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Walden University

College of Social and Behavioral Sciences

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Alexandro Garcia Vargas

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Walden University
2019

Abstract

Psychological Effects of Training in Martial Arts After Interpersonal Trauma

by

Alexandro Garcia Vargas

MBA, University of Phoenix, 2010

BS, University of Phoenix, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

May 2019

Abstract

Individuals who experience a traumatic event may have an adverse emotional reaction that negatively impacts their quality of life. The purpose of this qualitative phenomenological study was to explore the influence of training in the martial arts as an intervention in the treatment of interpersonal trauma. The biopsychosocial model provided the framework for the study. The research questions addressed the effects of training in the martial arts and the biological, psychological, and social functioning of individuals who had sustained a form of interpersonal trauma. Data were collected from semistructured interviews with 9 participants. Data were analyzed using Moustakas's modified van Kamm method. Findings indicated that martial arts training was transformative and positive for participants. Benefits included mentorship, a sense of achievement, increased confidence, better parenting, and recovery from substance abuse. Findings may be used to promote martial arts training as a treatment intervention for people who have experienced interpersonal trauma.

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Dedication

I dedicate this dissertation and completion of my work to my beautiful and amazing wife, Nora Vargas, who supported me throughout the journey of my life. I also dedicate this dissertation to my amazing kids, Merrick and Ayden Vargas, for their patience, understanding, and constant support despite their age. Lastly, I dedicate this work to my amazing mother, Guadalupe Vargas, who despite being a single parent never gave up on me. Thank you for always believing in me and pushing me to achieve my fullest potential.

Acknowledgments

First and foremost, I would like to thank God for giving me the strength, courage, and guidance throughout this difficult and strenuous journey, and for allowing me to believe in myself and overcome obstacles, challenges, and doubt faced during this journey.

I would like to acknowledge my dissertation committee chair, Dr. Carolyn A. Davis, and second committee member, Dr. Michael Johnson, for their continuous support, guidance, and motivation. Thank you both for your time and patience that helped me produce quality scholarly work.

I would like to acknowledge my martial arts instructor, Sifu J. R. Diaz, from Double Dragon Kenpo Karate in Sanger, CA. He has always been more than an instructor; he has been my friend, mentor, and supporter throughout this journey. He motivated me when I lacked motivation, cheered me up when I was down, and continuously reassured me that I was more than capable of completing this journey when I doubted myself. Thank you for your support, patience, and always being there for me.

I would like to acknowledge my siblings, Adriana Rivera, Rey Vargas, Daniel Vargas, and Lucero Vargas, for their continuous support and patience throughout this journey and always being there when I needed an ear to vent.

I would like to acknowledge Dr. Tyson D. Bailey who provided me with guidance and help with completing this project. His research was an inspiration to completing my dissertation.

I would like to acknowledge my father, Reynaldo Vargas, whom unbeknownst to him contributed to my success and who I have become.

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Chapter 1: Introduction to the Study

Interpersonal trauma is an individual's unique experience of a traumatic event caused by another person that leaves a survivor feeling overwhelmed, helpless, and believing that trauma is unavoidable (Vandenberg & Wamser-Nanney, 2013). The effects of interpersonal trauma can be more destructive when they are due to intentional actions committed toward the victim that compromise the victim's views regarding safety, intimacy, and trustworthiness (Vandenberg & Wamser-Nanney, 2013). Interpersonal trauma has been associated with an increased risk of developing other psychiatric disorders such as post-traumatic stress disorder (PTSD), depression, substance use, and psychosomatic symptoms (Allard & Gobin, 2016; Heeren, Liebschutz, McCall-Hosenfeld, & Winter, 2014). This qualitative phenomenological study addressed the effectiveness of training in the martial arts as an intervention in the treatment of interpersonal trauma through analysis of the lived experiences of martial artists who had sustained a traumatic event prior to commencing their training in the martial arts.

In an era of evidence-based approaches, there is a scarcity of research on the effects of martial arts training and its relationship with mental health after a traumatic event (Dardis & Gidycz, 2014; Tapanya, 2015). Although there is no single approach to the treatment of interpersonal trauma, the most commonly used interventions consist of psychotherapy and pharmacotherapy; however, despite their effectiveness, these interventions alone are not sufficient for the treatment of interpersonal trauma (Dardis & Gidycz, 2014; Tapanya, 2015). Other practices such yoga, mindfulness, dance therapy, art therapy, and psychodrama have been demonstrated to be beneficial to a person's

physiological and psychological well-being (Benson et al., 2014; Weiser, Kutz, Kutz, & Weiser, 1995). These holistic and unconventional approaches to therapy have proven to be effective in alleviating symptoms subsequent to interpersonal trauma (Benson et al., 2014; Weiser et al., 1995). The identification of common experiences among martial artists who are trauma survivors could be valuable in identifying alternative holistic interventions for the treatment of interpersonal trauma and other mental health disorders. This chapter provides a background of the study; the problem statement; the purpose of the study; the research questions; the theoretical framework for the study; the nature of the study; definitions of important terms; statements regarding the assumptions, scope and delimitations, limitations, significance of the study; and a summary.

Background

The symptoms of interpersonal trauma result from dysregulation of the systems that organize reflexive survival behaviors as a result of intense fear, horror, and helplessness (Nemeroff & Sherin, 2011). This disruption produces an emotional dysregulation that increases symptoms associated with anxiety, depression, substance use, and PTSD (Ford, 2013; McDevitt-Murphy & Tripp, 2015). Baranowsky and Gentry (2015) cited the establishment of safety and stabilization as major components of healing from a traumatic experience/event. This approach empowers and encourages trauma survivors to gain control of their emotions and behaviors and develop trusting relationships (Baranowsky & Gentry, 2015).

Through controlled breathing exercises, martial arts training provides the necessary skills needed to regulate mood, concentration, and self-awareness, thereby

providing a physiological, psychological, and social benefit for individuals who have experienced interpersonal trauma (Anderson & Hernandez, 2015). Other benefits of training in the martial arts that contribute to the healing of trauma include increased attention, focus, self-esteem, discipline, and physical fitness (Benson et al., 2014). Benson et al. (2014) claimed that the healing process for trauma survivors consists of physical and psychological components and is achieved through the mind-body connection that can occur through training in the martial arts. Martial arts training promotes safety and stabilization as part of the philosophy of training that allows students to build trust and establish positive relationships with their instructors and other students.

The current study addressed a gap in research on the healing aspects of martial arts in cases of interpersonal trauma and expanded on related research conducted by Bailey (2011) by focusing on a diverse population in terms of gender, ethnicity, and age. The study's aim was to include a diverse sample of participants with regard to styles of martial arts, demographics, and forms of interpersonal trauma. According to Conway, Dalgleish, Jobson, Moradi, and Rahimi-Movaghar (2014), culture influences the autobiographical memory of a traumatic event based on a person's social orientation, beliefs, and values. Autobiographical memory is a person's understanding of a remembered traumatic event, a process that can be disrupted in individuals who have witness or sustained trauma (Conway et al., 2014). Bailey's study was the first to address the involvement of martial arts after interpersonal trauma, and further research was needed to substantiate the possible benefits of training in the martial arts and the process of healing interpersonal trauma (Bailey, 2011; Dardis & Gidycz, 2014; Tapanya, 2015).

Problem Statement

People who experience a traumatic event have an adverse emotional reaction that negatively impacts their quality of life (D'Andrea & Minshew, 2015). Approximately 43.8 million (18.5%) of adults in the United States reported a form of mental health problems costing an estimated \$193.2 billion in loss of earnings per year due to absence from work (National Alliance on Mental Health [NAMI], 2017). The Substance Abuse and Mental Health Services Administration (SAMHSA, 2017) shared similar statistics and reported that traumatic experiences have become a problem among adults and children in the United States. SAMHSA (2017) further explained the public concern of the effects of trauma as being not only harmful but costly with no boundaries on whom it effects in regard to age, gender, socioeconomic status, race, ethnicity, and sexual orientation. Additionally, Mental Health America (MHA, 2018) reported that approximately 56% of Americans also face a lack of access to care in treatment of mental illness.

Treatment of trauma consists of evidence-based approaches typically limited to psychotherapy and pharmacotherapy; however, these interventions may not suffice in the healing of trauma (Dardis & Gidycz, 2014; Tapanya, 2015). Due to the prevalence of mental health problems in the United States, alternative interventions are needed to promote a positive effect on mental health (Dardis & Gidycz, 2014; Tapanya, 2015). Researchers have found that recreational activities with an emphasis on meditative practices promote positive physiological and psychological well-being (Benson et al., 2014). Despite the need for alternative interventions, researchers had not addressed the

effects of training in the martial arts and its influence on positive mental health for a person who has suffered a traumatic event (Dardis & Gidycz, 2014; Tapanya, 2015).

Purpose of the Study

The purpose of this qualitative phenomenological study was to examine the lived experiences of martial artists after a traumatic event. As part of the selection criteria, training in the martial arts must have commenced after the traumatic event. The goal was to explore whether training in the martial arts provided an effective intervention in the treatment of interpersonal trauma. Additionally, this study was intended to fill a gap in research by including participants from a diverse population in terms of gender, age, ethnicity, and form of interpersonal trauma. I explored how the mind-body connection provided by training in the martial arts has helped or hindered the recovery from interpersonal trauma. I also explored individuals' perceptions of the role of martial arts as a therapeutic intervention based on their personal experiences. For the purpose of this study, I used Sanderson's (2009) definition of *interpersonal trauma*, which states that this type of trauma "overwhelms ordinary human adaptation to life as it threatens bodily and psychological integrity" (p. 38). Interpersonal trauma is an event that causes helplessness, terror, and powerlessness and produces feelings of fear, loss of control, and threats of great bodily harm and/or death (Sanderson, 2009).

Research Questions

The purpose of this study was to provide a better understanding of the effects of training in the martial arts and participants' mental health after sustaining a form of interpersonal trauma. With permission (T. D. Bailey, personal communication, January

12, 2016), I modified Bailey's (2011) original research questions to fit the current study and to elicit rich responses from participants. Among the research questions (RQs), RQ6 was the primary focus of the study; however, to address RQ6 thoroughly, RQ1 through RQ5 had to be included.

1. RQ1: What is each participant's reason(s) for choosing to become involved in the martial arts? What was the reason(s) to continue training in the martial arts?
2. RQ2: What is each participant's subjective understanding of the meaning of martial arts in his or her life? How has this understanding changed over time?
3. RQ3: What have participants noticed about the effects of physical training and movement and how has this influenced them?
4. RQ4: What aspects of participants' lives have been in affected by their martial arts training?
5. RQ5: What similarities have the participants noticed between therapy and martial arts? What effect, if any, have these similarities and differences had on participants' understanding of their traumatic experience?
6. RQ6: What is each participant's overall experience with training in the martial arts?

Theoretical Framework

The theoretical framework for this study was the biopsychosocial model. This model includes three levels of human functioning—biological, psychological, and social—that play an important role when addressing an illness or disease (Engle, 1980;

Ghaemi, 2009; Henningsen, 2015). This model was used to (a) gain a better understanding of how interpersonal trauma extends from the function of the body; (b) focus on self-control, emotional functioning, and thought processing; and (c) determine the influence of social factors (see Borrell-Carrio, Epstein, & Suchman, 2004; Henningsen, 2015). The biopsychosocial model was suitable for understanding the relationship between training in the martial arts and its effects on the healing of interpersonal trauma. Additionally, this model allowed for a better understanding of the mind-body connection as it relates to training in the martial arts and positive mental health, and the biological, psychological, and social components of martial arts related to healing from trauma.

Nature of the Study

I used the qualitative phenomenological approach consisting of semistructured face-to-face interviews. In the scientific community, validation of qualitative research began with the foundation of phenomenology (Sousa, 2014). Using the phenomenological approach, researchers seek to identify and describe a subjective experience of participants by exploring everyday experiences from the participants' point of view (Yin, 2016). I used a demographic questionnaire and interviews with active martial artists to explore the effects of training in the martial arts after an individual had sustained a form of interpersonal trauma. The demographic questionnaire was used to assist in the selection of participants and to provide data on the demographics of participants who met the selection criteria for this study. The interview protocol included in-depth, open-ended questions designed to gain a better understanding of the

participants' experience in the martial arts and its effects on recovering from interpersonal trauma. A qualitative, phenomenological analysis of the data was used to identify potential benefits of training in the martial arts after a traumatic event.

Once all interviews were conducted and transcribed, the transcripts were exported to Nvivo software for the analysis of data. The data analysis plan was based on a modification of the van Kaam method of phenomenological data analysis (Moustakas, 1994). This method consists of the following steps: (a) listing and grouping of experiences, (b) reduction and elimination of irrelevant expressions to determine invariant constituents and themes, (c) clustering of experiences, (d) final identification of the invariant constituents and themes, (e) individual textural description of the experience, (f) individual structural description of the experience, (g) textural-structural description of the experience, and (h) composite description of the experience (Moustakas, 1994).

Definitions

Biopsychosocial model: A philosophy of and guide to clinical care that addresses the biological, psychological, and social components of a disease or illnesses (Borrell-Carrio et al., 2004; Henningsen, 2015).

Coping self-efficacy (CSE): The perceived ability to cope with demands after trauma as an important factor in psychological recovery following a traumatic event (Bosmans & van der Velden, 2016).

Interpersonal trauma: An event or experience that “overwhelms ordinary human adaptation to life as it threatens bodily and psychological integrity” and produces feelings

of helplessness, terror, powerlessness, fear, loss of control and threats of great bodily harm and/or death (Sanderson, 2009, p. 38).

Kata: A method of training in martial arts that involves a dance-like sequence composed of strikes and blocks (Nosanchuk & MacNeil, 1989).

Modern martial arts: An integration of a variety of techniques from different types of traditional martial arts including boxing and wrestling (Angleman, Russo, Shinzato, & Van Hasselt, 2009).

Post-traumatic stress disorder (PTSD): An accumulation of symptoms that develop following exposure to trauma and consist of reexperiencing, avoidance, and hyperarousal (Badour et al., 2016).

Qi (chi): Internal life-energy flow that runs through the meridian vessels; health is linked to the balance of Qi (Chen et al., 2016).

Traditional martial arts: Self-defense systems of codified practices and trainings designed for combat (Angleman et al., 2009).

Traumatic event: An incident such as war, natural disaster, human-made disaster, accident, rape, sexual assault, child abuse, kidnapping, or other violent crime (Nelson, 2011).

Tri-phasic model: A treatment approach designed to focus on three stages of trauma recovery: safety and stabilization, remembrance and mourning, and reconnection (Baranowsky & Gentry, 2015).

Assumptions

This study included a few key assumptions pertaining to the participants who met the selection criteria. First, participants were recruited and selected from towns and cities in the Central Valley of California. Based on the known demographics of this area, I assumed that the Central Valley would allow for recruitment of a diverse pool of participants in terms of gender, age, and ethnicity. Second, I assumed that participants would have a sincere interest in participating in this study and would not do so for any other motive or personal gain. Third, I assumed that all participants were active martial arts practitioners and that their martial arts training began after a traumatic event. Fourth, I assumed that participants would be honest and forthcoming about their experiences and when they started training in the martial arts. Lastly, I assumed that during the interview participants would answer all questions thoroughly, honestly, and to the best of their ability in relation to their personal experience with a traumatic event and their experience in the martial arts. These assumptions were necessary to ensure that data were accurate and reliable.

Scope and Delimitations

This qualitative phenomenological study focused on active martial arts practitioners who started training in the martial arts after a traumatic event. Only active practitioners in martial arts were recruited. The study also focused on a diverse population of participants to identify any effects of training in the martial arts after a traumatic event. Participant selection was limited to the state of California, specifically the Central Valley.

Selection criteria did not include a clinical diagnosis of PTSD. This study was limited to active martial arts practitioners. I did not consider experiences of those who are no longer actively training in the martial arts. Also, I did not focus on the rank that participants had achieved in martial arts but rather on their experience of training to identify any potential benefits of training in the martial arts related to healing from trauma. Future researchers may determine the practicability of transferability of findings to other populations or settings.

Limitations

The primary limitation of this study was its focus on (a) participants who are active practitioners in a form of martial arts and who started training after sustaining a traumatic event. This study also focused on participants' subjective experience of their traumatic event and how martial arts had influenced the healing process. Participants' experiences may not be an accurate representation of the overall trauma population and/or the different styles of martial arts; however, generalization of findings was not a goal in this study. In addition, participants were not required to provide a full disclosure or detailed description of their traumatic event as this was not considered an essential factor to understanding the effects of martial arts training on their well-being. I did not require participants to have a specific length of training or frequency of training but rather an active practice in martial arts with at least 6 months of training. Experience and self-efficacy of the martial arts instructor could have influenced the perceived effect of martial arts among the sample population; however, this factor was not considered in this

study. Lastly, my interest and training in the martial arts may have influenced my interpretation of the data regarding the potential benefits of training in the martial arts.

To mitigate limitations and researcher bias, I relied on the perceptions and experiences of all participants as reported. The interviews from the digital voice recorders were transcribed verbatim and e-mailed to participants for verification. Transcripts were read and reread to ensure accuracy of data, and continuous self-reflection was used to mitigate any personal bias.

Significance

This study addressed a gap in the literature regarding the influence of training in the martial arts on healing from interpersonal trauma. The findings were intended to reveal the psychological effects of training in the martial arts after a traumatic event among a diverse population in terms of gender, ethnicity, and age. According to Conway et al. (2014), culture influences the autobiographical remembering of a traumatic event based on a person's social orientation, beliefs, and values. Other than Bailey's (2011) study, there was no prior research identified that addressed the psychological effects of martial arts training after sustaining a form of interpersonal trauma and the possible influence of such training on healing from interpersonal trauma.

All forms of interpersonal trauma were considered in this study, which differs from Bailey's (2011) study in which only physical, sexual, and verbal accounts were considered in a sample of six White and one Hispanic participant. I also aimed to expand on a prior study by focusing on a variety of styles of martial arts and extending the geographical location of participants to promote greater diversity in the sample. Findings

may provide a more comprehensive understanding of the effects of training in the martial arts among a diverse population subsequent to a traumatic event. Through focus on a more diverse population and all forms of interpersonal trauma, findings may offer further support for Bailey's findings or indicate potential differences within the chosen participant pool.

Findings may be used to support the provision of alternative and/or combined treatment methods to help those who have sustained a form of interpersonal trauma and to create possibilities for further research on alternative intervention methods for positive mental health. Additionally, findings may be used to facilitate collaboration between the mental health community and martial arts instructors to develop classes or programs that may benefit individuals based on their mental health needs. Additionally, because of the stigma of mental health, results may provide alternative means of seeking treatment through more holistic interventions that may provide safety and stabilization in the healing from trauma.

Summary

This chapter provided an overview of the study's purpose to assess the potential benefits of training in the martial arts among individuals who had sustained a form of interpersonal trauma. This chapter addressed the lack of research related to the effects of training in the martial arts after a traumatic event and the need for additional research to improve understanding of the influence of training in the martial arts on positive mental health. The research questions were designed to address the effects of training in the martial arts and its influence on the healing from trauma. Chapter 2 provides a review of

relevant literature on interpersonal trauma and martial arts and the theoretical framework used in the study.

