussing the domain of PTG, a new or different path. Education will be provided by the therapist about this domain including examples of how this type of growth has been accomplished by others. The remaining session time will be devoted to helping the client identify ways they may have already experienced this type of growth and apply techniques to help cultivate additional growth. To close the entire study, a brief recap of all six sessions will be conducted. Homework will be assigned at the conclusion of the session.
*Positive declarations of desired outcomes will be used with group E. They will be reminded of the impact of words.

APPENDIX I: CONTROL GROUP SESSION CONTENT

CONTROL GROUP SESSION 1

1. Welcome to counseling
2. Explain confidentiality
3. Review session format
    A. Each session we will check in about how you are doing in general
    B. Conduct a body scan/relaxation exercise
    C. Share and educate about the session topic
    D. Topic is applied to the participants experience
4. How are you? And how are you feeling about this experience?
5. Teach about Mind body connection, the need for a relaxed body for trauma work.
    - **Conduct a Body Scan**
6. STEPS TO HELP HEAL TRAUMA
    A. Disclosure: Acknowledge what has happened without making it worse or better than what it is. Be truthful about our experience and feelings.
    B. Awareness: There are stress hormones and systems activated in our body that cause us to feel anxious or dysregulated after trauma. This is normal and will fade with time. Lacking this understanding can create a neurofeedback loop that reinforces anxious feelings.
    C. Emotional regulation: Gaining control over our nervous system and emotional state. Artistic expression, peaceful setting/scenery. music, walking, visual stimulation, body scans, etc.
7. **Invite them to share the story or topic they have chosen to focus on for the study. Provide support regarding their experiences.**

HOMEWORK WEEK 1:
o body scans/self-regulate once a day. Write 1 paragraph of what you understand about PTG and what you hope to achieve over the next few weeks.

CONTROL GROUP SESSION 2

1. Participant check in; how are they doing
2. Body scan/relaxation exercise to start
3. Review Homework
    - Self-regulation
    - Paragraph writing
4. Recap highlights from previous session
    - Steps to heal from trauma (awareness/disclosure/emotional regulation)
5. Steps to experience PTG
    - Acceptance: No longer fighting what was and is. Acceptance is not giving up, it is actually what is required to be able to move forward. This is where things are right now but does not have to be where things are in the future.
    - Narrative development: The choice of how we want to respond to what we have been through. Begin viewing challenges as opportunities. We have the power to write our own story through our responses to what happened to us.
    - Service: paying it forward can be helpful for healing and growth. This is connecting outwardly to surrounding community to help others as the result of what we have endured.
6. First Domain of Growth: **relationship quality and compassion**
    - Relationship quality and compassion refer to the change in how people experience their relationships with others.
    - PTG is evident within relationships with others when people report a deeper emotional quality during their interactions. This can occur through disclosure of the trauma and increased openness with others.
    - Respect and compassion for others often result because of personally understanding loss and emotional pain at a deeper level. Also, as trauma survivors share their experiences, receiving compassion and empathy can help reshape their relationships and bring healing.

Examples

- A study was conducted by Zhai et al. (2019) with women who were diagnosed with breast cancer. The women related more to others as evidenced by desiring intimate relationships and more meaningful connections. Increased closeness was experienced through enhanced sensitivity to the feelings of other people. Some women felt particularly drawn and connected to those with similar experiences, or who were sick, as they gained personal insight from having breast cancer. The practice of desiring to help others also developed for many women.
- A study was also conducted by Doherty & Scannell (2022) with people who had lost a spouse. Study results highlighted that increased compassion was experienced as a result. Some people expressed looking around and being able to notice other people hurting more than before their loss. Other people felt a desire to support people who were alone and in need (2022).

7. Guide the participant in identifying ways they have grown in relationship quality and compassion because of their trauma

HOMEWORK WEEK 2: Write a paragraph on how relationship quality and compassion has increased in your life because of the trauma you experienced.
-Increase frequency of body scans. Now two times a day.

CONTROL GROUP SESSION 3

1. Participant check in; how are they doing
2. Body scan/relaxation exercise to start
3. Review Homework
    - Self-regulation
    - Paragraph writing
4. Recap highlights from previous session
    - Steps to experience PTG
        - Acceptance: narrative development: service
    - First domain of PTG
        - Relationship quality and compassion
5. Today's topic is the second domain of growth: **appreciation of life**
    - This domain encompasses people gaining new or increased gratitude for aspects of life to a different extent after trauma.
    - Greater appreciation of life results from the pain of loss, or near loss, that a person experiences because of what they endured.
    - The most common expression of PTG for appreciation of life is an adjusted attitude that allows people to slow down how they live and no longer take life for granted.
    - What was once insignificant may become important, and what was once a burden may no longer be perceived as such.
    - Understanding that people and circumstances of life are not guaranteed beyond the present moment helps recenter life values and meaning for trauma survivors.

