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The Soldier 360Â°Orgram: Strengthening Combat-Exposed, Noncommisioned U.S. Army Officers' Interpersonal Sensitivity

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Abstract

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by

Anne Westlund Harper

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Interpersonal sensitivity is a foundational component of interpersonal relationships. It encompasses an individual's self-concept and self-identity, which are formed as the individual develops. An individual's self-concept develops from the norms and mores of his or her society. Soldiers in the U.S. Army have been trained to form a repurposed self to engage in combat and work in combat-focused jobs. The consequence of this training in many cases has been diminished interpersonal sensitivity that has been detrimental to their interpersonal relationships. The Soldier 360° course is a comprehensive treatment program that takes a holistic approach to providing soldiers with self-empowering tools designed to create healing and wellness from the inside out for the individual and for his or her relationships. Deidentified data obtained from Soldier 360° participant scores on the Symptoms Checklist-90-Revised and the Quality of Life Inventory were measured using repeated-measures analysis of variance to examine the effect, if any, of the Soldier 360° program on soldiers' interpersonal sensitivity and overall quality of life. Furthermore, changes based on marital status, parental status, and gender were examined. The findings of this quantitative analysis indicated that there is improvement in the interpersonal sensitivity of participants in the Soldier 360° program; however, no significant effect was found in the categorical examinations. This research contributes to positive social change by expanding knowledge researchers, practitioners, and soldiers themselves can use to help soldiers reclaim their lives, maintain successful relationships, and reduce incidence of suicide.

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Dedication

This dissertation is dedicated first to my husband, who has offered the greatest amount of support and love as I worked through many stress-filled years pursuing this dream. To my children, who fill me with the desire to be the best role model and parent I can hope to be. I also want to include all of the people who have offered me friendship, professional mentorship, and personal growth along this journey and to extend my gratitude further to the many individuals who have been an inspiration in my life without even realizing it. Thank you all.

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Chapter 1: Introduction to the Study

Introduction

More than 11 years have passed since the United States became involved in the global war on terror. Deployed to two primary theaters of operation—Operation Enduring Freedom (OEF) in Afghanistan and Operation Iraqi Freedom (OIF) in Iraq—nearly 2 million military men and women have since returned home to their families and communities having been directly impacted by conflict- and combat-related exposure (Fulco et al., 2013; Institute of Medicine, 2013; Karney & Crown, 2013; RAND Corporation et al., 2008). From the intense training that prepared them to fight, to the unimaginable traumas they experienced while in combat environments, many have returned home different versions of themselves, with altered temperaments and new ways of interacting with others. Many resemble who they used to be but are less social, less deferential, and less sensitive to others' needs and feelings (Karney & Crown, 2013). Since the wars in Afghanistan and Iraq began, there has been a considerable rise in suicide among soldiers serving in the U.S. Army (LeardMann et al., 2013; Limeberry & O'Connor, 2012). Understandably, many people who have served in the armed forces as well as their family members may have found they faced a colossal adjustment to the rigors of the military and deployment. If successful, such an adjustment allowed them to connect with one another and, upon returning home from deployment, resume their precombat routines and lifestyles to live productive and satisfying lives (RAND Corporation et al., 2008).

The U.S. Army alone has had more than a half million individuals serving in or

near two regions of combat, Afghanistan and Iraq. For these indviduals, whether they were in a war zone or garrison (non–war zone), the stressors associated with training and deployment became part of their new daily routines, as real as the families they left behind and the enemy forces that awaited them (RAND Corporation et al., 2008). Over time, the increased pace of their operations, known as the *operations tempo*, frequently led to an imbalance in their emotional, mental, and physical well-being and negatively impacted their ability to cope with conflict and develop and maintain meaningful relationships (Bryan & Rudd, 2012). As they returned from combat zones, rejoined their families, and attempted to reestablish their lives, many soldiers struggled with issues related to posttraumatic stress disorder (PTSD), diminished interpersonal sensitivity, and the ensuing problems that surfaced in their interpersonal relationships (Bryan & Rudd, 2012).

The U.S. Army has recognized the growing need for resources and support services to address these common issues, and has implemented more than 200 psychological programs over the past 10 years (Meredith et al., 2011). The shared purpose of these programs was to enhance soldiers' levels of resiliency and help them overcome their combat-related trauma and stress so they could reintegrate successfully into their lives back home. Some of these programs proved effective in addressing a wide range of various ecological factors, while others failed to produce the outcomes desired (Meredith et al., 2011).