Chapter 2: Literature Review

Many who experience a traumatic event have an adverse emotional reaction that negatively impacts their quality of life (D'Andrea & Minshew, 2015). The prevalence of mental health problems among adults in the United States is approximately 43.8 million (18.5%) each year (NAMI, 2017). Absence from work due to mental health issues is estimated to cost Americans approximately \$193.2 billion in lost earnings per year and has a negative impact on their quality of life (NAMI, 2017). The purpose of this study was to explore whether training in the martial arts can be used as an effective intervention in the treatment of interpersonal trauma.

In an era of evidence-based approaches to mental health care, there was a scarcity of research on the effects of martial arts training and its relationship with mental health after a traumatic event (Dardis & Gidycz, 2014; Tapanya, 2015). Additionally, like training in the martial arts, other holistic interventions such as dance therapy, art therapy, psychodrama, yoga, and meditation have been demonstrated to have a positive influence on the therapeutic process by providing active and physical paths for discovery and expressions of emotions (Aindow, 2013; Weiser et al., 1995).

This literature review shares how the literature search was conducted and the results thereof. Following identification of the literature search strategy, this chapter presents a review of the study's theoretical foundation. Then, key variables related to the study are reviewed. Lastly, Chapter 2 presents a summary and conclusions section.

Literature Search Strategy

To complete the literature search, I used the Walden University online database and other databases. An extensive search was conducted using the following databases: PsycARTICLES, PsycINFO, and EBSCOhost. I also used the Google Scholar search engine. The following search terms were used to search these databases: *martial arts, self-defense, battle fatigue, biopsychosocial, tri-phasic model, combat exhaustion, combat fatigue, DSM-III-R, DSM-IV-TR, DSM-5, effects of trauma, efficacy vs. effectiveness, emotions and health, evolution of trauma, history of trauma, interpersonal trauma, PTSD, mind-body connection, mental health and martial arts, mindfulness, mood, physiological effects of trauma and martial arts, psychological effects of martial arts and trauma, psychotherapy and trauma, psychotherapy and martial arts, relationships and trauma, relationships and martial arts, body movement and trauma, body movement and martial arts, social interactions and trauma, and social interactions and martial arts*. These were terms relevant to the research problem and research questions for this study.

The focus of this literature search was on attaining a better understanding of the effects of interpersonal trauma and the effects and therapeutic nature of training in the martial arts. This literature search was meant to provide an understanding of the effects of training in the martial arts with individuals who have sustained a form of interpersonal trauma. During the search of the literature, I found a lack of research pertaining to the effects of training in the martial arts and their influence on interpersonal trauma

symptomology. Additionally, no research was found that demonstrated the positive or negative effects of training in the martial arts after a traumatic event.

The literature review includes works published in the past 5 years; however, given the lack of research in the martial arts, older peer-reviewed articles and books are discussed to expand on this topic. Additionally, older articles and books are also reviewed to address the following topics: the theoretical foundation of the study, therapeutic models addressing trauma, and martial arts as a holistic approach to the treatment of interpersonal trauma.

Theoretical Foundation

The theoretical foundation for this study was the biopsychosocial model. This model was developed by Engel (1980) and derives from the biomedical model as a result of Engel's assertion that clinicians should address the biological, psychological, and social components of an illness. This model was a shift from the biomedical model, which focused on biological factors and excluded the psychological and social components that Engel argued were essential for a better understanding of an illness or disorder (Engel, 1980). Engel further explored the body-mind connection and argued that the psychological influence in the healthy functioning of the body is just as important as the physiological. Engel's model also takes into account a patient's subjective experience as it relates to an illness or disorder and the influence this factor may have on scientific studies (Borrell-Carrio et al., 2004; Henningsen, 2015). One of Engel's objectives was to empower patients and humanize the medical profession through the means of empathy and compassion (Borrell-Carrio et al., 2004; Henningsen, 2015).

Understanding another human being is a complex process, and in this effort, practitioners often require a great deal of information regarding an individual's biological makeup and psychological and social life. Human beings continuously and unconsciously participate in and reenact unconscious dynamics involving trauma, power, and powerlessness based on psychological and social factors (Berzoff, 2011). According to Ford (2013), PTSD continues to be viewed as a disorder of threat-related emotion dysregulation with biopsychosocial features that include and extend far beyond anxiety and irritability. The biopsychosocial model appears to be the most suitable in the study of trauma-related disorders (Hasto, Hruby, Travel, & Vojtova, 2013). This approach takes account of positive experiences with relationships prior to trauma that increase resilience and availability of empathetic relationships, influencing development of the disorder and its therapy (Hasto et al., 2013). I used this model to address the biological, psychological, and social components of training in the martial arts to understand any potential contributions regarding the healing from trauma.

Literature Review

The following sections provide a review of relevant literature including research related to the study constructs and scope of the study. This literature review provides an overview of studies addressing interpersonal trauma and psychological effects. Additionally, the review provides insight into the effects of training in the martial arts and the healing process after an individual has sustained interpersonal trauma, the role of martial arts training in psychotherapy, and alternative perceptions of the benefits of

training in the martial arts and mental health. This discussion is followed by a summary and conclusion of the findings.

Phenomenon of Interpersonal Trauma

Interpersonal trauma can result from witnessing or experiencing an overwhelming negative event perceived to cause serious bodily harm and/or be life threatening to oneself or others (Nelson, 2011). Traumatic events include war, natural disasters, human-made disasters, accidents, rape, sexual assault, child abuse, kidnapping, and any type of violent crime (Nelson, 2011). The symptoms that commonly result from a traumatic event include nightmares, flashbacks, intrusive thoughts, numbness, disassociation, avoidance, and hyperarousal (Nelson, 2011). Often individuals who have sustained trauma do not realize they have survived the trauma and that they need to process and overcome these traumatic memories to distinguish between perceived and actual threat (Nemeroff & Sherin, 2011). Backholm, Birgegard and Isomaa (2015) found that most individuals are capable of coping with a traumatic event, and symptoms will gradually diminish following the traumatic event. In some cases, the feelings produced by these negative experiences, such as intense fear, horror, and helplessness, can lead to PTSD when there is chronic dysregulation of the systems that organize reflexive survival behaviors, resulting in functional impairment and inability to perceive actual threat (Nemeroff & Sherin, 2011). Schnurr and Wolf (2016) reported that only a minority of individuals who experience a traumatic event develop PTSD, a finding that is consistent with the idea that PTSD is due to the pathological response to trauma as opposed to the traumatic event or experience itself.

Survivors of Interpersonal Trauma

Interpersonal trauma is a phenomenon that occurs daily with no discrimination of victims based on age, ethnicity, or socioeconomic status. The effects can vary by individual based on prior experiences because there is no uniform response to traumatic events. In a study on intimate partner violence (IPV) one common factor among survivors was self-blame (Lilly, Lim, & Valdez, 2015). The study focused on survivors' shared experience to better understand the negative event and how this was incorporated into their existing world schemas or whether these world schemas were altered to accommodate the negative event (Lilly et al., 2015). According to Fauci, Goodman, and Wilson (2015), 3 out of 10 women and 1 out of 10 men experienced a form of violence by their intimate partner in the United States. IPV is only one form of interpersonal trauma; however, IPV can consist of physical, sexual, emotional, and verbal abuse. Other researchers have used a qualitative analysis to better understand personal lived experiences and effects of a traumatic events in trauma survivors (Curtis, Foster, McCloughen, & Ogilvie, 2012). D'Andrea and Minshew (2015) found that symptomology for individuals who have experienced a single traumatic event is similar to survivors of chronic interpersonal trauma. Furthermore, D'Andrea and Minshew found that how an individual reacts to the traumatic event was determined by self-regulation and interpersonal functioning. Not all interpersonal trauma leads to a diagnosis of PTSD (D'Andrea & Minshew, 2015). Additionally, understanding the psychological impact of interpersonal trauma is a key component to identifying more holistic approaches in the treatment of trauma survivors.

Therapeutic Models Addressing Trauma

Although there are many effective therapeutic approaches and techniques available for survivors of interpersonal trauma, the client's needs ultimately determine which approach will be the most effective toward recovery (Bosmans & van der Velden, 2016). Other factors to consider when identifying the appropriate interventions are the individual's cultural and social background, the extent of the trauma, and the individual's current coping mechanisms including both psychological and biological components. These factors may influence the progress toward recovery (Bosmans & van der Velden, 2016). According to Bosmans and van der Velden (2016), coping self-efficacy (CSE), defined as the perceived ability to cope with the demands of trauma, was identified as an important aspect of psychological recovery after trauma and is a crucial factor to consider when selecting an appropriate treatment approach. Bosmans and van der Velden claimed that individuals with higher CSE levels demonstrated lower levels of distress and post-traumatic stress symptoms in cross-sectional and longitudinal studies.

Tri-Phasic Model: A Treatment Approach Toward Healing

The tri-phasic model was developed by Herman and has been recognized as an effective treatment approach focusing on three stages of trauma recovery: safety and stabilization, remembrance and mourning, and reconnection (Baranowsky & Gentry, 2015). This model focuses on establishing safety as a primary step toward recovery. In a case study involving a victim of a violent in-home assault, Gentry (1998) found that the tri-phasic approach successfully addressed the traumatic experience in eight sessions of psychotherapy. Validation of a traumatic experience and empowering victims of trauma

to manage their emotions and behaviors and to develop trusting relationships is a positive step toward recovery (Baranowsky & Gentry, 2015). Herman (1997) stated,

The core experiences of psychological trauma are disempowerment and disconnection from others. Recovery, therefore, is based upon the empowerment of the survivor and the creation of new connections. Recovery can take place only within the context of relationships; it cannot occur in isolation. (p. 133)

Developing those connections or relationships can allow survivors to shift their perceptions from unpredictable danger to reliable safety (Baranowky & Gentry, 2015).

Stage 1: Safety and stabilization. Stage 1 of the tri-phasic model of recovery allows trauma survivors to practice self-soothing and self-care skills to increase behavioral and emotional stability prior to working through the trauma (Baranowsky & Gentry, 2015). Rappaport (2010) claimed that a strong emphasis is placed on assisting clients to restore contact with reality and with their feelings as well as communication with others. These are factors essential to building and establishing a therapeutic alliance between the client and clinician prior to the beginning of the trauma treatment. Dass-Brailsford (2007) noted that disclosure of the client's diagnosis and treatment plans early in treatment can empower the client to be involved and have control in the therapeutic setting. To assist the client in regaining control and reducing anxiety and hyperarousal, psychopharmacology may be used to promote a sense of safety and stabilization (Dass-Brailsford, 2007).

Stage 2: Remembrance and mourning. The second stage of recovery focuses on safely working through the trauma by processing the trauma history and resolution of

traumatic memories to help make sense and develop a better understanding of the traumatic experience (Baranowsky & Gentry, 2015); however, even when the client is ready to proceed to this stage, safety is still a concern that must be revisited and negotiated with the client. Dass-Brailsford (2007) claimed this phase of recovery allows clients to tell their full story at their own pace with the clinician standing by as the witness and ally to their traumatic experience. Dass-Brailsford (2007) cautioned that although it is important that clients process their traumatic memories in order to progress in therapy, moving too quickly can overwhelm and compromise a client's safety. Throughout this phase the client is expected to mourn and learn to accept the mourning is part of the healing process as well as an act of courage rather than defeat or weakness (Dass-Brailsford, 2007).

Stage 3: Reconnection. The final stage in the tri-phasic recovery process focuses on trauma survivors' reconnection with their bodies by redefining themselves once they have attained closure regarding their traumatic experiences (Baranowsky & Gentry, 2015). The focus then shifts to present concerns, previously disrupted by the traumatic experience in order to help clients transition back into everyday life. Baranowsky and Gentry (2015) found that clients reach this level of recovery once they are able to distinguish that their negative and/or traumatic experiences do not determine who they are. At this point, a client now faces the task of building a future and developing a new self without the old self that the trauma destroyed (Herman, 1997).

Martial Arts Training: An Alternative Treatment for Interpersonal Trauma

Training in the martial arts comprises training methods similar to role play, in which practitioners practice self-defense techniques within a controlled training environment that offers the opportunity to be both an aggressor and defender. For example, Fonagy, Sacco, and Twemlow (2008), found that role play in martial arts allows an individual to process negativity in a nondestructive way while also reinforcing a secure attachment experience with human relationships. These authors further explained that from a psychoanalytical perspective, training in the martial arts provides a “corrective emotional experience that assist in embodiment through attachment of a safe, powerful, and predictable role model.” Like Herman’s model of stages of trauma recovery, martial arts training focuses on safety, personal development, and enhancement of cognitive skills (Fonagy et al., 2008). Fonagy’s et al. (2008) findings correlate with those by Anderson and Hernandez (2015); which identified that through training, martial artists not only begin to feel safer but are also able to experience a reenactment of violent events with the understanding and feeling that they are no longer helpless.

Training in the martial arts not only provides self-defense skills but it also promotes physical fitness, self-discipline, respect, improves self-esteem and helps regulate breathing (Bell, 2008). Bell (2008) claimed that martial artists utilize breathing exercises as a form of meditation, which he found has proven to reduce aggression and fear and improve concentration. Bell further explained that the mind is an emotional state and the expression of one’s emotional state is observed through breathing patterns, which he described as the following: deep sighing respiration (depression), shallow panting

(panic), breath holding (concentration), irregular breathing (distress), and short quick inspiration (surprise). Through training in the martial arts, students learn to regulate their breathing allowing them to control their thoughts, emotions, and behaviors (Bell, 2008). Just like in martial arts, breathing exercises are also a component of psychotherapy which teach one how control their emotions and attain a state of relaxation—all important elements in the treatment of interpersonal trauma and mind-body connection (Bell, 2008).

Integration of Martial Arts in Psychotherapy

According to Weiser et al. (1995) and Aindow (2013), similar to dance therapy, art therapy, psychodrama, and meditation, martial arts training has also been found to have a positive influence on and enhance the therapeutic process by providing active and physical paths for discovery and expressions of emotions. Weiser et al. (1995), further explained that the teachings and values of martial arts promote assertiveness, empathy, courage, humility, responsibility, effective communication, gentleness, respect for self and others, and continuous self-improvement. Most of these qualities are essential to continuous improvement in the therapeutic setting as well as the personal growth of both the clinician and the client. Additionally, studies have also found that both martial art practitioners and psychotherapy clients share similarities in that both learn how to understand and address their own and resistance of others, understand and manage evasion and confrontation, and cope with aggression and vulnerabilities; all important elements in the treatment of interpersonal trauma (Weiser et al., 1995).

In another study, Lantz (2002) found that aikido, karate, and taekwondo produced and enhanced positive family development for both couples and families participating in

marital or family therapy. These findings were consistent with those of La Torre's (2008); which identify martial arts to be a valuable resource to be used within a clinical setting or as a referral for those clients who may benefit from training in the martial arts. Fonagy et al. (2008) reported that the martial arts experience has demonstrated to increase a client's ability to explore their feelings and emotions more productively during their psychotherapy sessions. Additionally, Fonagy et al., 2008 identified that an integration of psychodynamic therapy and movement into physically oriented therapies such as yoga and martial arts are more likely to reach aggressive individuals.

In other studies, aikido demonstrated a mind-body unification which provides physical and psychological healing allowing a practitioner to be centered during training, an equivalent to being present during therapy (Faggianelli & Lukoff, 2006). In an earlier study, Martin (2004) found similar findings as those of Faggianelli and Lukoff (2006) in which training in aikido and its focus on dealing with conflict, peaceful resolution, and philosophy was found to be helpful in keeping therapists grounded, centered, and connected with themselves while also being sensitive and aware of the client. Faggianelli and Lukoff (2006) noted that a therapist must be completely in the situation—in body, emotions, relating thoughts, and every way. Faggianelli and Lukoff (2006) also claimed that that being present is the equivalent to being centered in aikido and compared this to Rollo May's "total relationship," Carl Rogers "being present," and Freud's "evenly suspended attention," all essential fundamentals of psychotherapy. Additionally, Hoyt and Lakes (2004) proclaimed that training in the martial arts is similar to psychotherapy in that it teaches self-awareness and promotes character growth through evaluation of

one's thoughts and actions, resulting in a healthier quality of life. While there is a lack of research on the influence of martial arts and psychotherapy; these findings support positive effects of training in the martial arts and its integration in the therapeutic setting when addressing symptoms of interpersonal trauma.

Understanding the Impact and Healing of Interpersonal Trauma

Understanding interpersonal trauma helps us identify the disorder and also allows for a more effective treatment approach in addressing symptomology and severity of symptoms. In addition, understanding the physiological, psychological, and social effects of interpersonal trauma provides a better understanding of the impact on day-to-day functioning and interpersonal relationships. This is a crucial aspect of seeking out appropriate treatment and establishing a social support group to minimize the long-lasting effects of interpersonal trauma (Andersen et al., 2013). Researchers found a direct influence between childhood trauma and an increased risk of difficulties in adulthood among the following six domains: affective, somatic, substance abuse, memory, sexual and aggression (Andersen et al., 2013). In efforts to better understand the influence of martial arts and the treatment of interpersonal trauma, the effects of training in the martial arts will be further explored to identify if training in the martial arts can be used as a holistic approach in the treatment of interpersonal trauma.

Physiological effects of interpersonal trauma. The physiological symptoms of interpersonal trauma consist of severe and persistent symptoms of somatic distress, panic attacks, states of hyper-reactivity, and dysphoric mood (Hinton & Kirmayer, 2013). These symptoms are often followed by headaches, fatigue, difficulties with sleep and

concentration, being easily startled, and muscle tension and pain (Hinton & Kirmayer, 2013). Music (2015) argued that when one feels anxious or threatened, one's sympathetic nervous system activates a flight, fight, and/or freeze response, triggering an increase in heart rate, sweating, increased breathing, dilation of pupils, inhibition of digestion, and an increase of vigilance and lack of trust, due to the sensitivity of the sympathetic nervous system. Furthermore, the systems that organize reflexive survival behaviors following exposure to perceive threat can become dysregulated, leading to a functional impairment, psychological traumatization, and eventually PTSD, when symptoms are persistent (Nemeroff & Sherin, 2011).

Martial arts involvement. The involvement of martial arts and its benefits extend far beyond self-defense, as many physiological benefits accrue from training in the martial arts that can aid in the healing of interpersonal trauma. Tai chi and other styles of martial arts, for example, have demonstrated to improve balance, sleep, musculoskeletal and cardiorespiratory health, immune response, cognitive functioning, self-care and reduction of stress (Cao et al., 2011; Chen et al., 2016). Additionally, researchers found that elements within martial arts are similar to those in dance arts and healing arts which produce a reduction in somatic symptoms such as fatigue in individuals who suffer from depression and anxiety (Cammarata et al., 2012; Jones et al., 2014). In other studies, training in the martial arts was identified to develop self-awareness of physical movement, controlled breathing, and concentration, which helps one overcome emotions produced by a traumatic event such as fear and anger allowing one to remain calm under stressful situations and respond appropriately (Anderson & Hernandez, 2015).

Furthermore, training in the martial arts provides an expanded selection of skills that have demonstrated flexibility in allowing a martial artist to adjust behavior in response to an opponent and/or aggressor's response as well as other environmental variables (Berg, Harding, Lee, Rick, & Wacker, 2004).