Examples

- The breast cancer study, the women often enjoyed life more after receiving their diagnosis. Their battle with cancer created a desire to live each day to the fullest in ways they had not before being diagnosed. Many women felt that they cherished life more and were privileged to be alive after surviving breast cancer, as if they had a second chance to live. There was also more acknowledgment of the good in their lives that previously went unnoticed. Many experienced more acknowledgment of life's beauty and increased appreciation of friends and family (Zhai et al., 2019).
- Elderton et al. (2017) reviewed studies of people who had experienced a greater appreciation of life after interpersonal trauma: physical and sexual violence. The trauma survivors were noted for restructuring their priorities due to a shift in appreciation from before the trauma. The shift in priorities resulted from gaining a new perspective about themselves, others, and life in general (Elderton et al., 2017).
- Also, many disaster workers grow after the trauma of being submerged in crisis and catastrophe (Brooks et al., 2020). It has been noted that disaster workers often experience both personal and professional growth after trauma, including feeling that they value life more and desire to live life more fully due to the trauma of their work (Brooks et al., 2020).

6. Guide the participant in identifying ways they have grown in their appreciation of life because of their trauma.

HOMEWORK WEEK 3: Write a paragraph on how appreciation of life has increased because of the trauma you experienced.
-Increase frequency of body scans. Now three times a day.

CONTROL GROUP SESSION 4

1. Participant check in; how are they doing
2. Body scan/relaxation exercise to start
3. Review Homework
    - Self-regulation
    - Paragraph writing
4. Recap highlights from previous session
    - Second domain of PTG
        - Appreciation of life
5. Today's topic is the third domain of growth: **spirituality and existential change**
    - Spirituality is the concern of the human spirit or soul opposed to material or physical things. Existential Change (relating to existence) is accomplished through questioning about purpose and existence.
    - The spiritual and existential domain encompasses how the occurrence of trauma causes people to re-evaluate their spiritual belief system.
    - Such spiritual reevaluation occurs through a series of existential questions that the survivor of trauma considers. People who are spiritual often question how the trauma aligns with their faith. Survivors of trauma who are not spiritual may reconsider the possibility of the divine or a higher power.
    - Existential questions can be, "What is my nature/essence?", "What is my greater purpose?", "What is my true identity?"

Examples

- Regarding spiritual and existential change, some women who completed breast cancer treatment reconnected with their faith in a higher power. Several of the women had established faith practices but became more committed after their cancer diagnosis. Faith was activated as women leaned into spirituality, accepted suffering, and released attachment to temporal life. Spiritual and existential change is also viewed as a cultural bond issue, meaning that expressions of spiritual growth may look different within various cultural contexts (Zhai et al., 2019). One woman may have faith in God, whereas another may have a stronger spiritual connection to the universe.
- A study of people who experienced physical, emotional, or sexual trauma were interviewed for spiritual and existential growth. Many participants felt that their spiritual life prior to the trauma was superficial, which was shattered by the trauma. Castella & Simmonds (2013) observed growth after trauma as the strengthening of religious or spiritual beliefs as well as spiritual healing. They also noted that new spiritual and religious understanding from trauma can continue to grow

and develop over time. An example of spiritual growth may be observed through the act of forgiveness after harboring unforgiveness.

- Additionally, Greyson & Khanna (2014) studied the spiritual transformation of 230 people who had near-death experiences (NDEs) compared to those with close but no NDE. By using various scales, findings indicated that more spiritual growth was experienced by those with NDEs than those with other traumas but no NDE. The level of spiritual growth experienced also correlates with the severity of the NDE (Greystone & Khanna, 2014).

6. Guide the participant in identifying ways they have experienced spiritual and existential change because of the trauma they endured.

HOMEWORK WEEK 4: Write a paragraph on how you have grown spiritually, or experienced existential change, because of the trauma you experienced.
-Increase frequency of body scans. Now five times a day.