Healing the body. Researchers found that through training in the martial arts an individual can achieve self-mastery and self-regulation along with motor and mental regulation, and eventually inner harmony (Greydanus & Palermo, 2011). Although there are many styles of martial arts, *tai chi*, also known as *tai chi chuan*, is one of many that utilizes slow graceful movements to improve the flow of internal energy, also known as the *Qi* (chi) (Cao et al., 2011). *Qi* is described as life energy that runs through the meridian vessels, and the health of an individual is based on the function of the level and balance of *Qi* (Chen et al., 2016). Gregory (2012) noted that training in the *forms* of tai chi, similar to *katas* in other martial arts, are designed to enable trust of the body and its resources. This ability allows one to enhance one's state of preparedness to maintain safety and respond efficiently to incoming forces (Gregory, 2012). In a qualitative study Badali, Milligan, and Spiroiu (2015) explored the mindfulness component of mixed martial arts (MMA) and self-regulation. Badali's and colleagues' findings correlate with those of Angleman, Russo, Shinzato, and Van Hasselt (2009) which identified a mindfulness element to mixed martial arts (MMA) and an element of calmness, tolerance, acceptance of distress, and self-awareness in traditional martial arts— all of which are likely effective tools in the treatment interpersonal trauma.

Healing through movement. In another study, La Torre (2008) explored the connection of body movement and psychotherapy and found that therapists perceive psychotherapy as a path to being able to find oneself and learning to express that self adequately. This goal is achieved through making the overall therapy experience a more in-depth mind–body experience. La Torre (2008) further explained that in dance therapy, for example, freestyle dance steps through body movement allow a client to contact the unconscious, which may not be verbally assessable; this technique allows the body to come into awareness during movement transitions, eliciting memories, sensations, and feelings. In addition, this mind–body experience has also proven to enhance self-awareness and the ability to express feelings that may be too painful to express verbally (La Torre, 2008). La Torre claimed that through *forms (katas)*, martial arts training also utilizes dance-like movements in a rhythmic and well-controlled manner, which entails a variety of hand movements while bending the knees and shifting weight from side to side, allowing a more in-depth connection with the body, mind, and spirit. This method of training not only allows an individual a way of working out but also a way of working *in*, both physically and emotionally (Jones, Reis, Walsh, & McCaughan, 2014).

Psychological effects of interpersonal trauma. Psychologically, the effects of interpersonal trauma vary based on the individual's subjective experience of a traumatic event as not everyone will react or be traumatized by the same event or even in the same manner. Backholm et al. (2015) identified the psychological symptoms following a traumatic event may consist of flashbacks, nightmares, night terrors, avoidance, negative change in cognition and mood, persistent negative thoughts about self, others and the

world, aggression, self-destruction, and hypervigilance. Capanna et al. (2015) further explained that when individuals believe there is nothing they can do to modify challenging environmental conditions, they may regulate their emotional state through denial, minimization, self-blame, and by seeking meaning in a traumatic experience. Ultimately, the psychological effects of a traumatic event and length of time the symptoms persist are determined by the individual's subjective experience, which is the distinguisher in the development of PTSD (Capanna et al., 2015).

A traumatic event can manifest self-regulatory and emotional difficulties, hindering one's ability to regulate negative emotions therefore establishing an actual or perceived inability to self-regulate (DiMauro, Kashdan, & Renshaw, 2016). Additionally, Bardeen, Lee, Orcutt, and Seligowski (2015) found this can lead into a state of emotional numbing producing an inability to experience both negative and positive emotions. This unhealthy regulation of emotions creates difficulties with concentration/attention, body awareness and results in avoidance by suppressing thoughts and expressive behaviors which are likely to increase and prolong traumatic symptoms (Dick, DiMartino, Mitchell, Niles & Street, 2014). Additionally, other researchers identified that individuals who experience difficulties with emotional regulation and avoid emotional experiences are more likely to engage in alcohol consumption for its perceived affect regulation properties (Radomski & Read, 2016). These findings are supported by researchers McDevitt-Murphy and Tripp (2015) who claimed that higher levels of trauma-related symptoms are associated with emotional dysregulation and excess drinking due to the inability to properly cope and regulate emotions.

In addition to the trademark symptoms of interpersonal trauma, individuals may also present with trauma induced dissociation which may disrupt one's sense of perception, thoughts, feelings, experiences, and memories (Boysan, Ozdemir, Ozdemir, & Yilmaz, 2015). Chambers et al. (2015) reported that this is all part of the ripple effect following a traumatic experience which often produces fear and shame significantly impacting social functioning, interpersonal relationships, and increasing the feelings of being disconnected from self, others and the world. Additionally, Boysan et al. (2015) found trauma-related dissociation to be comorbid with depression, self-mutilation and suicide ideation. Furthermore, trauma-induced dissociation produces a fear of relationships which can lead to attachment anxiety towards relationships known to alter the psychobiological processes regulating affect, attention, consciousness, self-perception, and somatic functioning (Chambers et al., 2015). However, Horn and Maercker (2013) argued that a lack of a social support group is one of the strongest predictors in the development of PTSD.

Martial arts and the mind-body connection. In a study conducted by the National Institutes of Health (NIH) (2008) researchers focused on the mind–body connection and found an important positive influence between emotional, mental, social, spiritual, behavioral factors and overall health. Exercises which focused on the mind-body connection were linked to an improvement in mental health, emotional well-being, and stress reduction (Froeliche, Haskell, Taylor-Piliae, & Waters, 2006). Because martial arts training focuses on the connection between the mind, body, and spirit, it allows for an increase in physical strength, mental clarity, and overall positive energy (Froeliche,

Haskell, Taylor-Piliae, & Waters, 2006). Benson et al. (2014) further elaborated that mind-body interventions such as tai chi have demonstrated a positive effect on psychological well-being when dealing with depression, anxiety, stress management, and exercise self-efficacy—all symptoms associated with interpersonal trauma.

Additionally, other studies supporting the psychological benefits of martial arts have found a connection to reductions in mood disturbance, tension, depression, anger, and confusion (Bouchard, Focht, & Murphey, 2000). While training in the martial arts has demonstrated to alleviate these symptoms, it also improves self-esteem and ameliorates forms of dysphoric mood such as neuroticism, self-awareness, and feelings of vulnerability and control (Bouchard et al., 2000). In another study focused on sexual victimization among women, researchers Ball and Martin (2012) concluded that a mastery of a martial arts intervention program enhanced perceived coping and cognitive control efficacy, decreased perceived vulnerability, and reduced intrusive thoughts and anxiety arousal related to the traumatic events. According to Ball and Martin (2012), after a 12-week intervention program, participants reported improvements with interpersonal relationships, activities, self-defense efficacy, and reduction of fear.

Overcoming fear through self-efficacy. In a traumatic event, fear can be a significant factor in one's ability to move on and overcome the symptoms associated with interpersonal trauma (Ball & Martin, 2012). Training in the martial arts encompasses the development of self-defense skills needed to address negative behavior, emotions, cognition, and environmental factors through self-efficacy (Ball & Martin, 2012). These researchers asserted that an increase in self-defense self-efficacy resulted in an increase in

confidence and reduction in fear associated with sexual victimization among women. Asencio, Merrill and Steiner (2014) further explained that engagement in protective behaviors such as avoiding threatening situations or utilizing self-defense techniques demonstrated a positive response to fear of crime as well as decreased feelings of vulnerability. With greater self-efficacy, individuals are more likely to seek out protective behaviors to protect themselves against victimization (Asencio et al., 2014). Furthermore, these findings linked greater self-efficacy to improved levels of self-esteem, which is also a known positive effect of training in the martial arts (Asencio et al., 2014).

Controlling anger. While anger is also a typical response to stressful situations, a traumatic event can elevate the level of anger to an unhealthy state, producing aggressive behavior towards self or others (Anderson & Hernandez, 2015). In utilizing internal and external techniques to balance the physical and mental aspect of training, training in the martial arts allows individuals to attain a physical workout through a variety of strikes, techniques, and forms while also focusing on breathing and self-control to manage emotions (Anderson & Hernandez, 2015). These researchers claimed that traditional martial arts focused on the psychological, spiritual, and nonaggressive aspects of the art, which have demonstrated to reduce aggressive tendencies among martial artists. These findings correlate with those of Gubbels, Spruit, Stams, and van der Stouwe (2016) who found that training in the martial arts was associated with higher levels of self-esteem, increase of emotional stability, assertiveness, and reduction of anxiety and antisocial behavior—all components in the healing of interpersonal trauma.

Mood instability. Mood is an emotional state which can be affected and influenced by any experience or event throughout the day as well as severe mental illnesses such as by depression, anxiety, personality disorders, and other forms of mental illnesses which cause distress and alter mood (Benson et al., 2014). Benson et al. (2014) reported that achieving a state of relaxation in the body has proven to have a positive effect on attitudes, mood, and self-esteem, which can also minimize irrational thinking and/or distorted thoughts. The mind–body connection in martial arts has demonstrated to have a positive effect on concentration, muscle relaxation, relaxed breathing, and physical balance, resulting in higher adherence and enjoyment (Benson et al., 2014). Additionally, Du et al. (2014) claimed that not only does martial arts provide a method of fitness but its internal focus on training allows for a positive influence in mood, an element in the healing of interpersonal trauma.

A path to mindfulness. The core elements of mindfulness consist of attention and awareness, external events, ethical mindedness, cultivation, and present centeredness (Kazemi & Nilsson, 2016). These components are also incorporated into martial arts training, which is known to help increase awareness, present-focus, tolerance, acceptance of distress, self-understanding, and also induces calmness—elements important in the healing of interpersonal trauma (Badali, Milligan, & Spiroiu, 2015). In other studies, mindfulness demonstrated to be an effective treatment approach for anxiety, depression, chronic pain, and drug abuse, which are symptoms that often derive from a traumatic event (Hakan, Kassab, & Lothes, 2013). As with mindfulness, training in the martial arts changes one’s perspective and provides the serenity needed to develop and enhance a

new method of thinking. Hakan et al. (2013) claimed that the positive psychological effects of martial arts have been linked to a philosophical state of meditation in motion produced the heightened awareness induced through training. These researchers further explained that awareness of one's body is achieved through exercise in martial arts that focus on balance, breathing, and meditation to calm the mind.

Social ramifications of interpersonal trauma. In a study focused on veterans seeking treatment for PTSD and interpersonal trauma, estrangement and isolation were identified as presenting concerns related to the traumatic event (Adler, Rosen, & Tiet, 2013). It is known that survivors of interpersonal trauma may find themselves pulling away from loved ones when they perceive their own reactions to be unpredictable and often seen as a coping mechanism to protect themselves and others (Adler, Rosen, & Tiet, 2013). Creating this distance is often due to shame for their inability to control their own emotional responses and reactions (Adler, Rosen, & Tiet, 2013). Additionally, in a qualitative study, Billings, Evans, and Pistrang (2013) utilized a thematic analysis approach and semistructured interviews to explore supportive and unsupportive social interactions among police officers following a traumatic event. These researchers concluded that individuals who have a support group and come to the realization that they are not alone are less likely to experience shame and self-criticism. In other studies researchers found that a perceived absence of supportive relationships produces a higher risk of developing PTSD, whereas perception of supportive relationships diminishes symptoms associated with anxiety, depression, and PTSD (Daly, Kamholz, Knight, Meyer, & Zimering, 2012; Grills, Littleton, & Mancini, 2016). Furthermore, Grills et al.

(2016) argued that social support groups not only reduce pathological reactions associated with stressful events but also have positive effects on an individual's overall wellbeing.

The challenges that arise following a traumatic event can negatively impact interpersonal relationships, making it very difficult to interact and reside with individuals presenting symptoms of interpersonal trauma (Auerbach et al., 2014). This is mainly because survivors of complex or untreated trauma are likely to develop attachment anxiety and avoidance in which they have a fear of developing close relationships, fear of rejection, constant need for approval, and fear of intimacy, causing them to maintain a physical and emotional distance from others (Auerbach et al., 2014). Beckham (2014) further explained that accepting help and developing a social support group can be a difficult task, specifically when individuals become avoidant, emotionally numbed, detached, and alienate themselves from others. These in addition to anxiety, depression, intrusive memories, hyperarousal and poor cognitive functioning are known symptoms which impair social, family and occupational functioning (Patki, Salim, & Solanki, 2014).

Martial arts and interpersonal communication. While training in the martial arts training provides great physiological and psychological benefits, it also positively affects communication, day-to-day interactions, and self-expression, which are crucial components to trauma recovery (Greydanus & Palermo, 2011). Greydanus and Palermo (2011) claimed that training in karate, a traditional form of martial arts, has proven to stimulate areas of the brain that are important in the development of social cognitive

skills and moral reasoning. These researchers further emphasized that facial expressions, gestures, and emotional aspects of speech, both verbal and nonverbal, are key elements of effective communication and interactions. While training in the martial arts requires verbal communication when interacting with other students and instructors, it also focuses on the nonverbal aspects of communication, through sparring (*kumite*), *katas* (forms), salutations, and self-defense techniques—all forms of self-expression (Greydanus & Palermo, 2011).

Furthermore, martial arts training creates a bond among students and the martial arts instructor. It models positive relationships and appropriate conflict resolution skills not only while training but outside of training as well (Lantz, 2002). In a study conducted, researchers found that couples and families who trained in the martial arts described martial arts as a positive marital and family development activity (Lantz, 2002). The discipline and humbleness that comes from training in the martial arts becomes a form of lifestyle as the skills learned and philosophy of martial arts can be applied to life in general (Lantz, 2002). Additionally, training in the martial arts teaches life skills that are useful at work, school, and interpersonal relationships (Lantz, 2002). Lantz (2002) findings demonstrate great opportunities to develop friendships and improve socialization and community outreach through training in the martial arts. Additionally, students have an opportunity to utilize and develop both verbal and non-verbal communication (Lantz, 2002). As students' progress in ranks, they are also encouraged to instruct class not only to enhance their skills as a martial artist but to

develop leadership skills required to attain the rank of black belt or become a martial arts instructor.

In summary, while there is a lack of research and current qualitative studies on the influence of training in the martial arts and the healing of interpersonal trauma, these findings support the physiological, psychological, and social elements of training in the martial arts which have demonstrated to be a possible aid in the reduction and/or elimination of symptoms associated with interpersonal trauma. These findings demonstrate the possible benefits of training in the martial arts and its integration into psychotherapy and therapeutic settings. However, training in the martial arts has also been controversial due to injuries and violence among martial arts practitioners, specifically in MMA.

Martial Arts: An Alternative Perception

Aside from the benefits research demonstrates of training in the martial arts, there are alternative views of its true effectiveness and promotion of violence. As with many other sports, martial arts are a physical sport in which students may experience physical injuries. These injuries can have a psychological impact depending on the severity of the injury and impact one the individual's lifestyle (McCabe, Schrock, & Vaccaro, 2011). This is a greater concern in the world of MMA in which 2 fighters have passed away as a result of serious brain injuries since 2007 (McCabe, Schrock, & Vaccaro, 2011). Additionally, researchers found that youth training in MMA have been associated with an increase of violence and antisocial behavior (Bautista, Chang, Hishinuma, Nguyen, & Umemoto, 2012). This is partly due to the culture of training of MMA which researchers

found lack teachings in problem solving skills and encouragement to excel in the art of fighting far more in comparison to boxing (Bautista et al., 2012). In another study Theeboom and Vertonghen (2012) found that youngsters who trained in kickboxing and Thai boxing demonstrated higher levels of physical aggression and behavioral problems as oppose to those who trained in *judoka*, *aikidoka*, and *karateka*, more traditional forms of martial arts. While minimal research exists that demonstrates the negative effects of training in the martial arts, additional research is required to identify potential negative effects of training in traditional martial arts as its philosophy to training differs from MMA.

Limitations

Additionally, the research available on the influence of training in the martial arts and interpersonal trauma has demonstrated limitations on diversity of population, sample size, instrumentation, and design. In a prior study, Bailey (2011) conducted a qualitative analysis in which he experienced limitations with access to a diverse population and participants in general within the martial arts community. He further explained the lack of participation was partly due to the trauma exposure requirement which caused many martial arts schools to decline participation in the study. In another qualitative study, Badali et al. (2015) identified a small sample size as another limitation which could negatively impact key processes, outcomes, and ability to triangulate data. Billings et al. (2012) affirmed that limitations of participants lead to smaller sample sizes, apparently a consensus among qualitative studies, specifically when related to trauma and martial arts.

Another limitation was the lack of studies which focused on the adult population, as most studies focus on the effects of martial arts within the youth population.

While research supports the psychological benefits of training in the martial arts, there is a lack of research on the effects of training in the martial arts among trauma survivors within the adult population. Approximately 20 research studies were identified, published in peer reviewed journals and conducted between 2010 to 2017. These studies explored the relationship between training in the martial arts and a traumatic event. This number dropped to 10 research studies, published in peer reviewed journals, when narrowing down the search to the past 5 years. Additionally, only a handful of articles focused on the adult population and all presented limitations with diversity of population, sample size, instrumentation, and design. These limitations were specific to accessibility of a diverse population pertaining to age, gender, and ethnicity. Additionally, most research available pertaining to training in the martial arts is focused on sports exercise science/sports psychology, neurocognitive disorders such as autism spectrum disorder (ASD) and attention deficit hyperactivity disorder (ADHD) and other known hallmark benefits of training in the martial arts such as anger, self-esteem, discipline and respect. These findings support that further research is needed to understand the influence of training in the martial arts as a holistic approach in the treatment of interpersonal trauma and its therapeutic nature within the field of psychology.

Jindani and Khalsa (2015) further claimed that the role of holistic and spiritual affects when addressing treatment of trauma is a significant finding as it encompasses physical, mental, social and spiritual elements towards wellness and recovery. These

researchers further reported that an increased acceptance of integrative therapies has led to an increase demand of holistic interventions in the treatment of trauma. Because symptoms associated with PTSD/interpersonal trauma can generate a disintegration between the body and mind, holistic interventions which focus on the mind-body connection can demonstrate to be an alternative effective intervention in the treatment of interpersonal trauma (Jindani & Khalsa, 2015).

Summary and Conclusions

This chapter provided a review of relevant literature regarding the phenomenon of interpersonal trauma, relevant psychological theories regarding the treatment of trauma, literature regarding the relationship between training in the martial arts and the treatment of symptoms associated to interpersonal trauma, and the alternative perception to training in the martial arts. Although a great deal of research was found on the benefits of martial arts as they pertain to self-esteem, self-efficacy, and regulation of emotions, research was lacking on martial arts serving as an alternative intervention in the treatment of interpersonal trauma symptomology and negative effects of training in the martial arts. As with psychotherapy, today's martial arts' focus is on safety and stabilization of the student by creating a safe and trusting environment where they are able to work through negative experiences or events to relax the body and mind. The purpose of training in the martial arts is to train not only the body but also the mind, through the reenactment of violent scenarios that allows students to familiarize themselves with those situations and develop the ability to react appropriately. In addition, the review of literature on martial arts found that martial arts have the ability to reduce symptoms associated with

individuals who have experienced a traumatic event and also addresses mood instability and neurocognitive disorders, thereby providing a better understanding of the therapeutic role of martial arts in mental health.