CONTROL GROUP SESSION 5

1. Participant check in; how are they doing
2. Body scan/relaxation exercise to start
3. Review Homework
    - Self-regulation
    - Paragraph writing
4. Recap highlights from previous session
    - Third domain of PTG
        - Spiritual and existential change
5. Today's topic is the forth domain of growth: **personal strength**
    - The domain of PTG that encompasses an increased understanding of personal capabilities.
    - People who live through trauma and tragedy are often surprised by their ability to survive.
    - After trauma strikes, most people are focused on survival rather than growth. As time progresses, people typically begin to see themselves as more than victims and more than survivors.
    - The perspective of being an overcomer requires strength to regain control after losing it. PTG within the domain of personal strength is often recognized as courage and empowerment, and people feel that they can confidently face more than they could prior to trauma.
    - Without the hardship caused by trauma, strength might not be exercised in a manner that reveals the depth and breadth of a person's capability.

Examples

- The responses of women who had breast cancer often highlighted a sense of increased capability to accomplish future life demands and tasks. Women who had to cope with cancer experienced some increase in self-esteem and sense of competence. Certain aspects of their personality felt renewed. The ability to be resilient and solve problems was also enhanced for many of the women. Furthermore, personal strength was observed for many women as increased energy and a more positive attitude about navigating their future (Zhai et al., 2019).
- Jung and Han (2023) reviewed the experience of earthquake survivors and how their sense of personal strength grew as a result. Several survivors felt they found an inner strength through their experience, which allowed them to overcome and face their current life demands. Prior to the earthquake, the feeling of being ordinary was common, but afterward people felt more significant and that their life was important. Strength was also identified as more than just a physical attribute but an intrinsic quality of the person.
- The COVID-19 pandemic traumatized many healthcare workers in Greece. Some of the healthcare workers (HCWs) were able to grow within the domain of personal strength. The HCWs felt a heightened awareness of personal capabilities which ultimately bolstered their self-confidence when facing adversity (Kalaitzaki et al., 2022).

6. Guide the participant in identifying ways they have grown in their personal strength because of the trauma they experienced.

HOMEWORK WEEK 5: Write a paragraph on how you have grown, regarding personal strength, because of the trauma you experienced.
-Increase frequency of body scans. Now attempt to consistently stay relaxed start by remaining mindful of what is happening in your body.

CONTROL GROUP SESSION 6

1. Participant check in; how are they doing
2. Body scan/relaxation exercise to start
3. Review Homework
    - Self-regulation
    - Paragraph writing
4. Recap highlights from previous session
    - Forth domain of PTG
        - Personal strength
5. Today's topic is the forth domain of growth; **a new or different path.**
    - A form of loss is attached to trauma whether loss of capabilities, relationships, roles, or expectations for the future.
    - Where a loss has been experienced, people are able to search for and discover new ways of finding purpose and life fulfillment.
    - People do not always recognize or appreciate opportunities throughout their daily routines. Once something is lost, a heightened awareness and consideration of new possibilities can arise.
    - Within the domain of a new or different path, growth due to trauma starts with perception. People will first interpret circumstances as opportunities and then take steps to engage in new or diverse activities or relationships.

Examples

- A new or different path for the women who battled breast cancer was noted through changes in their life philosophy and taking a new route. Health and social activities also became a priority for many as they realized the importance of valuing life while also having fun. As the women gained a new awareness of possibilities, some expressed a shift in identity that created the desire for a new life path. PTG was also evident as many of the women developed new friendships, started new hobbies, and considered foreign opportunities (Zhai et al., 2019).
- Some individuals who received an HIV/AIDS diagnosis were motivated to take a new path in life by stopping bad habits. After unsuccessfully trying to stop substance use and risky behavior in the past, receiving the diagnosis was the motivation needed for some people to make the change (Barskova & Oesterreich, 2009).
- Another study explored PTG among refugees, those who have been forced to leave their country and relocate to another place. There were some refugees who considered the forced relocation as an opportunity to build a new life (Von Arcosy et al., 2023).

6. Guide the participant in identifying ways they have experienced a new or different path because of the trauma.

RECAP of 6 weeks

- Session 1: your story and how to help heal trauma
- Session 2: how to experience PTG and domain 1 (relationship quality & compassion)
- Session 3: domain 2 (appreciation of life)
- Session 4: domain 3 (spirituality and existential change)
- Session 5: domain 4 (personal strength)
- Session 6: domain 5 (new or different path)
- A main take away for our time together is to learn how perspective impacts our life. Over the past 6 weeks, we have reframed the trauma you endured as an opportunity for growth rather than only a hinderance. The ability for people to be resilience and evolve from challenges was highlighted during our discussions. Learning about PTG helped us identify ways you have already grown and how to possess a growth mindset for additional growth.