There is an abundant of information needed on the therapeutic benefits of training in the martial arts and its influence to the treatment of interpersonal trauma. This study will not only focus on identifying that influence, but it will also fill a gap in prior research by focusing on a more diverse population, increasing the number of participants, expanded geographical area known for diversity, and all forms of interpersonal trauma to represent the overall population. Furthermore, it will aid in identifying an alternative holistic approach to the treatment of interpersonal trauma aside from the more traditional methods such as psychotherapy and psychotropic medications. The following chapter outlines this study's methodology. Included is a detailed description of the research design and procedures used for the selection of participants, interviews, and analysis.

Chapter 3: Research Method

The purpose of this qualitative phenomenological study was to explore whether training in the martial arts can be used as an effective intervention in the treatment of interpersonal trauma. This chapter provides a description of the research design and rationale, role of the researcher, methodology, and issues of trustworthiness. The chapter concludes with a summary.

Research Design and Rationale

This phenomenological inquiry was guided by the following research questions:

1. What is each participant's reason(s) for choosing to become involved in the martial arts? What was the reason(s) to continue training in the martial arts?
2. What is each participant's subjective understanding of the meaning of martial arts in his or her life? How has this understanding changed over time?
3. What have participants noticed about the effects of physical training and movement and how has this influenced them?
4. What aspects of participants' lives have been affected by their martial arts training?
5. What similarities and differences have the participants noticed between therapy and martial arts? What effect, if any, have these similarities and differences had on participants' understanding of their traumatic experience?
6. What is each participant's overall experience with training in the martial arts?

To answer the research questions, I used a qualitative, phenomenological research design. Phenomenological researchers seek to identify and describe an individual's

subjective experience by exploring everyday experiences from the individual's point of view (Yin, 2016). Phenomenological research focuses on the individual's experience to gain an ample description of the reaction to an event or phenomenon (Moustakas, 1994). In the current study, the phenomenological design was used to analyze commonalities among individuals with similar experiences of interpersonal trauma. Phenomenological researchers seek to eliminate any prejudgment or presupposition by exploring individuals' lived experiences without generalizations or insubstantial interpretations and by accepting participants' responses as the truth (Moustakas, 1994).

The qualitative phenomenological design was used to explore the subjective experience of interpersonal trauma among trauma survivors who are currently active practitioners in martial arts. For this study, in-depth face-to-face interviews were conducted with participants to explore their lived experiences of martial artists after sustaining interpersonal trauma prior to their training in the martial arts. The phenomenological design was selected because it was the most appropriate method to explore individuals' lived experience and to analyze the data for meaningful themes. This method allowed participants to tell their stories while also presenting their personal and world schemas regarding their experiences with martial arts training. The goal was to identify the meaning of the shared experiences with martial arts among survivors of interpersonal trauma (see Moustakas, 1994).

Role of the Researcher

My role as the researcher consisted of identifying, recruiting, and interviewing qualified participants and analyzing their interview responses. My role also included

maintaining an appropriate level of professionalism to establish rapport and instill trust and confidence during my interactions with participants and businesses (see Pinsky, 2015). I followed the human relations, privacy and confidentiality, record keeping, and research standards set by the APA code of ethics. An appropriate level of professionalism was maintained throughout the study and interview process. As the researcher, my conduct was crucial to the integrity of this study. To enhance my interviewing skills and elicit rich responses, I read books and scholarly articles focused on effective interviewing techniques and body language. I practiced my interviewing skills through role play and screened the research documents and interview questions with other doctoral students, friends, family members, and professional peers. I focused on techniques designed to create a safe and comfortable environment to elicit detailed responses.

The subjective nature of qualitative phenomenological research places responsibility on the researcher to address and set aside personal biases that may influence or affect the research process (Adams & van Manen, 2017; van Manen, 2017). This was accomplished in the current study by using the reflective method *epoche*. This method is used to promote self-awareness regarding personal biases that could influence the outcome of a study (Adams & van Manen, 2017; van Manen, 2017). Due to my personal interest and involvement in training in the martial arts, I understood and had experienced the benefits of such training. During this study, I remained aware of my personal biases because the benefits I have gleaned from training in the martial arts may not be the same as those experienced by other individuals. In addition, my style of training and philosophy of martial arts may differ from other styles experienced by the

study's participants. This difference in style could have resulted in a variety of responses among the participants; however, I intended to accept all responses to the open-ended questions as data, regardless of training style or philosophy.

In addition, I have professional experience treating and working with individuals who have experienced traumatic events. Through self-reflection, I made a conscious effort to set aside my personal and professional biases and to not have any expectation of reports of a positive outcome regarding the effects of training in the martial arts and healing from interpersonal trauma. Enhanced awareness of personal bias was meant to protect the validity of this study (see Adams & van Manen, 2017; van Manen, 2017).

Methodology

This section includes the methodology used for this study. I describe the participant selection logic; the instruments necessary for the study; the procedures for recruitment, participation, and data collection; and the data analysis plan.

Participant Selection Logic

The population of focus for this study was active martial arts practitioners who started training in the martial arts after experiencing a form of interpersonal trauma. The number of participants selected for this study was based on achieving saturation of data (approximately 8 to 10 participants). According to Boddy (2016), saturation of data is achieved once no new information or themes are observed with additional interviews. Due to the knowledge and experience required of each participant, I used a purposeful sampling method to select participants. According to Duan et al. (2015), purposeful sampling is an effective technique used in qualitative research for identification and

selection of rich information. Duan et al. explained that the effectiveness of this technique is dependent on identifying participants who are knowledgeable and/or experienced in a phenomenon of interest. Participants in the current study were selected from martial arts schools in the Central Valley region of California. I intended to expand the search area if additional participants were needed. This geographical location was selected because of the diverse demographics of its inhabitants.

Martial arts schools were identified based on recommendations and referrals from my martial arts instructors, fellow martial arts students, online searches, and networking during martial arts seminars. I followed up with the instructors of the selected martial arts schools in person, by phone, or by e-mail. This follow-up was intended to provide an understanding of the study, promote interest in the study, and obtain permission to post brochures at the instructors' places of business (see Appendix A). Once an instructor or school agreed to participate, I provided recruitment brochures with basic details of the study and my contact information for potential participants to address me with questions and concerns and express interest in participating in the study (see Appendix B). An attempt was made to limit the number of participants from each school and style to obtain a more comprehensive understanding of the influence of martial arts training on recovery from interpersonal trauma among a diverse population in terms of gender, age, and ethnicity.

Instrumentation

Prior to the semistructured interviews, participants were required to complete a demographic questionnaire to confirm they met the selection criteria for this study (see

Appendix E). Permission was obtained to use the original demographic questionnaire from the Bailey (2011) study. The demographic questionnaire was modified to fit the purpose of the current study.

Aside from my role as the researcher, the primary instrument in this study was the semistructured interview protocol, which consisted of in-depth, open-ended questions. Permission was obtained to use and modify the original interview questions from the Bailey (2011) study. The current study was designed to fill a gap in the literature by recruiting participants from a more diverse population in terms of gender, ethnicity, and age. Researchers have found that the perception and memory of a traumatic event is influenced by culture, social orientation, beliefs, and values (Conway et al., 2014). Additionally, this study was intended to increase the number of participants and include participants who had experienced other forms of interpersonal trauma. This study may elicit different responses from participants regarding the psychological effects of training in the martial arts after interpersonal trauma. The face-to-face interviews were conducted at the participant's martial arts school, a location of preference, or at Synchrony of Visalia, Inc., a nonprofit mental health organization in Visalia, CA. The interviews were approximately 45 minutes to an hour in length and were audio recorded with the participant's consent. Probing questions were used to guide the interview when needed, such as "Can you expand on that?" or "Can you help me understand what you mean?"

To maintain the confidentiality of participants, the audio files on digital voice recorders as well as flash drives were password encrypted. These files along with transcripts of the interviews, research documents/forms, and any notes that I took during

the interview process will be securely stored in a safe at my home office that only I have access to and will be destroyed 5 years after the date of the interview. Additionally, participants were assigned identification numbers so their real names or other personal identifying information would not be used in any way. Once all documents were stored on a secure flash drive or secure location mentioned above, all e-mails and unnecessary documents were deleted and destroyed. Although all data were intended to be kept confidential, I may have had to breach confidentiality and report circumstances to the proper authorities as directed by state/federal laws (e.g., harm to self or others and child/elderly abuse).

Interview Protocol

The interview protocol was derived from the research questions and was used to explore the influence of martial arts involvement after interpersonal trauma (see Appendix F). Validity was established through Bailey's (2011) study and was enhanced through triangulation of the interview protocol, transcription review, and behavioral observations. The interview questions were suitable in exploring each participant's experience of martial arts and trauma. Additionally, interview questions provided the structure needed to elicit rich and detailed data in order to answer the research questions.

Procedures for Recruitment, Participation, and Data Collection

Upon obtaining permission from the selected martial arts schools, I recruited participants by posting a brochure with the description of the research study and asking instructors to announce the study at the beginning and end of each class. Social media sites such as Facebook were utilized to identify potential participants who met the criteria

for the study within the Central Valley and surrounding counties. All potential participants had to be at least 18 years of age and had been training in the martial arts for at least six months. Participants did not require a clinical diagnosis of PTSD; however, having experienced a traumatic event was a requirement for this study. Training in the martial arts must have also commenced after the traumatic event, and participants had to be actively training in the martial arts as an eligibility requirement for this study.

Once potential participants who met the criteria for this study were identified, I reached out to them by mail or email with an invitation letter outlining the requirements, benefits, and details of the study (see appendix C). It was made clear that participation in the study was voluntarily and that all data would be collected by utilizing a demographic questionnaire and semistructured interviews. Each of the selected participants had an opportunity to address any questions or concerns via a telephone call with me prior to the scheduling of the interview, and each was advised of his or her right to decline participation in the study at any time during process. There was only one interview for each participant and interviews were approximately 45 minutes in length and were digitally audio recorded.

On the date of the interview, all participants were provided with a consent form outlining the interview process and potential emotional risk that may arise during the interview process (see appendix D). Upon arrival for their scheduled interview, the assurance of confidentiality was addressed and discussed with participants, and they were also be provided with a demographics questionnaire to reconfirm that they met the criteria for the study. The demographic questionnaire was not viewed by me until the

interview had ended and the participant had left the premises. This was to reassure the participant that the traumatic event would not be discussed during the interview, as that is not a requirement for this study. As a preventative measure, if participants showed any levels of distress it was reiterated to them that they may withdraw from the study at any time without cause or consequences. At the end of each interview, I provided participants with a list of referrals to mental health clinics and facilities accessible within their community and no further follow up with participants was initiated. Further details pertaining to this process are discussed in the ethical procedures section of this chapter.

Data Analysis Plan

Once all interviews were completed, I gathered and organized all data collected in order to initiate the data analysis plan. This plan consists of a verbatim transcription of the interviews from the digital voice recorders and exportation of the interview transcripts to NVivo software for the analysis of data. NVivo is a software used for qualitative data management and to assist with the organization and facilitation of the data analysis (Godoy-Ruiz, Mason, McKenzie, Toner, & Vidal, 2015).

Once the interviews were transcribed, the transcripts were emailed to participants for feedback and verification that the transcripts accurately represented their opinions and perceptions. Needed corrections were made. The transcribed data was reviewed and repetitiously reread to gain comprehensive understanding of participants' background and subjective experiences. The transcribed data was coded to identify themes and patterns as they relate to participants' subjective experience and research questions. Additionally, the data analysis plan considered all nonverbal expressions and communications of

participants and notes taken during the interviews. The coded data was analyzed to identify patterns among the themes and organize them into categories which helped address the research questions.

The data analysis plan used was based on Moustakas's (1994) modification of van Kaam's method of phenomenological analysis. This method of data analysis includes the following steps: (a) listing and grouping of experiences by themes; (b) reduction and elimination of data not related to the research questions/irrelevant data; (c) clustering of experiences; (d) final identification of the invariant constituents and themes; (e) individual textural description of the experience; (f) individual structural description of the experience; (g) a textural-structural description of the experience; and (h) a composite description of the experience. This process has high validity when eliciting rich and detailed information of each participants' subjective experience and also included any discrepant responses. Participants were asked to clarify any discrepant responses which was cross referenced with the interview transcript.

Issues of Trustworthiness

The criteria used to identify a study's trustworthiness was first introduced in the 1980s by Guba and Lincoln (Morse, 2015). Previous terminology used to attain rigor, reliability, validity, and generalizability was replaced with *credibility*, *transferability*, *dependability*, and *confirmability* in order to achieve the *trustworthiness* of a study (Morse, 2015). This innovation became an important aspect of qualitative research as it helps evaluate a study's worth, which is crucial in achieving credibility. Rapport, Clement, Doel, and Hutchings (2015) further explained the importance of assessing and

supporting data through detail description of the study's *credibility, transferability, dependability, and confirmability*.

Credibility

Credibility in qualitative research is identified as the believability and trustworthiness of information (Featherman, Hajli, Love, & Sims, 2015). In this current study, credibility was achieved through saturation and triangulation of data. Data saturation occurs when no new information or themes are observed within the interview process (Boddy, 2016). Triangulation is an analytical technique used to substantiate findings with evidence from multiple sources (Yin, 2016). In this study, triangulation was accomplished through behavioral observations, transcripts, audio recordings, and notes taken by me during the semistructured interviews. I also followed and utilize a detailed documentation method based on Moustakas's (1994) modification of van Kaam's method of phenomenological analysis to enhance the credibility of this study. A full and detailed report of the processes linked to the study's aim and objectives was provided, based on Rapport et al.'s (2015) claim that such a report can allow for credibility to be assessed and assured.

Transferability

Transferability in qualitative research is defined by the degree to which the results can be generalized or transferred to other settings and participants (Rapport et al., 2015). These other settings and participants can consist of an identical phenomena, situation, and population. To strengthen and enhance the transferability of the results in this study, a thorough and detailed description of the setting and participants was provided.

Participants were selected by using the purposeful sampling method to identify individuals with a shared lived experience. This measure allows future researchers sufficient information pertaining to the study's scope and purpose for practical transferability.

Dependability

Dependability in qualitative research refers to the processes utilized within the study being documented with sufficient detail and information for other researchers to replicate the study and/or expand and extend the knowledge of the study (Rapport et al., 2015). In this current study, dependability was achieved through a detailed description of data collection and analysis. Additionally, copies of all documents consisting of details pertaining to behavioral observations, interview transcripts, audio recordings, and notes taken by me as the researcher during the interviews are available to validate the procedures that encompassed this study. The original documents, flash drives, and digital audio recordings are safely stored for a minimum of 5 years following the completion of this study. These precautions will allow future researchers the capability of not only replicating this study but also enhancing to the findings by filling the gaps identified in this study.

Confirmability

Confirmability is identified by the findings of results directly associated to the participants' experience and ideas and not based on the researcher's preference or beliefs (Rapport et al., 2015). In this study, confirmability was achieved through my self-awareness in identifying and eliminating any biases and beliefs that may have influenced

or affected the outcome of the study. Additionally, the semistructured interviews allowed participants direct control of their lived experience, and all decisions made by me can be identified within the raw data of the interview transcripts.

In best efforts to promote the intercoder reliability, the research process relied on van Kaam's method modified by Moustakas (1994) and understood to be an appropriate method for use in qualitative phenomenological research. Additionally, this research method of analysis utilized seven steps outlined by Moustakas to analyze and transcribe the interview of each participant and its findings. In order to achieve intercoder reliability, I reviewed the interview transcripts and manually identify themes and patterns independently of those from NVivo. These findings were cross referenced for accuracy, consistency and reliability with those of NVivo.

Ethical Procedures

Prior to data collection, as the researcher, I obtained approval for the study through the Walden Internal Review Board (IRB). Taking this step ensured that the research process intended was followed and was consistent with all ethical considerations as deemed by the IRB. Once IRB approval was granted, data collection began, IRB approval number 09-12-18-0246966.

In order to protect the rights, privacy, and confidentiality of all participants, I explained to all participants that participation in the study was optional and that they could withdraw from the study at any time. The process of withdrawing from the study was kept simple and allowed participants to withdraw formally from the study either verbally or by contacting me via email, without consequences or any form of justification

required. Participants were informed that once they withdrew from the study, any data collected would be destroyed and not included in the final results of the study. This information was provided to participants prior to the interviews. Each participant was handed an informed consent form outlining the background and purpose of the study and only participants who signed the informed consent form were officially included in the study. Participants were not required to disclose or identify any details pertaining their traumatic event during the interview or on any of the research documents provided. As the researcher, I was the only one interacting with participants prior and during the interview process. Furthermore, participants were advised that to maintain privacy and confidentiality, their personal information would remain anonymous and identification numbers would be used instead of names. I password-encrypted all audio files (digital voice recorders) and flash drives and these devices along with all data gathered during the interviews are securely stored at a secure safe in my home office which only I have access to and destroyed after five years.

Additionally, because the sample selected can be considered to be a vulnerable population, participants were not required to discuss their traumatic event as that was not a requirement for this study or the semistructured interviews. All participants were informed that participation in this study may produce minor discomforts that can be encountered in daily life when discussing past negative experiences, such as unpleasant thoughts, feelings, emotions or memories. During the interview process if participants demonstrated or reported any levels of distress, I reiterated to them that they may take a break, continue or withdraw from the study completely at any time without cause or

consequences. Furthermore, in order to safeguard participants wellbeing, I checked in with them after every other question or if any distress was noticed or reported by participants and again provide them with the opportunity to stop, take a break or continue with the interview. At the end of each interview, I discussed with participants the steps they can take to address any discomforts they may have experienced with a licensed qualified mental health professional. Regardless of any levels of distress and to avoid a dual relationship, I provided all participants with a list of licensed qualified mental health professionals who could provide psychological assistance if needed and were accessible within their community should psychological assistance be required.

Furthermore, a qualitative analysis which focused on the effects of martial arts involvement after interpersonal trauma, no levels of distress were identified or reported during or after the interview process (Bailey, 2011). In a longitudinal study focused on victims of intimate partner abuse (IPA), DePrince and Hebenstreit (2012) found that participants viewed participation in the study as positive experience and found minimal negative emotions and inconveniences as a result of the study and interview process. Fahs (2016) further proclaimed that wording of interview questions and the use of open-ended formats are crucial in how a participant responds and conceptualizes their experience. This process empowers participants with control over how much participants are willing to share based on their levels of stress and coping capabilities (Goodkind, Gorman, Hess & Parker, 2012). In this study, the interview questions did not focus on the details of the traumatic event but rather the psychological effect martial arts have had after a traumatic event. Additionally, given the focus of the study and that the interview questions did not

focus on the details of the trauma, there were no to minimal levels of distress expected during or after the interview process – a concept supported by Bunnell and Legerski (2010) in trauma survey research. Goodkind et al., (2012) further explained that in instances when mental health services are needed following the interview, participants should be directed to the appropriate mental health services – a process that will be followed in this study.

Summary

This chapter provided a detailed description of the study's methodology, with a focus on the study's research design and rationale, role of the researcher, methodology, and issues of trustworthiness. For this study, a qualitative, phenomenological research design was used in order to present the research questions and analyze the results fully. This research design was the appropriate method to explore the subjective experiences of a group of individuals. This exploration was accomplished by utilizing semistructured interviews to attain a more comprehensive understanding of the effects of training in the martial arts in relation to the healing of interpersonal trauma. The description of the methodology included participant selection logic, instrumentation, procedures for recruitment, participation and data collection, and the data analysis plan. Additionally, the discussion of the issues of trustworthiness elaborated on the credibility, transferability, dependability, confirmability, and ethical procedures of this study. The following chapter outlines this study's results. Included is a detailed description of the setting, demographics, data collection, data analysis, evidence of trustworthiness, and results of the analysis of the data.

Chapter 4: Results

The purpose of this qualitative phenomenological study was to examine the lived experiences of martial artists after a traumatic event. The goal was to explore whether training in the martial arts might be an effective intervention in the treatment of interpersonal trauma. Six research questions were used to guide the study:

RQ1: What is each participant's reason(s) for choosing to become involved in the martial arts? What was the reason(s) to continue training in the martial arts?

RQ2: What is each participant's subjective understanding of the meaning of martial arts in his or her life? How has this understanding changed over time?

RQ3: What have participants noticed about the effects of physical training and movement and how has this influenced them?

RQ4: What aspects of participants' lives have been affected by their martial arts training?

RQ5: What similarities have the participants noticed between therapy and martial arts? What effect, if any, have these similarities and differences had on participants' understanding of their traumatic experience?

RQ6: What is each participant's overall experience with training in the martial arts?

Chapter 4 includes a description of the setting for data collection and the demographic characteristics of the participants. This chapter also includes descriptions of the data collection and data analysis procedures that were used in this study, followed by a discussion of the evidence of the trustworthiness of the results. Next, this chapter

includes a presentation of the results organized by research question. The chapter concludes with a summary of the results.

Setting

All participants were interviewed at their respective martial arts studios except P6, who was interviewed in a mental health clinic. Personal conditions that may have influenced participants or their experience at the time of study are described as follows:

P1: During the interview, no significant information was reported or observed that would influence data for this participant.

P2: During the interview, P2 revealed that her boyfriend had recently broken up with her. They had a vacation planned within the next few weeks and she was still coping with this loss.

P3: After the interview, P3 revealed a relationship breakup within the past few months. He further noted he did not want to discuss this as he was still coping with this loss.

P4: Prior to the interview, P4 requested reassurance that the interview would remain confidential. The process to protect confidentiality was reviewed and explained to this participant. Her dog was also present during the interview. She explained that this was for safety reasons to protect herself from loiterers who sometimes roam the area.

P5: During the interview, P5 disclosed an upcoming surgery for an injury she had sustained. She also revealed her husband was recently diagnosed with a serious medical condition, which they were both coping with and working through.

P6: During the interview, P6 revealed health concerns that she was concerned about and working through; however, she assured me that she would be able to continue with the interview process.

P7: During the interview, P7 described the breakup of a long-term relationship that occurred approximately two years ago and that he was still working through this loss. He also played meditative music during the interview and explained that this was typical of his daily routine.

P8: During the interview, P8 did not sit facing me but instead faced a wall to my left. This resulted in minimal eye contact, but he occasionally turned and made eye contact with me. No other conditions were reported or observed that would have influenced the data.

P9: At the end of the interview, P9 revealed he had a diagnosis of PTSD and was currently in the process of seeking professional treatment for the disorder. This participant reported being a military veteran with combat experience.

Demographics

Participants were a purposeful sample of nine adults who had commenced martial arts training after experiencing a traumatic event. The sample size of nine was chosen because data saturation was achieved with this number of participants. Data saturation is achieved when additional data collection and analysis yield no new themes or insights (Boddy, 2016). Table 1 shows the relevant demographic characteristics of the study participants.

Table 1

Participant Demographics

Partici- pant	Gender	Age	Race or ethnicity	Relationship status	Level of education	Years of martial arts training
P1	Male	60	Hispanic	Single	B.A.	42
P2	Female	29	White	Divorced	High school	6
P3	Male	32	Hispanic	Single	High school	10.5
P4	Female	24	Middle Eastern	Single	G.E.D.	2.5
P5	Female	44	White	Married	B.A.	No response
P6	Female	41	White	Single	B.A.	1
P7	Male	31	Hispanic	Single	High school	12
P8	Male	57	White	Married	A.A.	48
P9	Male	58	Black	Married	High school	42

Data Collection

Following IRB approval, I commenced making phone calls and sending e-mail notifications to all potential participants. Once all participants who met the criteria were identified, I addressed any questions or concerns they may have had pertaining to the study. All participants who agreed to participate and who met the criteria for the study selected a date and time convenient for them to conduct the interview. The interview process continued until saturation of data was attained.

Data were collected through nine one-on-one, face-to-face, semistructured interviews using an interview protocol and demographic questionnaire validated by

Bailey (2011) (see Appendices E and F). Both the interview protocol and demographic questionnaire were modified to fit the purpose of this study. All interviews were audio recorded with the participant's consent, and demographic questionnaires were completed on the date of the scheduled interview. Interviews with all participants except P6 were conducted in their respective martial arts studios. P6 was interviewed in a mental health clinic. The average duration of the interview was approximately 45 minutes, and data collection took place over a period of approximately three weeks. No unusual circumstances were encountered during data collection, and there were no deviations from the procedures described in Chapter 3.

Data Analysis

Audio recorded interviews were transcribed verbatim, yielding approximately 79 pages of single-spaced transcripts. Transcripts were uploaded in NVivo 12 software and analyzed using Moustakas's (1994) modification of van Kaam's method. The method involved the following steps: (a) listing and grouping of experiences by themes, (b) reduction and elimination of data not related to the research questions, (c) clustering of experiences, (d) final identification of the invariant constituents and themes, (e) individual textural description of the experience, (f) individual structural description of the experience, (g) a textural-structural description of the experience, and (h) a composite description of the experience (Moustakas's 1994).

One of the goals in the presentation of results was to make the analysis process as transparent as possible, thereby providing evidence of the trustworthiness of the study's results. The results are organized by research question, and within each research question

the results are organized according to a nested pattern that indicates the results of Steps E, F, G, and H of the analysis described above. This organizational scheme was used to demonstrate the validity of the process by which composite descriptions (Step H) were derived from textural-structural descriptions (Step G), textural-structural descriptions were derived from individual structural descriptions (Step F), individual structural descriptions were derived from individual textural descriptions (Step E), and themes were identified based on individual textural descriptions (Steps A through D).

The application of the modified van Kamm method (Moustakas, 1994) ensured that all participants' experiences were fully addressed. No fully discrepant experiences existed within the data set. However, there were instances in which experiences differed between participants without being contradictory or fully discrepant; these occurrences were reflected in the textural-structural descriptions. The Results section presents a description of experiences for each participant.

Evidence of Trustworthiness

The four criteria used to assess a study's trustworthiness were first introduced in 1985 by Guba and Lincoln (as cited in Morse, 2015). The criteria include credibility, or internal validity; transferability, or external validity; dependability, or reliability; and confirmability, or objectivity. Each of these criteria is discussed below.

Credibility

Credibility in qualitative research is the degree to which the results accurately represent the reality they are intended to describe (Rapport et al., 2015). In the current study, credibility was enhanced through data saturation and triangulation. Data saturation

occurs when no new information or themes are observed in the interview process (Boddy, 2016). In the present study, this occurred with nine participants. Triangulation is an analytical technique used to substantiate findings with evidence from multiple sources (Yin, 2016). In this study, triangulation was accomplished using behavioral observations, transcripts, audio recordings, and notes taken by me during the interviews.

Transferability

Transferability in qualitative research is the extent to which the results will be found in other research contexts (Rapport et al., 2015). To aid future researchers in assessing transferability, I provided a thorough and detailed description of the setting and participants.

Dependability

Dependability in qualitative research refers to the processes used within the study having been documented with sufficient detail for other researchers to replicate the study (Rapport et al., 2015). In the current study, dependability was enhanced through a detailed description of data collection and analysis. Additionally, copies of all documents pertaining to behavioral observations, interview transcripts, audio recordings, and notes taken by me during the interviews are available to validate the procedures. The original documents, flash drives, and digital audio recordings are safely stored and will be kept for a minimum of 5 years following the completion of this study. These procedures will allow future researchers to replicate this study.

Confirmability

Confirmability refers to the findings in a study emerging from the participants' experiences rather than from the researcher's preference or beliefs (Rapport et al., 2015). In the current study, confirmability was enhanced through my self-awareness in identifying and eliminating any biases and beliefs that could potentially influence the outcome of the study. Additionally, semistructured interviews allowed participants direct control of the expressions of their lived experiences, and all decisions made by me can be identified within the raw data of the interview transcripts.

Results

The following presentation of the study's results is organized by research question. Results are organized by composite descriptions, which emerged during Step H of data analysis. The organization of results is consistent with the modified van Kamm method of individual textural descriptions, textural-structural descriptions, and composite descriptions.

Research Question 1

Research question 1: What is each participant's reason(s) for choosing to become involved in the martial arts? What was the reason(s) to continue training in the martial arts? Two composite descriptions emerged during step (h) of data analysis to answer the research question.

Composite description 1: Starting martial arts from a sense of personal inadequacy. The first answer to research question 1 is that participants chose to become involved in martial arts as a result of a sense of personal inadequacy. All participants

except P5 contributed data to this answer; P5 indicated that she started martial arts only because her husband was participating in it. The composite description emerged from two textural-structural descriptions identified during step (g) of the analysis, including (1) unable to stand up to bullies, and (2) lacking confidence for necessary activities. Table 2 indicates which of the participants contributed to each of these textural-structural descriptions.

Table 2

Composite Description 1: Contributing Participants

Textural- structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Unable to stand up to bullies	X	X	X				X	X	X
Lacking confidence for necessary activities		X		X		X			

Textural-structural description: Unable to stand up to bullies. The textural-structural description *unable to stand up to bullies* emerged from four individual structural descriptions. Table 3 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 3

Textural-Structural Description: Unable to Stand Up to Bullies

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Bullied because small	X							X	
Bullied by gang							X		X
Bullied because female		X							
Bullied because of uncommon name	X								
Unable to avoid bullies			X						

Individual structural description: Bullied because of small size. This individual structural description emerged in the analysis of data from participants P1 and P8, from the following individual textural descriptions:

- P1 textural description: Smallness as a provocation to bullies:
- I remember taking pictures in our classroom in 1st grade or 2nd grade and I was the smallest, . . . and just being small in stature was enough for even strangers to pick on you and make fun of you and push you.
- P1 textural description: Karate as a means of retaliating against bullies: “You want to retaliate. . . . I remember in school telling . . . [bullies] I’m going to learn karate and kick your ass.”

- P8 textural description: Bullied for being chubby and short:
- I was probably just a chubby short little kid, always been short. And so, I was bullied a lot. I was, you know, head beaten. . . . I mean I was extorted for money. . . . That was probably one of the biggest factors of [starting] the martial arts.
- P8 textural description: Beaten at home:
- I was physically abused from my father more than normal. I was one of five siblings, I was the middle child, I was the one that got everything, so dad had a lot of depression [and] put it out on my back. . . . I felt though after martial art started, I can deal with it better.

Individual structural description: Bullied by gang. This individual structural description emerged in the analysis of data from P7 and P9, from the following textural descriptions:

- P7 textural description: Life threatened by gang:
- I was getting into knife fights, guns pulling out. . . . The day I said no more, I was almost killed. . . . [An] older gentleman in [my] same gang was murdered down the street from my house. The getaway car got away, they got the description of the car. . . . A few weeks later, I was walking down the street and . . . the exact same car pulls up next to me and three guys come out with guns.
- P7 stated that the situation was resolved when a sheriff who lived down the street intervened, and the threatening individuals left.

- P9 structural description: Having to defend self from gangs: “[I started martial arts] due to bullying, gang related in certain areas you don’t walk. People try to take money from you or disrespect you and you had to defend yourself.”

Individual structural description: Bullied because of being female. This individual structural description emerged in the analysis of data from P2, from the following textural description:

- P2 textural description: Perception that women need to know how to defend themselves: “I first started [martial arts] when I was a child, my father signed me up because I was being bullied at my school, and he felt that women needed to know how to defend themselves.”

Individual structural description: Bullied because of unusual name. This individual structural description emerged in the analysis of data from P1, from the following textural description:

- P1 textural description: Teachers and students mocked unusual name: . . . just because you couldn’t pronounce . . . [my name] and so again when you’re little 9, 10, 11[-year-old] people, it was just constant bullying, and it almost seem that the instructors or the teachers were bullying. I mean because (mispronounces his first name how teachers would mispronounce his first name).

Individual structural description: Unable to avoid bullies. This individual structural description emerged in the analysis of data from P3, from the following textural description:

- P3 textural description: Advice from teachers to avoid bullies not practical: “I was in mid-elementary school [and] I would get bullied, . . .and you know, teachers back then was, ‘Hey, well stay away from him, and you would be fine,’ [but] that’s never true.”

Textural-structural description: Lacking confidence for necessary activities.

The textural-structural description *lacking confidence for necessary activities* emerged from three individual structural descriptions. Table 4 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 4

Textural-Structural Description: Lacking Confidence for Necessary Activities

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Always afraid		X							
Lacking the confidence to speak				X					
Fear of upcoming operation						X			

Individual structural description: Always afraid. This individual structural description emerged in the analysis of data from P2, from the following textural descriptions:

- P2 textural description: Constant anxiety resulting from trauma: I had a lot of anxiety issues. There had been a couple of traumatic instances that have been leading up to . . . this continued state of anxiety all the time. If you talked to me, I was in defense mode and I would attack you. I was in a constantly in a fight reflex.
- P2 textural description: Martial arts as a solution to constant fear: “[I started martial arts because] I wanted to overcome that fear I had 24/7. I mean, literally, I didn’t sleep at night. I couldn’t go to the movies. I couldn’t do anything without being in constant fear 24/7.”

Individual structural description: Lacking the confidence to speak. This individual structural description emerged in the analysis of data from P4, from the following textural descriptions:

- P4 textural description: Afraid to speak up: I just want to advocate for myself it was like if I was in a conversation or something and people were talking, and I thought of, like, oh, I want to add this, like, I wouldn’t do it because I was scared of what my voice would sound like, if I felt like I didn’t have any control over it.
- P4 textural description: Martial arts as a means of controlling voice: “I was like, I should do martial arts because you have to make weird sounds. Like you start learning what your voice sounds like and how to control it.”

Individual structural description: Fear of upcoming operation. This individual structural description emerged in the analysis of data from P6, from the following textural descriptions:

- P6 textural description: Coping with anxiety about lung transplant: I decided to look into training in martial arts because I've wanted to get tougher mentally mostly, because I have a lung disease that has no cure, and the only solution basically is lung transplant, and that was giving me a lot of anxiety.
- P6 textural description: Martial arts as a coping strategy: "I do deal with a lot of anxiety [due to impending lung transplant], and I thought maybe martial arts would help me with anxiety management."

Composite description 2: Continuing martial arts because it contributed to personal goals. The second answer to research question 1 is that participants chose to continue their involvement in martial arts because their training contributed to the fulfillment of personal goals. All participants contributed data to this answer. The composite description emerged from three textural-structural descriptions. Table 5 indicates which of the participants contributed to each of these textural-structural descriptions.

Table 5

Composite Description 2: Contributing Participants

Textural-structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Coping effectively with anxiety and depression		X			X	X		X	
Overcoming fear of assault	X		X	X					
Achieving position and livelihood		X					X		X

Textural-structural description: Coping effectively with anxiety and depression.

The textural-structural description *coping effectively with anxiety and depression* emerged from two individual structural descriptions. Table 6 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 6

Textural-Structural Description: Coping Effectively with Anxiety and Depression

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Martial arts as a coping strategy					X	X		X	
Using martial arts for increased self-control		X							

Individual structural description: Martial arts as a coping strategy. This individual structural description emerged in the analysis of data from P5, P6, and P8, from the following textural descriptions:

- P5 textural description: Dealing with depression from grief: “When I started judo it helped with dealing with the loss of my dad and not losing my mind and ditching my family, like all my friends who had the same experience.”
- P5 textural description: Better than any therapy:
 [When taking judo] I started to feel very strong and empowered, and that right there made me look back at my previous experiences and go, this makes me feel better. . . . This is better than any sort of therapy that I could have, . . . [it] does make me strong and empowered.

- P6 textural description: Taking one thing at a time: “Now I am much better about taking things, kind of, one step at a time as they are, instead of building it up in my head as something that’s so overwhelming I can’t deal with it.”
- P6 textural description: Progressing by increments instead of freezing: “You take one step at a time to deal with the situation instead of just freezing and getting so overwhelmed that you can’t do anything and feeling helpless.”
- P6 textural description: Learning to control self:

I think having that physical manifestation of martial arts, where you are learning to use your body to manage a situation or control a situation even, . . . that it helps my mind realize that there are steps that can be taken.
- P8 textural description: Dealing with stress from bullying:

It was during this last day of school getting abused and beaten by these kids, and . . . the studio opened next to, and it was a Kenpo school. . . . I think it made me tough and it helped me deal with a lot of that stress, depression, and stuff that I had been dealing with at school.

Individual structural description: Using martial arts for increased self-control.

This individual structural description emerged in the analysis of data from P2, from the following textural descriptions:

- P2 textural description: Calm in a crisis:

I was at my mom’s house, and . . . there was a guy there that was a family friend that had been drinking, and we were having a discussion, and he had a disagreement. . . . He started to become very belligerent and just

kind of aggressive and hostile and my mom freaked out . . . [but] I was just completely chill.

- P2 textural description: Calm in crisis due to martial arts:

I didn't have any fear there's no anxiety there's no "Oh my god, what am I going to do," it was just complete, "I got this," and it was like, this is why I need to keep doing this [martial arts].

Textural-structural description: Overcoming fear of assault. The textural-structural description *overcoming fear of assault* emerged from two individual structural descriptions. Table 7 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 7

Textural-Structural Description: Overcoming Fear of Assault

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Overcoming fear of assault in bad neighborhood	X			X					
Overcoming fear of assault from bullies			X						

Individual structural description: Overcoming fear of assault in bad neighborhood. This individual structural description emerged in the analysis of data from P1 and P4, from the following textural descriptions:

- P1 textural description: Still afraid of assault:

The reason I continued to study karate is because I'm still afraid. . . . I don't ever want to be afraid, you know. You always have that, "What if I walk out and there's five guys there?" you know, . . . because today's society is much more aggressive.

- P1 textural description: Fear of pain: "Just the fear of being beat up, you know. Physical pain I guess."
- P4 textural description: Facing scary situations:

I was still living in the shelter. . . . I did notice a difference [while taking martial arts classes] in how I thought about things, like if I was in a scary situation or something, I thought differently about it, and so I just I just decided to keep doing it until I didn't see a positive benefit in my life.

Individual structural description: Overcoming fear of assault from bullies. This individual structural description emerged in the analysis of data from P3, from the following textural description:

- P3 textural description: Fear of bullies: "I continued my trainings because in mid-elementary school I would get bullied."