HOMEWORK WEEK 6: Write a paragraph about a new or different path you have experienced because of the trauma you endured.
-Continue focusing on the mind body connection to remain calm through future stressors.

- Two final items: scales and a question for your closing remarks.
- Schedule a time to debrief to close out the study.

APPENDIX J: EXPERIMENTAL GROUP SESSION CONTENT

EXPERIMENTAL GROUP SESSION 1

1. Welcome to counseling
2. Explain confidentiality
3. Review session format
    A. Each session we will check in about how you are doing in general
    B. Conduct a body scan/relaxation exercise
    C. Share and educate about the session topic
    D. Topic is applied to the participants experience
4. How are you? And how are you feeling about this experience?
5. Teach about Mind body connection, the need for a relaxed body for trauma work.
    - **Conduct a Body Scan**
6. STEPS TO HELP HEAL TRAUMA
    A. Disclosure: Acknowledge what has happened without making it worse or better than what it is. Be truthful about our experience and feelings.
    B. Awareness: There are stress hormones and systems activated in our body that cause us to feel anxious or dysregulated after trauma. This is normal and will fade with time. Lacking this understanding can create a neurofeedback loop that reinforces anxious feelings.
    C. Emotional regulation: Gaining control over our nervous system and emotional state. Your expression, our setting/scenery. music, walking, visual stimulation, body scans, etc.
7. **Invite them to share the story or topic they have chosen to focus on for the study. Provide support regarding their experience.**
8. Talk about the Power of Words.
    - The words we say have been proven to impact every aspect of life.
    - The brain literally changes because of words spoken. Words activate different areas of the brain and cause the release of chemicals/hormones in the body. Negative/hurtful speech creates stress, positive speech creates hope and healing.
    - Speech also creates possibilities for people.
    - Relationship quality/satisfaction, violence, health and wellness, and even recovery after trauma are shaped by our words.
    - Studies have shown that the type of communication used with people after trauma occurs impacts how much PTG they experience.
    - Speaking positively creates a sense of empowerment.
    - Words of rehabilitation and recovery
    - specific word and pronoun usage helped people experience PTG.
    - We will be speaking out what we hope to achieve throughout our sessions. As we speak it, the hope and expectation for it to happen will build.

HOMEWORK WEEK 1:

- body scans/self-regulate daily. Speak five positive declarations of growth over yourself daily. Write 1 paragraph of what you understand about PTG and what you believe you will achieve over the next few weeks. Incorporate positive declarations.
    - "I will continue to become better because of what I went through."

EXPERIMENTAL GROUP SESSION 2

1. Participant check in; how are they doing
2. Body scan/relaxation exercise to start
    - *Speak positive declarations during relaxation exercise*
3. Review Homework
    - Self-regulation
    - Paragraph writing
4. Recap highlights from previous session
    - Steps to heal from trauma (awareness/disclosure/emotional regulation)
5. Steps to experience PTG
    - Acceptance: No longer fighting what was and is. Acceptance is not giving up, it is actually what is required to be able to move forward. This is where things are right now but will not be where things will be in the future.
    - Narrative development: The choice of how we want to respond to what we have been through. Begin viewing challenges as opportunities. We have the power to write our own story through our responses to what happened to us.
    - Service: paying it forward can be helpful for healing and growth. This is connecting outwardly to surrounding community to help others as the result of what we have endured.

First Domain of Growth: **relationship quality and compassion.**

- Relationship quality and compassion refer to the change in how people experience their relationships with others.
- PTG is evident within relationships with others when people report a deeper emotional quality during their interactions. This can occur through disclosure of the trauma and increased openness with others.
- Respect and compassion for others often result because of personally understanding loss and emotional pain at a deeper level. Also, as trauma survivors share their experiences, receiving compassion and empathy can help reshape their

relationships and bring healing.

Examples

- A study was conducted by Zhai et al. (2019) with women who were diagnosed with breast cancer. The women related more to others as evidenced by desiring intimate relationships and more meaningful connections. Increased closeness was experienced through enhanced sensitivity to the feelings of other people. Some women felt particularly drawn and connected to those with similar experiences, or who were sick, as they gained personal insight from having breast cancer. The practice of desiring to help others also developed for many women.
- A study was also conducted by Doherty & Scannell (2022) with people who had lost a spouse. Study results highlighted that increased compassion was experienced as a result. Some people expressed looking around and being able to notice other people hurting more than before their loss. Other people felt a desire to support people who were alone and in need (2022).