Textural-structural description: Achieving position and livelihood. The textural-structural description *achieving position and livelihood* emerged from two individual structural descriptions. Table 8 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 8

Textural-Structural Description: Achieving Position and Livelihood

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Earning a living		X							
Feeling needed							X		X

Individual structural description: Earning a living. This individual structural description emerged in the analysis of data from P2, from the following textural descriptions:

- P2 textural description: Running the dojo office: “I run the office here at the dojo because [instructor’s name] knew I needed money, that I was having money problems as a single mom, so he hired me to run the office.”
- P2 textural description: Business opportunities:

I started going to different martial arts stuff and started recording it, and it led to a business [dedicated to martial arts] now that I run I go and I interview different martial artists and talk about how martial arts affects their life for the better and stuff so it actually ended up growing my income and my business by quite a bit.

Individual structural description: Feeling needed. This individual structural description emerged in the analysis of data from P7 and P9, from the following textural descriptions:

- P7 textural description: Being needed as a miracle: “I’m needed here [in the dojo as a teacher], and that’s something big, it’s a miracle. So little by little I started getting away from all of that [participating in gangs] but stayed here.”
- P9 textural description: Being a dad to everybody: “[The dojo is] a family. . . . You make new family members when they come in. Everybody is here. . . . It’s like family, I’m dad to everybody.”

Research Question 1 summary. Results indicated that participants chose to start training in martial arts as a result of feelings of personal inadequacy caused either by a perceived inability to stand up to bullies or a lack of confidence in their ability to assert themselves in necessary ways such as going out without anxiety, speaking in front of others, and undergoing a necessary medical procedure. Seven out of nine participants perceived martial arts as a potential solution to these personal difficulties and chose to participate for this reason. Participants who were being bullied perceived martial arts as a means of learning how to fight back physically, while participants who lacked the confidence to undertake necessary activities perceived martial arts as a means of gaining control over their bodies and feelings.

Results further indicated that participants’ decision to continue to train in martial arts resulted from their perception that martial arts was helping them to accomplish their personal goals. Personal goals that martial arts was perceived as promoting included

coping with or managing anxiety and depression, overcoming fear of assault, and achieving livelihood and position (e.g., as an instructor or paid clerical worker in a dojo).

Research Question 2

Research question 2: What is each participant's subjective understanding of the meaning of martial arts in his or her life? How has this understanding changed over time?

Two composite descriptions emerged during step (h) of data analysis to answer the research question.

Composite description 3: Martial arts are a source of community and confidence. The first answer to research question 2 is that participants perceived martial arts as a source of confidence and community. All participants contributed data to this answer. The composite description emerged from two textural-structural descriptions identified during step (g) of the analysis. Table 9 indicates which of the participants contributed to each of these textural-structural descriptions.

Table 9

Composite Description 3: Contributing Participants

Textural-structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Martial arts are a source of confidence and calm	X		X	X	X	X		X	
Martial arts are a source of community and belonging		X		X	X		X	X	X

Textural-structural description: Martial arts are a source of confidence and calm. The textural-structural description *MAs are a source of confidence and calm* emerged from two individual structural descriptions. Table 10 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 10

Textural-Structural Description: Martial Arts are a Source of Confidence and Calm

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Martial arts as a source of personal empowerment	X			X	X				
Martial arts as a source of self-control and calm			X			X		X	

Individual structural description: Martial arts as a source of personal empowerment. This individual structural description emerged in the analysis of data from P1, P4, and P5, from the following textural descriptions:

- P1 textural description: Feeling capable of countering an assault:
 Nobody can beat us [martial artists] up, and then, you know, we learn to take pain, and I can take anybody any size, and they can kick me or punch me as hard as they want, then I'll say it's my turn.
- P4 textural description: Interacting more confidently:
 I started noticing how people, like, even strangers interacted with me differently. I just felt people talk to me with more respect, and it just seemed to, like, change my energy even though I'm not a big, like, chi person, but it's still, like, I noticed this kind of shift.

- P5 textural description: Confidently approaching change:

I wanted to switch jobs and I was scared and I'm the only source of income, so I was kind of intimidated and I thought, no, you would tell the kids [whom you train in martial arts] to go for it. So, you have to go for it too. So, it helps me off of the mat, as well as on the mat.

- P5 textural description: Interviewing with confidence:

Judo is all about respect and honor and tradition, . . . so that carries over into my career, and . . . I'm not intimidated to go for what I want, because if I can get through a sensei birthday workout, then I can certainly interview for a job.

Individual structural description: Martial arts as a source of self-control and calm. This individual structural description emerged in the analysis of data from P3, P6, and P8, from the following textural descriptions:

- P3 textural description: Remaining calm despite coworkers' provocation:

"Sooner or later someone is going to start barking [at work], and my definition of barking is someone starts getting mad and, you know, starts throwing attitudes, and martial arts you know keeps me calm."

- P6 textural description: More control and mental stability:

With the different breathing techniques, especially with the goju ryu karate, one of their main kata's is a breathing kata, and that's a big focus. . . . And that has really been a benefit. So, I feel like as I get deeper into it, I'll have more breath control, more mental stability.

- P8 textural description: Self-control through martial arts: “I think martial arts helps you, you know. It gives you control of yourself to deal with these things [such as bullying and abuse].”

Textural-structural description: Martial Arts are a source of community and belonging. The textural-structural description *martial arts are a source of community and belonging* emerged from two individual structural descriptions. Table 11 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 11

Textural-Structural Description: Martial Arts Are a Source of Community and Belonging

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
A sense of community and family				X	X		X		
Achieving status through Martial arts		X						X	X

Individual structural description: A sense of community and family. This individual structural description emerged in the analysis of data from P4, P5, and P7, from the following textural descriptions:

- P4 textural description: Her only community: “[Martial arts has] given me a really good community, people with kind of the same set of values and

something to relate over, and that's been really good. Otherwise, I don't have family, and I moved here [by] myself."

- P5 textural description: A solid family:

We have an entire family here [in the dojo] that supports us and we all bleed together, we sweat together, we cry together, we compete together, and these people just have our back and on and off the mat. . . . It's like having a huge extended family, and it makes you feel pretty pretty solid.

- P7 textural description: Not having people outside of martial arts:

Prior to coming to the martial arts, I would describe myself as much of a loner. I've been I was alone since I exited the gangs and that was a span of probably 7 years but I wouldn't hang out, I didn't have people.

Individual structural description: Achieving status through martial arts. This individual structural description emerged in the analysis of data from P2, P8, and P9, from the following textural descriptions:

- P2 textural description: Having fans: "Now I can go to these martial art things, and I have girls that run up to me [saying], 'Are you [states her nickname]?' and stuff like that. So the martial arts, it's really just opened up everything for me."
- P8 textural description: The fulfilling role of teaching:

When he opened that school, I took a role in teaching all those kids. . . . I guess I was always that kind of giver, but that's what my teacher taught me. We're supposed to help each other keep the schools going. . . . I just

enjoy watching kids get it, you know, seeing that light bulb come on. . . . I always say I'll stop teaching when that last person comes in who wants to get taught.

- P9 textural recognition: Achieving national recognition:

I've been nationally, world rated in martial arts. I've been in movies a couple times. I just did one recently. I've been on TV shows because of martial arts, so it helped me tremendously. . . . I've been in several halls of fame, in magazines.

Composite description 4: The meaning of martial arts evolves beyond

fighting. The second answer to research question 2 is that participants understood the meaning of martial arts as evolving beyond training in physical combat into a discipline that positively impacted their self-confidence, the way they used their bodies, and the way they related to others. Eight out of nine participants contributed data to this answer. The composite description emerged from two textural-structural descriptions identified during step (g) of the analysis. Table 12 indicates which of the participants contributed to each of these textural-structural descriptions.

Table 12

Composite Description 4: Contributing Participants

Textural-structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Meaning evolved from fighting to relationships with others	X	X		X		X	X		
Meaning evolved from fighting to relationship with self			X		X			X	

Textural-structural description: Meaning evolved from fighting to relationships with others. This textural-structural description emerged from two individual structural descriptions. Table 13 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 13

Textural-Structural Description: Meaning Evolved from Fighting to Relationships with Others

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
From physical confidence to social confidence		X		X		X			
From conflict to positive patterns of relating	X						X		

Individual structural description: From physical confidence to social confidence.

This individual structural description emerged in the analysis of data from P2, P4, and P6, from the following textural descriptions:

- P2 textural description: Gaining social authority:

When I first started, I knew: Oh, this is going to be self-defense, what to do if someone grabs you, blah, blah, blah. But as I started to advance in my rank and started to become more involved at the dojo, I started to learn how it affects your interaction with people, especially when you start learning how to teach.

- P4 textural description: Being treated with respect: “And then, from that point on, I realized, like, I started noticing how people, like even strangers,

interacted with me differently. I just felt like people talk to me with more respect.”

- P6 textural description: From workout to confidence-building:

I thought at first, it would just be like a workout, but now that I understand it’s much more psychological, . . . I think it’s made my life a lot better, and it’s allowed me to engage with other people better. . . . I think it’s helped me to become more confident . . . [and] to have, I guess, less fear about what other people think.

Individual structural description: From conflict to positive patterns of relating.

This individual structural description emerged in the analysis of data from P1 and P7, from the following textural descriptions:

- P1 textural description: Becoming less aggressive: “As I’ve gotten older, martial arts for me has evolved in the fact that I don’t have to be as aggressive.”
- P7 textural description: From fighting to family: “The biggest thing I didn’t expect from martial arts is that you create a family. I did not expect that. I expected that you’re there to train and to learn how to defend yourself.”

Textural-structural description: Meaning evolved from fighting to relationship with self. This textural-structural description emerged from two individual structural descriptions. Table 14 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 14

Textural-Structural Description: Meaning Evolved from Fighting to Relationship with Self

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
From fighting to body mechanics and movement			X					X	
From learning as a means to learning as an end					X				

Individual structural description: From fighting to body mechanics and movement. This individual structural description emerged in the analysis of data from P3 and P8, from the following textural descriptions:

- P3 textural description: Learning about his own body: “A lot of people don’t realize that martial arts is not just you know kicking and punching and knowing how to defend yourself, it’s . . . the knowledge which you learn from martial arts, you learn body mechanics.”
- P8 textural description: Learning how the body works: “I guess I have a better understanding how the body works and what you can create with it.”

Individual structural description: From learning as a means to learning as an end. This individual structural description emerged in the analysis of data from P5, from the following textural description:

- P5 textural description: From wanting to learn everything to lifelong learning: “As you kind of progress up the ranks, you [realize] I’m never going to know everything. I’m always going to be learning. . . . So that’s kind of how it’s evolved from a white belt to my brown belt.”

Research Question 2 summary. Data indicated that participants perceived the present meaning of martial arts to be a source of community and confidence. Participants reported that martial arts had helped them to approach life changes, other people, and their own trauma with a greater feeling of confidence and self-efficacy. Additionally, some participants had achieved a sense of status and of belonging to a community or family in their dojo.

Data further indicated that participants had seen the meaning of martial arts change over time for them, from training in physical combat or self-defense to a discipline that positively impacted the way they related to themselves or other people. Participants felt more confident in their interactions with others and felt they had learned how to use and understand their own bodies better.

Research Question 3

Research question 3: What have participants noticed about the effects of physical training and movement and how has this influenced them? One composite description emerged during data analysis to answer the research question.

Composite description 5: Physical training is empowering for both body and mind. The answer to research question 3 is that participants described the effects of physical training and movement as empowering for body and mind. All participants

contributed data to this answer. The composite description emerged from three textural-structural descriptions identified during step (g) of the analysis. Table 15 indicates which of the participants contributed to each of these textural-structural descriptions.

Table 15

Composite Description 5: Contributing Participants

Textural-structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Increased awareness of mind-body connection		X	X	X	X	X	X		X
Enhanced sense of empowerment	X			X	X	X		X	X
Improved concentration		X			X			X	

Textural-structural description: Increased awareness of mind-body connection.

This textural-structural description emerged from two individual structural descriptions.

Table 16 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 16

Textural-Structural Description: Increased Awareness of Mind-Body Connection

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Awareness of mind-body connection leading to improved experience of body			X			X	X		X
Awareness of mind-body connection leading to greater calm		X		X	X				

Individual structural description: Awareness of mind-body connection leading to improved experience of body. This individual structural description emerged in the analysis of data from P3, P6, P7, and P9, from the following textural descriptions:

- P3 textural description: Awareness of mind-body connection as a way of coping with physical pain: “It gets me really thinking, going back when I was in that position, in that pain, ‘Okay, this is how I feel,’ my mind-body starts working together.”
- P6 textural description: Repetitive motion and trying to do it perfectly:
Just the repetitive practice, the body training, where you’re kind of going for perfection. . . . You’re supposed to do it thousands of times. . . . So,

you do get more of the attachment between what your mind and your body is doing. So, I feel like it's reconnecting my mind and my body.

- P7 textural description: Mind-body connection and Ki energy:

My teacher, he was very big on working with your Ki energy. The Ki, the natural energy within everything alive, . . . working with just some breathing, focusing that energy. . . . Once I started training, working on it with my teacher, I started to feel something different, more of a connection [between mind and body].

- P9 textural description: Awareness of the body's needs: "It's easy for your mind to say, 'Oh, I can't do this,' but the body, listen to your body, your body's going to let you know 'I'm tired, stop,' you know, or you need water because your muscle's cramping."

Individual structural description: Awareness of mind-body connection leading to greater calm. This individual structural description emerged in the analysis of data from P2, P4, and P5, from the following textural descriptions:

- P2 textural description: Lowering anxiety through mind-body connection:

When I first started I did not have a mind body connection because I was in that state, still, of that fear, that panic state of anxiety, and when I first came, it was actually very uncomfortable for me. . . . I didn't want that physical interaction with people [during training] but as the training progressed, I got more comfortable because . . . [instructor's name] would

hug me at privates [one-on-one training sessions] and attack me, I started to get more comfortable and that anxiety level went down.

- P4 textural description: Mind-body connection for getting back to normal when scared:

I mean just in the physical sense like you have to connect your mind to your body to figure out little things like staying in a fighting stance while you're moving. . . . When I feel triggered by things, it's given me the presence of mind to be able to be like, well, this feels really scary right now but. . . . I can just keep back to normal.

- P5 textural description: Mind-body connection for shutting out mental distractions: "All the time for work and being a mom and a wife, and when I get to train, that shuts off, and I get to train.... . . . We're here to train. This what we are going to focus on right now."

Textural-structural description: Enhanced sense of empowerment. This textural-structural description emerged from two individual structural descriptions. Table 17 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 17

Textural-Structural Description: Enhanced Sense of Empowerment

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Empowered to face obstacles	X			X				X	X
Empowered to assert self					X	X			

Individual structural description: Empowered to face obstacles. This individual structural description emerged in the analysis of data from P1, P4, P8, and P9, from the following textural descriptions:

- P1 textural description: Promoting positive thinking: “I do promote positive thinking regarding all aspects of martial arts as well as daily decisions, such as clear mind when making any decision that can affect one’s life from personal, financial, social, mental or physical decisions.”
- P4 textural description: Emotional stamina in the face of hardships: “I think . . . [martial arts] kind of helps you, like, build up stamina. Like not just in a physical way but, like, build up stamina to go through harder things, . . . build up, like, that emotional stamina to keep doing stuff.”
- P8 textural description: Fearing no one:

[martial arts] gave me the confidence to keep doing anything I want to do.
 . . . I have enough confidence I don't have to worry about it, you know.
 My wife doesn't like it, but like I said, I don't really fear anybody that's in
 front of me.

- P9 textural description: No feeling of vulnerability when walking down the street:

No one picks on me. . . . I no longer feel I'm alone if I'm if I'm walking
 down the street. . . . I'm more sure of myself, but more capable of
 knowing that I'm going to hurt you just as much as you try to hurt me.

Individual structural description: Empowered to assert self. This individual structural description emerged in the analysis of data from P5 and P6, from the following textural descriptions:

- P5 textural description: Taking time for self:

[martial arts is] what I want to do, it's my goals, and it doesn't have
 anything to do with anybody else. It's how hard I've worked and how
 much I want to win. It's kind of all about me. It's like my own selfish
 moment that I get to have.

- P6 textural description: Comfortable with own body:

Honestly, when I started martial arts, I didn't even realize this, but it was
 really hard for me to look in the mirror. . . . I think that has to do with my
 past where I've just really felt uncomfortable in my own body, and I don't

like to think about it and look at it . . . [but] I can do that now and I'm not uncomfortable with it.

Textural-structural description: Improved concentration. This textural-structural description emerged from one individual structural description. Table 18 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 18

Textural-Structural Description: Improved Concentration

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Improved concentration		X			X			X	

Individual structural description: Improved concentration. This individual structural description emerged in the analysis of data from P2, P5, and P8, from the following textural descriptions:

- P2 textural description: More focused: "I started becoming more focused at stuff and not kind of scatterbrained. Which I always felt that was part of the anxiety is being kind of scatterbrained."
- P5 textural description: Stripping away other identifies and focusing on essential self: "I'm not a mom, I'm not a wife, I'm not an employee, I get to be just me."

- P8 textural description: Putting distractions away: “I put it away, I just turn it off as soon as I walk through the door. I don’t worry about the bills, it’s not fair. These people are here to learn.”

Research Question 3 summary. Data indicated that the effect of physical training and movement was empowerment for both body and mind. Participants were empowered through an enhanced awareness of the mind-body connection, which allowed them to improve their use of their own bodies and to maintain calm. Participants also experienced an increased sense of empowerment related to facing obstacles and to asserting themselves. Lastly, participants experienced improved concentration as an effect of physical training.

Research Question 4

Research question 4: What aspects of participants’ lives have been affected by their martial arts training? One composite description emerged during data analysis to answer the research question.

Composite description 6: Enhanced self-efficacy. The answer to research question 4 is that participants described the effect of martial arts training on their lives as enhanced self-efficacy. All participants contributed data to this answer. The composite description emerged from three textural-structural descriptions identified during step (g) of the analysis. Table 19 indicates which of the participants contributed to each of these textural-structural descriptions.

Table 19

Composite Description 6: Contributing Participants

Textural-structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Feeling capable	X	X	X			X	X		X
Coping with stress					X	X		X	
Sense of purpose	X			X			X		

Textural-structural description: Feeling capable. This textural-structural description emerged from two individual structural descriptions. Table 20 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 20

Textural-Structural Description: Increased Awareness of Mind-Body Connection

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Increased self-confidence	X	X	X			X			X
Sense of achievement							X		

Individual structural description: Increased self-confidence. This individual structural description emerged in the analysis of data from P1, P2, P3, P6, and P9, from the following textural descriptions:

- P1 textural description: Nothing he can't do:

If there's something in the way it's just like a road block, you just go around it if you can't go through it. . . . [martial arts has] affected me in the fact that I know there's nothing that I can't do, nothing.
- P2 textural description: Control over life: “[martial arts] gave me more control over the situation, because before in my life, I didn't feel I had control over anything going on in my life. It was just getting ready for for the next thing to happen.”
- P3 textural description: Increased confidence: “Martial arts, you know, it affected me in a good way, it boosted up my confidence but not in a cocky way.”
- P6 textural description: Taking things as they come: “[martial arts has] really helped me take things as they come, basically, instead of trying to solve problems that I can't solve.”
- P9 textural description: Able to speak confidently:

I used to be nervous. . . . I stutter, but I used to really stutter. . . . I had a hard time being around people. . . . My confidence wasn't there. But learning martial arts has helped me. I'm able to talk, I'm able to teach in public. . . . It built up my confidence.