6. Guide the participant in identifying ways they have grown in relationship quality and compassion because of their trauma
    - *Incorporate positive declarations throughout the discussion*

HOMEWORK WEEK 2: Write a paragraph on how relationship quality and compassion has increased in your life because of the trauma you experienced. Incorporate positive declarations.
-Speak positive declarations of growth over yourself five times a day.
-Increase frequency of body scans. Now two times a day.

EXPERIMENTAL GROUP SESSION 3

1. Participant check in; how are they doing
2. Body scan/relaxation exercise to start
    - *Speak positive declarations during relaxation exercise*
3. Review Homework
    - Self-regulation
    - Paragraph writing
4. Recap highlights from previous session
    - Steps to experience PTG
        - Acceptance: narrative development: service
    - First domain of PTG
        - Relationship quality and compassion
5. Today's topic is the second domain of growth**: appreciation of life**
    - This domain encompasses people gaining new or increased gratitude for aspects of life to a different extent after trauma.
    - Greater appreciation of life results from the pain of loss, or near loss, that a person experiences because of what they endured.
    - The most common expression of PTG for appreciation of life is an adjusted attitude that allows people to slow down how they live and no longer take life for granted.
    - What was once insignificant may become important, and what was once a burden may no longer be perceived as such.
    - Understanding that people and circumstances of life are not guaranteed beyond the present moment helps recenter life values and meaning for trauma survivors.

Examples

- The breast cancer study, the women often enjoyed life more after receiving their diagnosis. Their battle with cancer created a desire to live each day to the fullest in ways they had not before being diagnosed. Many women felt that they cherished life more and were privileged to be alive after surviving breast cancer, as if they had a second chance to live. There was also more acknowledgment of the good in their lives that previously went unnoticed. Many experienced more acknowledgment of life's beauty and increased appreciation of friends and family (Zhai et al., 2019).
- Elderton et al. (2017) reviewed studies of people who had experienced a greater appreciation of life after interpersonal trauma: physical and sexual violence. The trauma survivors were noted for restructuring their priorities due to a shift in appreciation from before the trauma. The shift in priorities resulted from gaining a new perspective about themselves, others, and life in general (Elderton et al., 2017).
- Also, many disaster workers grow after the trauma of being submerged in crisis and catastrophe (Brooks et al., 2020). It has been noted that disaster workers often experience both personal and professional growth after trauma, including feeling that they value life more and desire to live life more fully due to the trauma of their work (Brooks et al., 2020).

6. Guide the participant in identifying ways they have grown in their appreciation of life because of their trauma.
    a. *Incorporate positive declarations throughout the discussion*

HOMEWORK WEEK 3: Write a paragraph on how appreciation of life has increased because of the trauma you experienced. Incorporate positive declarations.
-Speak positive declarations of growth over yourself five times a day.
-Increase frequency of body scans. Now three times a day.

EXPERIMENTAL GROUP SESSION 4

1. Participant check in; how are they doing
2. Body scan/relaxation exercise to start
    - Speak positive declarations during relaxation exercise
3. Review Homework
    - Self-regulation

- Paragraph writing

4. Recap highlights from previous session
5. Second domain of PTG
    - Appreciation of life
6. Today's topic is the third domain of growth: **spirituality and existential change**
    - Spirituality is the concern of the human spirit or soul opposed to material or physical things. Existential Change (relating to existence) is accomplished through questioning about purpose and existence.
    - The spiritual and existential domain encompasses how the occurrence of trauma causes people to re-evaluate their spiritual belief system.
    - Such spiritual reevaluation occurs through a series of existential questions that the survivor of trauma considers. People who are spiritual often question how the trauma aligns with their faith. Survivors of trauma who are not spiritual may reconsider the possibility of the divine or a higher power.
        - Existential questions can be, What is my nature/essence? What is my greater purpose? What is my true identity?