Individual structural description: Sense of achievement. This individual structural description emerged in the analysis of data from P7, from the following textural description:

- P7 textural description: First real sense of achievement:

I was always the bad student. I never did my work. I've never finished any of the projects. High school I barely graduated. . . . I'll tell you the truth, when I came, I didn't think I was going to stay. I didn't think I was going to finish. And the day my teacher handed me a black belt, that told me that I had succeeded in something.

Textural-structural description: Coping with stress. This textural-structural description emerged from one individual structural description. Table 21 indicates which of the participants contributed to this textural-structural description and to the structural description that composed it.

Table 21

Textural-Structural Description: Coping with Stress

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Coping with stress					X	X		X	

Individual structural description: Coping with stress. This individual structural description emerged in the analysis of data from P5, P6, and P8, from the following textural descriptions:

- P5 textural description: Coping with stress through distraction: “My husband was diagnosed with lupus and ITP, and both of us relied heavily on the mat for distraction.”

- P6 textural description: Focusing on what can be done:

I would just stew on or ruminate on, like, stuff. . . . I would just overthink things, like, ridiculously. . . . Now I’m just, like, there’s nothing I could do now. . . . Like, if something can be done now, I’m gonna do it now, and if there isn’t something that can be done now, then I have to let it go. . . . I think martial arts has really had me look at it that way.

- P8 textural description: Beating the bag:

I think it would be a lot harder if I didn’t study [martial arts] and dealt with it, you know. I remember sometimes getting so mad, and you go to the studio, and just beating the bag when I was younger helped a lot.

Textural-structural description: Sense of purpose. This textural-structural description emerged from one individual structural description. Table 22 indicates which of the participants contributed to this textural-structural description and to the structural description that composed it.

Table 22

Textural-Structural Description: Sense of Purpose

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
A focal point	X			X					
A standard to uphold							X		

Individual structural description: A focal point. This individual structural description emerged in the analysis of data from P1 and P4, from the following textural descriptions:

- P1 textural description: Breathing martial arts: “I live, eat, breathe, you know, think karate. I mean this is my life, this is what I do.”
- P4 textural description: A stable focal point: “[martial arts] kind of gives me, like, a stable point or focus point or something.”

Individual structural description: A standard to uphold. This individual structural description emerged in the analysis of data from P7, from the following textural description:

- P7 textural description:
[martial arts is] all about being a good person. It has rules how to conduct yourself and when and how to use your self-defense discipline, and so me

learning that and now teaching it, it put me in a place where I understand where I'm supposed to be.

Research Question 4 summary. Data indicated that the aspect of participants' lives that was affected by martial arts training was their sense of self-efficacy, which was positively impacted. Participants reported that their self-efficacy was enhanced through increased feelings of capability, self-confidence, and achievement. Self-efficacy was also enhanced through an increased ability to tolerate or cope with stress, when stress was manifested in rumination, fear for the future, or rage. Lastly, martial arts had enhanced self-efficacy by giving a sense of purpose, either by providing a stable focal point for effort and concentration or by providing a standard of conduct to be upheld.

Research Question 5

Research question 5: What similarities have the participants noticed between therapy and martial arts? What effect, if any, have these similarities and differences had on participants' understanding of their traumatic experience? One composite description emerged during data analysis to answer the research question.

Composite description 7: Empathy leading to guidance and comfort. The answer to research question 5 is that participants described martial arts as similar to therapy in that both involved empathy leading to guidance and comfort. All participants contributed data to this answer. The composite description emerged from two textural-structural descriptions identified during step (g) of the analysis. Table 23 indicates which of the participants contributed to each of these textural-structural descriptions.

Table 23

Composite Description 6: Contributing Participants

Textural-structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Martial arts and therapy both lead to guidance and comfort		X	X	X	X	X		X	X
Martial arts and therapy both involve empathy	X						X		

Textural-structural description: Martial arts and therapy both lead to guidance and comfort. This textural-structural description emerged from two individual structural descriptions. Table 24 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 24

Textural-Structural Description: Martial Arts and Therapy Both Lead to Guidance and Comfort

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Providing guidance for recovery		X	X		X	X			X
Using the body is therapeutic				X				X	

Individual structural description: Providing guidance for recovery. This individual structural description emerged in the analysis of data from P2, P3, P5, P6, and P9, from the following textural descriptions:

- P2 textural description: Learning to step back:

If there's something traumatic that happens, she'll [therapist] come back into the picture and be, like, "Alright, let's get this straightened out." . . . Now, I've been training in the martial arts and having my therapy. If I'm in the same situation, I'm still going to have those emotions, being upset, they're going to get triggered, but I'm going to be able to step back and say this is not a hot life-or-death situation.

- P3 textural description: Asking advice:

I got a great instructor. He's 60 years old, he's been around. You know, every time we have questions—I mean, I'm not saying he's a therapist—but sometimes, you know, I come to him and talk: “Hey . . . [instructor's name], this is what's going on,” and he'll tell me, “Well, you have to see it this way, you know.”

- P5 textural description: Martial arts more empowering than therapy: “It's that sense of control that you get when you study any sort of martial art. That is more empowering than someone telling you here's what you should do.”
- P6 textural description: Changing outlook:

You're just kind of taking . . . [therapy] in and doing what they tell you, but on the one hand, it is changing kind of your outlook. . . . So martial arts is [also] one of those things where the more you learn, the more it's going to change your outlook.
- P9 textural description: Making people feel at home: “Oh, there's similarities, yes [between martial arts and therapy]. The approach, making . . . the person [patient/trainee] feel at home and at ease, making them love themselves, making them understand themselves, yes, it's hand in hand.”

Individual structural description: Using the body is therapeutic. This individual structural description emerged in the analysis of data from P4 and P8, from the following textural descriptions:

- P4 textural description: Somatic experiencing:

They say your body stores all of the memory like the physical memories of . . . [trauma], and so, in somatic experiencing, you kind of role play, and you just let your body do whatever you wanted to do at that moment. And you do it over and over and over again, until you finally start to kind of release that from your body. And so, I find that a lot in martial arts.

- P8 textural description: Therapeutic to spar: “Coming in here and fighting, getting beat up and getting hit. . . . It was really a tough, tough deal. But, you know, it makes you a better person, I think.”

Textural-structural description: Martial arts and therapy both involve empathy.

This textural-structural description emerged from one individual structural description.

Table 25 indicates which of the participants contributed to this textural-structural description.

Table 25

Textural-Structural Description: Martial Arts and Therapy Both Involve Empathy

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Empathizing with people in pain	X						X		

Individual structural description: Empathizing with people in pain. This individual structural description emerged in the analysis of data from P1 and P7, from the following textural descriptions:

- P1 textural description: Understanding others' pain:

If someone came to me, and they do all the time, [saying], "Oh man, oh my god, last night, oh man, and I just cried," and all they're grabbing their face you know, I've gotta be able to put myself in that position and feel that pain, understand that pain.

- P7 textural description: Gaining perspective through empathy: "Talking to somebody that has no relation, doesn't pick the side, it helps, . . . seeing it from another person's point of view."

Research Question 5 summary. Data indicated a similarity between therapy and martial arts in that both involve empathy leading to guidance and comfort. Participants noted that martial arts instructors are sometimes asked for advice, like therapists, and that in giving this advice they need to practice empathy and place themselves in the situation of the person seeking guidance. Like therapy, martial arts also led to guidance and comfort for most participants, as when learned techniques such as controlled breathing and repetitive motion had therapeutic efficacy. Only one participant (P5) perceived therapy and martial arts training as differing significantly in their effects. P5 believed that therapy and martial arts both have the goal of furnishing the learner with guidance but that therapy disempowers the patient through the appearance of criticism, whereas martial arts empowers the trainee through accomplished feats of physical dexterity and strength.

Research Question 6

Research question 6: What is each participant's overall experience with training in the martial arts? One composite description emerged during data analysis to answer the research question.

Composite description 8: Martial arts are a transformatively positive experience. The answer to research question 6 is that participants described martial arts overall as a transformatively positive experience. All participants contributed data to this answer. The composite description emerged from one textural-structural description identified during step (g) of the analysis. Nine out of nine participants contributed to the textural-structural description.

Textural-structural description: Martial arts training was life-changing. This textural-structural description emerged from six individual structural descriptions. Table 26 indicates which of the participants contributed to this textural-structural description and to the structural descriptions that composed it.

Table 26

Textural-Structural Description: Martial Arts Training Was Life-Changing

Structural description	Contributing participants								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Being a mentor	X				X		X	X	X
Having an achievement			X	X			X		
Increased confidence			X	X		X			
Being a better parent		X			X				
Recovering from trauma		X				X			
Stopping substance abuse		X							

Individual structural description: Being a mentor. This individual structural description emerged in the analysis of data from P1, P5, P7, P8, and P9 from the following textural descriptions:

- P1 textural description: Imploring students:

[martial arts] saved my life. It allowed me to achieve, it allowed me to believe in me. . . . I have to get up and implore upon . . . [trainees] on the importance of training and focus and paying attention and staying on task. . . . I can't touch them all, but if I can touch one, I've done my job.

- P5 textural description: Becoming better through leading by example:
I think [martial arts] has made me a better person. . . . I think it's made me a better life, and I do have a unique opportunity to influence a bunch of the next generation. . . . I've been teaching the littles a lot—to kind of keep at least mentally being, and getting on the mat, and have that disconnect from the outside world, and just focus on judo and and teaching the kids.
- P7 textural description: Growing by helping others grow:
[martial arts is] something that you're going to stick with for your whole entire life because you understand it's going to grow you as a person. As in growing you, you're able to branch out and help others grow. . . . I really believe I'm going to end up passing on something to my students or to my children, if I ever have children—to stick to martial arts.
- P8 textural description: Instilling good values: “I think if you try to instill good values We always gather around and if anybody wants to pray over something it's what we do, we do it all the time. So, I think that's really important.”
- P9 textural description: Not a leader but a role model: “I'm still learning, still, still learning. . . . [I'm] not a leader but a role model. We're all role models.”
- P9 textural description: Helping others recover from trauma: “I had one brother and sister [as my trainees] that witnessed their dad killing their mom and then killing himself in front of them. That was an interesting case, and [martial arts] helped. It helped them out tremendously.”

Individual structural description: Having an achievement. This individual structural description emerged in the analysis of data from P3, P4, and P7, from the following textural descriptions:

- P3 textural description: A source of identity: “Martial arts, especially American Kenpo, has made me be who I am today. . . . When I hand out resumes, I make sure my martial arts is on there.”
- P4 textural description: Seeing the progression toward greater strength:
I think [martial arts has] been probably one of the most beneficial things I’ve ever done. Even right now, like, I feel like it’s been more beneficial than therapy just because, like, I can see the progress. . . . It gave me a sense of stability, and it gave me a sense of, like, okay, I’m a little bit stronger.
- P7 textural description: Becoming a sensei:
It felt amazing [to become a sensei]. It felt like a journey in life. It’s not just getting into a seasonal sport. It’s not just getting in and hanging out with friends until you’re tired of it. It’s something that you’re going to stick with for your whole, entire life.

Individual structural description: Increased confidence. This individual structural description emerged in the analysis of data from P3, P4, and P6, from the following textural descriptions:

- P3 textural description: Building confidence is fundamental: “The fundamentals of martial arts is that you build self-confidence.”

- P4 textural description: Confidence in stamina: “It gave me a sense of stability, and it gave me a sense of, like, okay, I’m a little bit stronger, like I can last a little bit longer.”
- P6 textural description: Increasing intellectual confidence:

Everything I’ve learned, I just feel like it’s helping my mind grow, like, I didn’t realize until I started going, but they say karate is 90% mental, and I’m, like, well, that’s weird. I mean I know you have to memorize these complicated moves and stuff, but now I’m starting to understand what they mean with the mental part.

Individual structural description: Being a better parent. This individual structural description emerged in the analysis of data from P2 and P5, from the following textural descriptions:

- P2 textural description: Able to cope with parenting:

[Before martial arts] it was hard for me even to take care of my son at times, because I’m in such agitated panic state, and he would come, you know, like typical kids come at me, like, “Mom, I smashed my finger,” and you fly into that fight-or-flight reflex.
- P5 textural description: A better mom: “I think I’m a better mom [with martial arts].”

Individual structural description: Recovering from trauma. This individual structural description emerged in the analysis of data from P2 and P6, from the following textural descriptions:

- P2 textural description: Escaping negative life patterns:

It was a life cycle I was going through [of entering into abusive relationships before martial arts]. . . . I don't know where I would be without my training here at the dojo. I mean, when I think back of where I was at when I started, and I realize what was going on, it would just be a really ugly picture.

- P6 textural description: Reconnecting with body:

Going through stuff like being raped and all that, I feel like I did dissociate a little bit from my body, and I really just wasn't interested in connecting with my body. . . . I think karate has really helped me get to know it again.

Individual structural description: Stopping substance abuse. This individual structural description emerged in the analysis of data from P2, from the following textural description:

- P2 textural description: Alcohol abuse before martial arts: "I was a bad alcoholic, you know [before martial arts]. I was just in a bad, unhealthy state of mind where it was hard for me even to take care of my son."

Research Question 6 summary. Data indicated that participants experienced martial arts overall as a transformatively positive experience. Martial arts training had changed participants' lives by allowing them to be mentors, by allowing them to attain a sense of achievement, by increasing their confidence, by helping them become better parents, by helping them recover from trauma, and by helping one participant stop substance abuse.

Summary

Six research questions were used to guide the study. The findings for each question are summarized as follows.

Research Question 1: What is each participant's reason(s) for choosing to become involved in the martial arts? What was the reason(s) to continue training in the martial arts? Results indicated that participants chose to start training in martial arts as a result of feelings of personal inadequacy caused either by a perceived inability to stand up to bullies or a lack of confidence in their ability to assert themselves in necessary ways, such as going out without anxiety, speaking in front of others, and undergoing a necessary medical procedure. Results further indicated that participants' decision to continue to train in martial arts resulted from their perception that martial arts was helping them to accomplish their personal goals. Personal goals that martial arts was perceived as promoting included coping with or managing anxiety and depression, coping with fear of assault, and achieving livelihood and position (e.g., as an instructor or paid clerical worker in a dojo).

Research Question 2: What is each participant's subjective understanding of the meaning of martial arts in his or her life? How has this understanding changed over time? Data indicated that participants perceived the present meaning of martial arts to be a source of community and confidence, and that participants had seen the meaning of martial arts change over time for them, from training in physical combat or self-defense to a discipline that positively impacted the way they related to themselves or other people.

Research Question 3: What have participants noticed about the effects of physical training and movement and how has this influenced them? Data indicated that the effect of physical training and movement was empowerment for both body and mind. Participants were empowered through an enhanced awareness of the mind-body connection, which allowed them to improve their use of their own bodies and to maintain calm. Participants also experienced an increased sense of empowerment related to facing obstacles and to asserting themselves. Lastly, participants experienced improved concentration as an effect of physical training.

Research Question 4: What aspects of participants' lives have been affected by their martial arts training? Data indicated that the aspect of participants' lives that was affected by martial arts training was their sense of self-efficacy, which was positively impacted. Participants reported that their self-efficacy was enhanced through increased feelings of capability, self-confidence, and achievement. Self-efficacy was also enhanced through an increased ability to tolerate or cope with stress, when stress was manifested in rumination, fear for the future, or rage.

Research Question 5: What similarities have the participants noticed between therapy and martial arts? What effect, if any, have these similarities and differences had on participants' understanding of their traumatic experience? Data indicated that a similarity between therapy and martial arts was that both involved empathy leading to guidance and comfort. Participants noted that martial arts instructors were sometimes asked for advice, like therapists, and that in giving this advice they needed to practice empathy and place themselves in the situation of the person seeking guidance. Like

therapy, martial arts also led to guidance and comfort, as when learned techniques such as controlled breathing and repetitive motion had therapeutic efficacy.

Research Question 6: What is each participant's overall experience with training in the martial arts? Data indicated that participants experienced martial arts overall as a transformatively positive experience. Martial arts training had changed participants' lives by allowing them to be mentors, by allowing them to attain a sense of achievement, by increasing their confidence, by helping them become better parents, by helping them recover from trauma, and by helping one participant stop substance abuse.

Chapter 5 includes interpretation and implications of these results.

Chapter 5: Discussion, Conclusions, and Recommendations

This qualitative phenomenological study was designed to explore the lived experiences of martial artists who shared the commonality of experiencing a traumatic event. The objective was to explore whether training in the martial arts can be used as an effective intervention in the treatment of interpersonal trauma. Guided by six research questions, I uncovered key findings.

More than 90% of participants reported that martial arts training helped remedy feelings of personal inadequacy caused by a perceived inability to stand up to bullies. In addition, results indicated that participants' decision to continue to train in martial arts resulted from the perceived belief that martial arts was helping them to accomplish their personal goals. Findings also indicated that martial arts had helped participants to approach life changes, other people, and their own trauma with a greater feeling of confidence and self-efficacy. Participants reported being empowered through an enhanced awareness of the mind-body connection, which allowed them to improve their use of their bodies and to maintain calm. Data from Research Question 4 indicated that self-efficacy was one of the main areas of participants' lives that was positively impacted. Participants reported that their self-efficacy was enhanced through increased feelings of capability, self-confidence, and achievement. Participants also noted that martial arts instructors were sometimes asked for advice, like therapists, and that in giving this advice instructors needed to practice empathy and place themselves in the situation of the person seeking guidance. Lastly, martial arts training changed participants' lives by allowing them to be mentors, by allowing them to attain a sense of achievement, by increasing

their confidence, by helping them become better parents, by helping them recover from trauma, and by helping one participant stop substance abuse.

Interpretation of the Findings

The findings showed that participation in martial arts for participants experiencing a traumatic event had a positive impact in numerous ways that aligned with the biopsychosocial model used as the framework for this study. This model was found to be accurate in identifying how interpersonal trauma extended from the function of the body, which was demonstrated in participants expressing physical improvements; participants expressing improvements in self-control, emotional functioning, and thought processing; and participants admitting that they viewed the martial arts instructor the same way they would have viewed a therapist (see Borrell-Carrio et al., 2004; Henningsen, 2015). The biopsychosocial model was suitable in understanding the relationship between training in the martial arts and its effects on the healing from interpersonal trauma. The findings from this study confirmed this model in suggesting that the body and mind connection is positively impacted by participation in martial arts.

The results of this study affirmed to the mind-body connection demonstrated by the biopsychosocial model by showing mental and physical improvements to participants. Engel (1980) asserted that the psychological influence in the healthy functioning of the body is as important as the physiological influence. All of the participant in the current study spoke about their belief that there was a positive impact on their mental conditions as a result of their participation in martial arts.