Examples

- Regarding spiritual and existential change, some women who completed breast cancer treatment reconnected with their faith in a higher power. Several of the women had established faith practices but became more committed after their cancer diagnosis. Faith was activated as women leaned into spirituality, accepted suffering, and released attachment to temporal life. Spiritual and existential change is also viewed as a cultural bond issue, meaning that expressions of spiritual growth may look different within various cultural contexts (Zhai et al., 2019). One woman may have faith in God, whereas another may have a stronger spiritual connection to the universe.
- A study of people who experienced physical, emotional, or sexual trauma were interviewed for spiritual and existential growth. Many participants felt that their spiritual life prior to the trauma was superficial, which was shattered by the trauma. Castella & Simmonds (2013) observed growth after trauma as the strengthening of religious or spiritual beliefs as well as spiritual healing. They also noted that new spiritual and religious understanding from trauma can continue to grow and develop over time. An example of spiritual growth may be observed through the act of forgiveness after harboring unforgiveness.
- Additionally, Greyson & Khanna (2014) studied the spiritual transformation of 230 people who had near-death experiences (NDEs) compared to those with close but no NDE. By using various scales, findings indicated that more spiritual growth was experienced by those with NDEs than those with other traumas but no NDE. The level of spiritual growth experienced also correlates with the severity of the NDE (Greystone & Khanna, 2014).

7. Guide the participant in identifying ways they have experienced spiritual and existential change because of the trauma they endured.
    - *Incorporate positive declarations throughout the discussion*

HOMEWORK WEEK 4: Write a paragraph on how you have grown spiritually, or experienced existential change, because of the trauma you experienced. Incorporate positive declarations.
-Speak positive declarations of growth over yourself five times a day.
-Increase frequency of body scans. Now five times a day.

EXPERIMENTAL GROUP SESSION 5

1. Participant check in; how are they doing
2. Body scan/relaxation exercise to start
    - *Speak positive declarations during relaxation exercise*
3. Review Homework
    - Self-regulation
    - Paragraph writing
4. Recap highlights from previous session
5. Third domain of PTG
    - Spiritual and existential change
6. Today's topic is the forth domain of growth: **personal strength**
    - The domain of PTG that encompasses an increased understanding of personal capabilities.
    - People who live through trauma and tragedy are often surprised by their ability to survive.
    - After trauma strikes, most people are focused on survival rather than growth. As time progresses, people typically begin to see themselves as more than victims and more than survivors.
    - The perspective of being an overcomer requires strength to regain control after losing it. PTG within the domain of personal strength is often recognized as courage and empowerment, and people feel that they can confidently face more than they could prior to trauma.
    - Without the hardship caused by trauma, strength might not be exercised in a manner that reveals the depth and breadth of a person's capability.

Examples

- The responses of women who had breast cancer often highlighted a sense of increased capability to accomplish future life demands and tasks. Women who had to cope with cancer experienced some increase in self-esteem and sense of competence. Certain aspects of their personality felt renewed. The ability to be resilient and solve problems was also enhanced for many of the women. Furthermore, personal strength was observed for many women as increased energy and a more positive attitude about navigating their future (Zhai et al., 2019).
- Jung and Han (2023) reviewed the experience of earthquake survivors and how their sense of personal strength grew as a result. Several survivors felt they found an inner strength through their experience, which allowed them to overcome and face their current life demands. Prior to the earthquake, the feeling of being ordinary was common, but afterward people felt more significant and that their life was important. Strength was also identified as more than just a physical attribute but

an intrinsic quality of the person.

- The COVID-19 pandemic traumatized many healthcare workers in Greece. Some of the healthcare workers (HCWs) were able to grow within the domain of personal strength. The HCWs felt a heightened awareness of personal capabilities which ultimately bolstered their self-confidence when facing adversity (Kalaitzaki et al., 2022).

7. Guide the participant in identifying ways they have grown in their personal strength because of the trauma they experienced.
    - *Incorporate positive declarations throughout the discussion*

HOMEWORK WEEK 5: Write a paragraph on how you have grown, regarding personal strength, because of the trauma you experienced. Incorporate positive declarations.
-Speak positive declarations of growth over yourself five times a day.
-Increase frequency of body scans. Now attempt to consistently stay relaxed start by remaining mindful of what is happening in your body.

EXPERIMENTAL GROUP SESSION 6

1. Participant check in; how are they doing
2. Body scan/relaxation exercise to start
    - Speak positive declarations during relaxation exercise
3. Review Homework
    - Self-regulation
    - Paragraph writing
4. Recap highlights from previous session
    - Forth domain of PTG
        - Personal strength
5. Today's topic is the forth domain of growth: **a new or different path**
    - A form of loss is attached to trauma whether loss of capabilities, relationships, roles, or expectations for the future.
    - Where a loss has been experienced, people are able to search for and discover new ways of finding purpose and life fulfillment.
    - People do not always recognize or appreciate opportunities throughout their daily routines. Once something is lost, a heightened awareness and consideration of new possibilities can arise.
    - Within the domain of a new or different path, growth due to trauma starts with perception. People will first interpret circumstances as opportunities and then take steps to engage in new or diverse activities or relationships.

Examples

- A new or different path for the women who battled breast cancer was noted through changes in their life philosophy and taking a new route. Health and social activities also became a priority for many as they realized the importance of valuing life while also having fun. As the women gained a new awareness of possibilities, some expressed a shift in identity that created the desire for a new life path. PTG was also evident as many of the women developed new friendships, started new hobbies, and considered foreign opportunities (Zhai et al., 2019).
- Some individuals who received an HIV/AIDS diagnosis were motivated to take a new path in life by stopping bad habits. After unsuccessfully trying to stop substance use and risky behavior in the past, receiving the diagnosis was the motivation needed for some people to make the change (Barskova & Oesterreich, 2009).
- Another study explored PTG among refugees, those who have been forced to leave their country and relocate to another place. There were some refugees who considered the forced relocation as an opportunity to build a new life (Von Arcosy et al., 2023).

6. Guide the participant in identifying ways they have experienced a new or different path because of the trauma.
    - *Incorporate positive declarations throughout the discussion*

RECAP of 6 weeks

- Session 1: your story and how to help heal trauma
- Session 2: how to experience PTG and domain 1 (relationship quality & compassion)
- Session 3: domain 2 (appreciation of life)
- Session 4: domain 3 (spirituality and existential change)
- Session 5: domain 4 (personal strength)
- Session 6: domain 5 (new or different path)
- A main study take away is how perspective impacts our life. The past 6 weeks, we have reframed the trauma you endured an opportunity for growth. Learning about PTG helped us identify ways you have already grown and how to achieve additional growth.

HOMEWORK WEEK 6: Write a paragraph about a new or different path you have experienced because of the trauma you endured. Incorporate positive declarations.
-Speak positive declarations of growth over yourself five times a day.
-Continue focusing on the mind body connection to remain calm through future stressors.

- Two final items: scales and a question for your closing remarks.
  Schedule a time to debrief to close out the study.

APPENDIX K: WRITING ASSIGNMENTS

CONTROL GROUP

WEEK 1: Write what you now understand about PTG. What do you hope to achieve over the next few weeks?

WEEK 2: As the result of the trauma you endured, how has relationship quality and compassion increased in your life?

WEEK 3: As the result of the trauma you endured, how has your appreciation for life grown?

WEEK 4: As the result of the trauma you endured, how have you experienced spiritual and existential change?

WEEK 5: As the result of the trauma you endured, in what ways has your sense of personal strength increased?

WEEK 6: As the result of the trauma you endured, what new or different path have you taken?

EXPERIMENTAL GROUP

WEEK 1: Write what you now understand about PTG. What do you hope to achieve over the next few weeks?
Be sure to incorporate positive declarations of desired growth into your response.

WEEK 2: As the result of the trauma you endured, how has relationship quality and compassion increased in your life?
Be sure to incorporate positive declarations of desired growth into your response.

WEEK 3: As the result of the trauma you endured, how has your appreciation for life grown?
Be sure to incorporate positive declarations of desired growth into your response.

WEEK 4: As the result of the trauma you endured, how have you experienced spiritual and existential change?
Be sure to incorporate positive declarations of desired growth into your response.

WEEK 5: As the result of the trauma you endured, in what ways has your sense of personal strength increased?
Be sure to incorporate positive declarations of desired growth into your response.

WEEK 6: As the result of the trauma you endured, what new or different path have you taken?
Be sure to incorporate positive declarations of desired growth into your response.

APPENDIX L : CONCLUDING REMARKS QUESTION

Positive Communication and Posttraumatic Growth
Concluding Remarks

Name: _____
Date: _____

Please describe your experience in response to participating in the study and how you feel after completing the counseling sessions.

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APPENDIX M: CONCLUDING REMARKS

PARTICIPANT CONCLUDING REMARKS

- This experience allowed me to recall strengths I had and to not just see the obstacles. It reminded me to speak life into myself, and not only into others. I looked forward to each week because it brought encouragement and tools for me to use to continue my journey in post traumatic growth.

- I didnt really know what to expect for the study. The traumatic events in my life are part of who I am and I always dealt with them in the best way possible. This study helped me to gain new insight about myself and the strengths that I call my own.
  Thank you again

- I had a very good experience over the 6-week study. I felt like you listened to what I was saying and I felt comfortable talking to you about everything. You covered the post-traumatic growth process clearly and knowing I would have "homework" helped the weekly topics stick with me. I found myself thinking about them all week. I feel more at peace with myself. I know I still have work/healing to do, but I have a new perspective and "tools" to keep in mind as I go through it.
  Thank you so much for the opportunity

- Best way I could describe my feelings after our sessions would be enlightened and optimistic for the future. Although I was aware beforehand of my ability to solve problems and push through, our sessions taught me about my strength that allows me to do those things and the ways that I have grown and the ways that I will continue to do so.