The purpose of this study was to explore whether martial arts training was a positive and impactful alternative treatment for interpersonal trauma. The findings of this study affirmed findings from other studies. Fonagy et al. (2008) found that role play in martial arts allowed an individual to process negativity in a nondestructive way while also reinforcing a secure attachment experience with human relationships. Findings from the current study indicated that participants were successful in overcoming their traumatic experiences in large part due to the way martial arts helped them process destructive mind-sets of personal inadequacy through an increase of self-efficacy, self-actualization, and resilience.

Findings from the literature also indicated that, from a psychoanalytical perspective, training in the martial arts provided a counteractive emotive proficiency that assisted in embodiment through connection of a safe, powerful, and predictable role model (Fonagy et al., 2008). This was relevant to the current study because it was validated by each participant in their belief that martial arts helped them improve their emotional states. Like Herman's model of stages of trauma recovery, martial arts training focuses on safety, personal development, and enhancement of cognitive skills (Fonagy et al., 2008). Fonagy et al.'s (2008) findings were consistent those from Anderson and Hernandez (2015), who identified that, through training, martial artists not only begin to feel safer but are also able to experience a reenactment of violent events with the understanding and feeling that they are no longer helpless. Findings from the current study showed that participants were able to take control of their circumstances, which enhanced their sense of empowerment.

The findings from this study were also consistent with what Bell (2008) described as martial artists using breathing exercises as a form of meditation. Bell found these exercises reduced aggression and fear and improved concentration. In the current study, participants reported reduced aggression and controlled emotions. Bell further explained that the mind is an emotional state and the expression of an emotional state is observed through breathing patterns, which Bell described as the following: deep sighing respiration (depression), shallow panting (panic), breath holding (concentration), irregular breathing (distress), and short quick inspiration (surprise). Through training in the martial arts, students learn to regulate their breathing to control their thoughts, emotions, and behaviors (Bell, 2008). Participants in the current study experienced this in learning how to control their breathing, which allowed them to experience benefits of concentration and to combat depression.

A rather surprising finding of this study was how much of a therapeutic impact martial arts had on the participants. In alignment with research by Weiser et al. (1995) and Aindow (2013), participants in the current study reported that martial arts provided them with active and physical paths for discovery and expressions of their emotions. Weiser et al. argued the teachings and values of martial arts promote assertiveness, empathy, courage, humility, responsibility, effective communication, gentleness, respect for self and others, and continuous self-improvement. These effects of martial arts training might help to explain how the participants in the current study were able to heal from and overcome interpersonal trauma. For example, participants reported an increase in self-efficacy, which increased feelings of capability, self-confidence, and achievement.

This also led to an increased ability to cope with and tolerate stress and fear and provided participants with a sense of purpose. Additionally, participants experienced an increased sense of empowerment through an enhanced awareness of the mind-body connection allowing them to better understand their bodies and maintain a sense of calmness. In a study conducted by the National Institutes of Health (NIH, 2008), researchers focused on the mind-body connection and found a positive influence between emotional, mental, social, spiritual, and behavioral factors and overall health. Martial arts training consists of exercises that focus on the mind-body connection to improve mental health, emotional well-being, and stress reduction (Froeliche et al., 2006). The physiological symptoms of interpersonal trauma consist of severe and persistent symptoms of somatic distress, panic attacks, states of hyperreactivity, and dysphoric mood (Hinton & Kirmayer, 2013). These symptoms are often followed by headaches, fatigue, difficulties with sleep and concentration, being easily startled, and muscle tension and pain (Hinton & Kirmayer, 2013). Participants in the current study spoke about how martial arts helped them overcome stress and dysphoric moods. Martial arts training helps people improve things such as balance, sleep, musculoskeletal and cardiorespiratory health, immune response, cognitive functioning, self-care, and reduction of stress (Cao et al., 2011; Chen et al., 2016). Additionally, researchers found that elements in martial arts are similar to those in dance arts and healing arts, which produce a reduction in somatic symptoms such as fatigue in individuals who suffer from depression and anxiety (Cammarata et al., 2012; Jones et al., 2014). In the current study, reduced fatigue was one of the benefits experienced by participants. Participants also reported experiencing a reduction in stress

and fatigue and improvements in not only mental but also physical well-being. This was significant due to the physiological effects of traumatic experiences encountered by the participants in this study.

In addition, participants also experienced post-traumatic symptoms as explored by Backholm et al. (2015), who identified the psychological symptoms following a traumatic event to consist of flashbacks; nightmares; night terrors; avoidance; negative change in cognition and mood; persistent negative thoughts about self, others, and the world; aggression; self-destruction; and hypervigilance. These symptoms were not uncommon for participants in the current study who discussed the negative thoughts they experienced. Many of the participants stated that martial arts proved to be therapeutic by allowing them to rid themselves of negative thoughts. An additional finding that was aligned with Bell and Martin (2012) research was overcoming fear through self-efficacy. Participants expressed their desire and subsequent success in this regard. Martial arts training focuses on the connection between the mind, body, and spirit and promotes physical strength, mental clarity, and overall positive energy (Benson et al. 2014). Ball and Martin (2012) found that an increase in self-defense self-efficacy also resulted in an increase in confidence and reduction in fear associated with sexual victimization among women. Asencio et al. (2014) found that martial arts participants were able to overcome their fears through greater self-esteem and a decrease in feelings of vulnerability and victimization.

Another area of positive impact of martial arts training is reducing anger, which is a typical response to stressful situations (Anderson & Hernandez, 2015). Research has

indicated that a traumatic event can elevate the victim's level of anger to an unhealthy state, producing aggressive behavior toward self or others. In alignment with previous research, I found that traditional martial arts taught the participants the psychological, spiritual, and nonaggressive aspects of the art, which proved to reduce aggressive tendencies (see Anderson & Hernandez, 2015). This reduction of anger among the participants seemingly resulted from what researchers described as mood stability. Du et al. (2014) argued that not only does martial arts provide a method of fitness but its internal focus on training allows for a positive influence in mood, an element in the healing from interpersonal trauma. Participants in the current study were able to positively regulate and control their moods. Some of this emotional regulation was due to mindfulness, which consists of attention and awareness, external events, ethical mindedness, cultivation, and present centeredness (see Kazemi & Nilsson, 2016). The findings from the current study were consistent with this idea, which was demonstrated by participants learning the techniques of focus and concentration. Participants were able to learn focus through intentional self-control when learning new techniques. The literature also indicated the problem of isolation following a traumatic experience (Adler et al., 2013). Participants in the current study were able to develop a healthy support system among people taking the martial arts training with them. This allowed participants to avoid being isolated.

Finally, participants of the current study developed skills of communicating better with others, which was in alignment with what was described in previous research. Greydanus and Palermo (2011) claimed that training in karate, a traditional form of

martial arts, has proven to elicit development with facial expressions, gestures, and emotional aspects of speech, both verbal and nonverbal, which are all key elements of effective communication and interactions.

Limitations of the Study

The primary limitations of this study were consistent with what were initially thought would be the case in Chapter One. The first limitation was that the research focused solely on participants who were active practitioners in a form of martial arts and started training after sustaining a traumatic event and/or experience. This was an apparent limitation of the study in that it limited the scope of who could be targeted for the study. Another way this was a limitation is that it did not allow for others to be tested to see if similar benefits were experienced. However, it also served a benefit because it allowed me to specifically concentrate on individuals who experienced a traumatic event and the impact of martial arts in their lives.

This study also focused on participants' subjective experiences of their traumatic event and their individual perceptions of how martial arts influenced their healing process. Research that is qualitative such is often not a true representation of the overall trauma population. With this said, generalization was not a goal in this study but rather an exploration of an alternative method for dealing with trauma by a select group of participants.

Although it was thought my interest in martial arts would serve as a limitation, the findings of the study proved to be consistent and in alignment with previous research on the study. Furthermore, I relied on the perceptions and experiences of all participants as

reported. The interviews from the digital voice recorders were transcribed verbatim and emailed to participants for verification. Transcripts were read multiple times to ensure accuracy of data and through continuous self-reflection to address any personal bias perceptions. Therefore, the findings of the study appeared to be trustworthy for future practice and exploration.

Recommendations

This study was significant because it addressed a gap in literature in understanding the relationship of training in the martial arts and healing of interpersonal trauma. With the exception of the one study by Bailey (2011), there was no prior research or literature that addressed the psychological effects of martial arts after sustaining a form of interpersonal trauma and its possible benefits in the healing of trauma and positive mental health. The findings of this study were also significant in relation to providing research that offers a more comprehensive understanding of the effects of training in the martial arts among a more diverse population subsequent to a traumatic event. With this being said, the hope is that future research studies will offer rigorous research methods to validate and build upon the results of this investigation. Forthcoming research might consider the following questions:

- How do ethnic and gender concerns impact the affects of martial arts training in overcoming a traumatic experience?
- Should martial arts be considered as a universal method of treatment for trauma victims in addition to other treatment methods?

- In what ways do martial arts training impact mental health concerns not associated with traumatic experiences?
- How does impact of martial arts training among trauma victims vary by age of participants?
- What is the impact of martial arts training among children that have experienced a traumatic event?
- What other areas could martial arts training positively impact individuals in society?

This study demonstrated that martial arts training could at the very least have very wide-ranging consequences. Future research would go a long way in understanding the potential applications of martial arts training in the lives of people.

Implications

The findings for the first research question showed that participants had numerous reasons for wanting to engage in martial arts training. First, research findings suggested they started training out of a personal sense of inadequacy. Every participant with the exception of Participant 5 stated this. This was important because of the influence with not only previous research but also the fact that the participants shared this sentiment as a result of their traumatic experience. Although this could mean several things, it would seem that the most important is that martial arts could be a positive method for helping individuals, not just trauma victims overcome a sense of perceived inadequacy. If this is the case, it would therefore be a benefit for not only more research to be conducted on the extent of the impact of martial arts training outside trauma victims, but martial arts

training could and possibly should be recommended as a solution to victims of trauma everywhere. The second reason stated for wanting to take martial arts training was to fulfill a personal goal in areas such as coping with depression, fear of assault, and achieving position and livelihood. This was important because it suggested the value of martial arts training for helping individuals cope with destructive forces such as depression and fear. Due to these issues having effects that extend well beyond trauma experiences, this finding is important because of its vast applicability towards other areas. For example, there are children that struggle with the inability to control their emotions in the classroom. If the findings in this study holds true across spectrums, martial arts training could be a recommended tool to help those children concentrate. Another area is depression and mental health, which are big, issues in America today. Findings in this study suggested that martial arts training had a significant mental impact. Therefore, martial arts training could also prove to help individuals deal with both mental health and depression.

The findings for the second research question seemed to make sense of participants' motivations described in the first research question. Participants were assessed on their understandings of the perceived benefits of martial arts training. The findings revealed the thought that martial arts was a source of community and confidence. This was meaningful because it provided context for why a person may consider martial arts training upon experiencing a traumatic event, which is especially important when trying to find solutions that help guard against isolation. This finding also demonstrated that martial arts training extended well beyond fighting, which is important

because it because of its resultant application to other areas outside of fighting skills. The vital implication here is to identify individuals who lack confidence and tend to operate in isolation rather it be in schools, community settings or even at work and recommend martial arts training to them. Simply creating awareness of the benefits could prove helpful in this regard for individuals who may be seeking out solutions.

The finding for the third research question was that martial arts training was empowering to both the body and the mind in that physical training and movement had dual impact. This was important because martial arts not only helped participants improve their physical bodies but their mental capacities also. The reality of this finding is also significant because it offers an alternative to helping individuals outside of traumatic experiences a solution that could improve both their bodies and minds at the same time. In a larger context, martial arts can be used as a physical component within educational settings. There seems to be a lot of talk about kids staying fit and the issue of obesity. Therefore, with the multi benefit of martial arts training that has been identified in this research, it would seem prudent for schools across the country to incorporate this training. Not only will kids be more fit, but they will also have more respect and confidence also.

The fourth research question showed that participants receiving martial arts training developed a heightened level of self-efficacy, meaning they were more capable of dealing with stress, feeling capable and having a sense of purpose. This was important because each participant was at a sensitive juncture in his or her life. Martial arts helped each person improve in ways they were lacking. The implications for this are also

valuable as it relates to using martial arts to help individuals who are deficient in self-efficacy. More specifically, this information should be used as a potential strategy to combat low self-worth and stress.

The dominant finding for question five revealed that participants developed a greater sense of empathy that led to guidance and comfort. In this particular finding, research showed that participants believed martial arts as being similar to therapy in that both involved empathy leading to guidance and comfort. This was important because of its application to those experiencing a great deal of sadness and loss in their lives. Martial arts could be a solution for providing comfort to individuals experiencing something similar. Learning techniques such as controlled breathing and repetitive motion could be valuable to individuals having difficulty controlling their emotions. The big implication for this is the educational component for therapists. If therapists are equipped with research such as this, they will be able to recommend martial arts training as a potential strategy to be employed by their clients.

Lastly, findings from question six suggested that martial arts was transformative and positive for the participants. Participants expressed that martial arts helped them be a mentor, have an achievement, increase confidence, be a better parent, recover from trauma, and stop substance abuse. This, in essence suggests that martial arts helped change their lives after experiencing a traumatic event. This is important because of its applicability to nearly any other area of life that a person wants to improve.

Conclusion

This chapter provided a detailed discussion of the importance and meaning of the findings, with a focus on the interpretation of the findings as it relates to a review of the literature, the limitations of the study, recommendations for future research, and the implications. For this study, a qualitative, phenomenological research design was used in order to present the research questions and analyze the results fully. This proved especially effective for exploring the impact of martial arts on participants experiencing a traumatic life event. Also, in utilizing a semi-structured interview approach, I was able to attain a comprehensive understanding of the effects of training in the martial arts in relation to the healing of interpersonal trauma. This research is valuable to victims of trauma and could potentially have vast impact in a multitude of areas outside traumatic experiences. Chapter 5 concludes this qualitative study.

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Appendix A: Research Study Agreement

Instructor/Owner Name: _____

Title: _____

Name of Business: _____

I, _____ instructor and/or owner of _____ confirm I have been informed of the study conducted by Alexandro G. Vargas and have an understanding of the purpose of this study. By signing this agreement, I understand, I agree to allow him to post flyers and recruit participants at my place of business for the research study entitled *The Psychological Effects of Training in the Martial Arts After Interpersonal Trauma: A Qualitative Analysis*. I agree to announce the study prior and after each class as needed. I understand there will be no personal gain or monetary compensation for participation in this study aside from the contribution on expanding and furthering research of the psychological effects of training in the martial arts and interpersonal trauma.

Print Name: _____

Signature: _____

Date: _____

Appendix B: Participant Recruitment Flyer

Research Participants Needed



Martial Arts after Interpersonal Trauma

My name is Alex Vargas, a doctoral student in the clinical psychology program at Walden University. I am also a 1st degree black belt in Kenpo Karate and have trained in other styles such as Tae Kwon Do, Goju Ryu Karate, Muay Thai, and Brazilian Jiu Jitsu. I am conducting a dissertation research study focused on the effects of martial arts training after sustaining a form of interpersonal trauma. This is a great opportunity to contribute and expand on research in martial arts and its potential benefits for the healing of trauma and positive mental health.

All participants must have experienced or witness a form of interpersonal trauma, some examples listed below:

- Physical abuse
- Sexual abuse
- Emotional/verbal abuse

All participants must meet the below criteria:

- At least 18 years of age.
- Commenced training in martial arts after a traumatic event and actively training for at least 6 months.
- Willing to discuss your martial arts experience and its influence in other life experiences.

Note, you will not be required to discuss the details of your traumatic event for this study.

In addition to helping me complete my requirements to graduate, this is a great opportunity to contribute towards research in martial arts and its influence on mental health. If you meet the above criteria and are interested in participating, please reach out to Alex Vargas at [REDACTED] (call or text) or by email at [REDACTED]

MAKE A DIFFERENCE, CONTRIBUTE TOWARDS RESEARCH IN MARTIAL ARTS

Appendix C: Participant Invitation Letter

Dear Participant,

Thank you for your interest and willingness to participate in this study. My name is Alex Vargas, a doctoral student at Walden University. I am researching the effects of training in the martial arts after sustaining a form of interpersonal trauma. Given your experience training in the martial arts and history of traumatic experience(s) you are formally invited to participate in this study. There will be no personal gain for research participants and martial arts schools participating in the study; however, this study will provide you with the opportunity to contribute and expand on research in martial arts and its potential benefits for the healing of interpersonal trauma and positive mental health.

The purpose of this study is to explore if training in the martial arts can be used as an effective intervention in the treatment of interpersonal trauma. This research could potentially assist in identifying alternative interventions towards positive mental health and create awareness of the influence martial arts has in the healing process.

Participation in this study is completely voluntarily and participants can withdraw from the study at any time. This study will consist of semistructured interviews lasting approximately 45 to 60 minutes. All interviews will be recorded and notes will be taken during the interview; however, your name will not be linked to the interview in order to maintain confidentiality. You may stop the interview at any time without consequences; however, this will withdraw you from the study and data collected will not be used in the study. As part of the interview process you will not be required to discuss details pertaining to the traumatic event as this is not a requirement for this study.

Along with this participant invitation letter please see the attachment for the participant consent form outlining the details of the study, your rights as a participant, potential risk of the study, and that you consent to proceed with the interview process.

If you have any questions or concerns please feel free to reach out to me at any time.

Respectfully,

Alexandro G. Vargas
Doctoral Candidate

Appendix E: Demographic Questionnaire

Participant Number: _____

Age: _____ Gender: ___Male ___Female ___Transgendered
 Date of Birth: _____

Ethnicity (Please check the option that best describes you):

___ American Indian or Alaska Native ___ Hawaiian or Other Pacific Islander
 ___ Asian or Asian American ___ Black or African American
 ___ Hispanic or Latino ___ Non-Hispanic White

How long have you been studying the martial arts? ___ years ___ months

What is your current belt rank? _____

How many belt tests have you passed? _____

Marital status:

___ Married ___ Partnered ___ Divorced ___ Widowed ___ Separated
 ___ Never been married ___ Single ___ Long-term relationship

Employment status:

___ Employed for wages ___ Self-employed ___ Out of work for more than 1 year
 ___ Out of work for less than 1 year ___ A homemaker ___ A student ___ Retired
 ___ Unable to work

Education:

How many years of school have you completed? _____

What is the highest degree you have obtained? _____

Annual Household Income:

___ \$0 to \$14,999 ___ \$15,000 to \$29,999 ___ \$30,000 to \$44,999
 ___ \$45,000 to \$59,999 ___ \$60,000 to \$74,999 ___ \$75,000 to \$99,999
 ___ \$100,000 or more

Appendix F: Interview Questions

1. What were the motivating factors and/or reasons for choosing to begin training in martial arts? What are the reasons why you have decided to continue training?
2. Outside of training, have martial arts contributed towards other activities or accomplishments in your life? If so, how have they?
3. In what ways has your understanding of martial arts evolved over the course of training?
4. Have you noticed a mind-body connection to training in the martial arts? If so, can you explain?
5. Has your involvement and training in martial arts helped with challenges or difficulties in your life? If so, how or If not, why didn't it help you?
6. Are there any other aspects of your life that have been affected by martial arts training? In what ways?
7. Seeing a therapist is common among people who experience difficulties in life, what are your thoughts about seeing a therapist for life difficulties?
8. How would you classify your overall experience with your involvement and training in martial arts?