- My experience with you has been nothing short of amazing. With so much going on in my life, I've been striving to keep up with everything. Jennifer, you provided a safe space for me to share my traumas, and I never felt judged. During times when chaos seemed to reign, and I was constantly putting out fires, you made me feel validated, valued, and helped me recognize my personal growth.

  The complex trauma resulting from […] has had less of an impact on me. […] I have let go of a significant emotional burden and continue to take steps to remove the last remnants of my past from my home, property, and ultimately my life […].

- After completing the counseling sessions I feel stronger and like a new person. I now know how to better handle and deal with my anxiety. The techniques I've learned I can pass on to my loved ones. Thank you again for everything you've done.

- I feel like I learned more about the body and how it responds to PTSD. That awareness kind of helps me when I get upset to reign things in before I'm reactive. I've also found myself not jumping to worst possible scenario when something unexpected would arise. Really being mindful of my words. Overall, I think I have better coping skills and a better outlook to move forward with.
  Thank you for the opportunity!

- What. A. Privilege! I have learned so much. I have a deeper understanding of the delicate process required for processing trauma. It has been so interesting to me to learn about the stages involved. It has been so helpful to have homework each week that required me to truly pause and consider each stage personally. Jennifer, you are AMAZING! Thank you for the opportunity to be a part of this project.

- I definitely feel that participating in the study was a positive experience. It helped me to recognize areas where I have had positive growth experiences as well as other areas I am still learning to cope with and turn into positive growth.

- I love how easy it was to talk to someone who just sat and listened. No judgements. Who helped remind me how much I matter. I learned a new coping skill (the body scan) it helps me listen to my body instead of my brain.
  Thank you so much for everything. It has been an honor to get to know you and work with you.

- I had never heard of PTG and honestly it was a great reminder of where I have been and where I am now. I believe this should be piggybacked with every PTSD counseling session end. I really felt a lot of gratitude after, not just concentrating on the bad but seeing the end result, after such hard seasons in my life. Very refreshing. I am super thankful […].

- The study was absolutely amazing! It was all very user friendly and I do truly feel even better than when I started. This whole experience has given me some new tools to use in day to day life to stay more grounded and in the moment. It was also an excellent exercise in looking back to see just how much I've grown since and from the trauma. Thank you so much!

- My experience in this study has been great. In the beginning I was nervous due to not knowing what to expect. However, that changed by week 2 due to the fact that I was already on a journey to heal past trauma. I tend to think that my personality is a bit more on the pessimist side and I have been working on changing that. Within these 6 sessions I realized that I'm not as pessimistic as I thought I was, how much more hopeful I've become and it just felt nice to have another perspective and not from a direct peer.

  I feel much more confident after completing the sessions. I'm grateful that I have a few new tools to guide me throughout the rest of my lifespan. I'm much more relaxed and I dont feel a great sense of anxiousness as I did prior to. I feel seen and heard…. Just hearing someone speak life into me and to guide me through relaxation allowed me to feel safe and vulnerable to expand. I sincerely feel relief. Thank you

- I had an enlightening experience participating in the study. It was very insightful and therapeutic to revisit the past trauma that I experienced from a different time and perspective. I am aware of how common and subconsciously it is to forget or block out undesirable experiences. However, after willingly being put in a position to have to reflect on the past; it turns out it was both powerful and even rewarding to be my own witness of how far by the Grace of God I have come […].

- As I reflect back to 6 weeks ago I was an emotional wreck anxiety was at an all time high. My mind created false narratives and I thought the worst. I could not accept the traumatic events that took place in my life. I was ashamed of who I was […]. I can say with an honest heart that the past 6 weeks were very refreshing for me. I was able to speak on the things that took place in my life not to hide from what happened but able to accept and own it. Even if I reflect back on what I went through now, it doesn't hold an emotional bondage on me as much. I'm able to use the coping mechanism I learned in the past 6 weeks. I'm able to focus on the accomplishment and not the traumas and enjoy what is now and what is to come. I feel honored that I was able to participate in the program. These past 6 weeks have been a turning point for healing from the past that lies dormant for years. I still have a lot of work to do but I now have a positive outlook on life.