The Soldier 360° program, designed with a purpose similar to the many examined by Meredith et al. (2011), is a 2-week, comprehensive leadership course that, following a

holistic approach, focuses on the combined mind–body–spirit of soldiers in the U.S. Army—specifically, noncommissioned officers (NCOs)—who engaged in combat or had been exposed to combat. The program, which was introduced in 2010 but has not been implemented on a widespread basis, is aimed at developing participants' psychological resiliency, improving their emotional and physical well-being, sharpening their leadership skills, and increasing their ability to cope with the trauma they had experienced. The program's objective is to enhance participants' well-being, health, and interpersonal relationships and to significantly reduce the number of suicides resulting from wartime trauma (Bryan, Morrow, Etienne, & Ray-Sannerud, 2013).

In this research study, I intended to measure the effectiveness of the Soldier 360° program to determine its usefulness in helping soldiers move forward and live healthy, productive, fulfilling lives. Specifically, I evaluated how effectively the program enhanced interpersonal sensitivity and relationship issues returning military personnel faced and whether it led to positive social change by ultimately increasing participants' satisfaction in various domains of their lives. This chapter opens with the problem statement and a discussion of the study's purpose. Next, I state the research questions and hypotheses, discuss the theoretical foundations, conceptual framework, and nature of the study, and offer definitions of terminology used throughout the study. Sections addressed to the assumptions, scope, delimitations, limitations, and significance of this research follow.

Background

Conflict and conflict resolution have been a normal part of life in most human

societies. With parents, teachers, and other adults as models, children are taught conflict resolution skills from the earliest ages: share, wait one's turn, do not hit, and always apologize when one has hurt another (Grusec, 1992). At the same time, American children generally learn through their early development that it is best to remain neutral and avoid conflict in the first place—to stay out of arguments, mind their business, and walk away. Those skills most often stay with them through adulthood, becoming part of a repertoire of actions and responses, and serve them well at home, at work, and in the community (Grusec, 1992; Wayne, Grzywacz, Carlson, & Kacmar, 2007).

For many people whose diverse life journeys lead to military service, there is a need to shed or distance themselves from the behaviors and response patterns they had learned up to that point. They need to learn new skills to be able to engage in conflict, be the aggressors, and—when and if necessary—inflict great harm on or even take the lives of others without ever looking back. In short, they are trained to desensitize themselves in order to accomplish the mission at hand and to survive.

But what happens when those individuals return to their families, communities, and civilian lives? What does a long-term war do to someone, and are all people impacted to the same extent? How do their newly acquired responses and skills fit into a day-to-day setting in which there is no combat exposure? Are they able to shed those aggressive, confrontational behaviors and access those more acceptable social skills and levels of human sensitivity they learned during their early development? What happens when soldiers *cannot* make that transition back into their lives back home, when their interpersonal relationships bear the impact of the traumas and hardships they had to

endure while in or exposed to combat?

In a comprehensive study conducted by RAND Corporation et al. (2008), the 2.7 million men and women in the U.S. Army who were deployed to combat- and conflict-exposed regions between 2003 and 2010 were categorized as follows: 89% were men and 11% were women (Fulco et al., 2013; RAND Corporation et al., 2008). For the most part, they were between 18 and 40 years old. Commissioned officers, who made up 13.4% of those in active duty, had completed a 4-year bachelor's degree program through a qualifying college as well as the required officer basic training prior to receiving commissioning. They were unit leaders and were responsible for tactical, operational, and strategic planning and implementation of campaigns, much like floor managers, regional managers, and corporate-level officers within any nonmilitary corporation.

Enlisted personnel are required to go through basic training (i.e., combat and military training) and skills specialization training (i.e., medical, infantry, cooks, laundry). Their role is that of the workforce, to carry out operations and related tasks as assigned to them by leadership. Approximately 80% of the soldiers on active duty are enlisted personnel who signed up through military recruitment centers and committed themselves to a minimum of 8 years of service. Their service typically ranges from 2 to 4 years of active service, with the remainder of the 8 years considered inactive (i.e., a time in which they could be recalled to service). Of the enlisted personnel, approximately 45% are NCOs, who are essentially the managers and supervisors within the organization (RAND Corporation et al., 2008).

The final category of soldiers deployed is warrant officers—enlisted personnel

who were recognized as technical experts in their fields—such as engineering, aviation, and maintenance—and held special authority within those fields. Reservists served in the same capacity as officers, enlisted soldiers, and warrant officers, except that they served 1 weekend per month and 2 full weeks every year. The reservists could be called to active-duty status when required for national defense, and could be asked to serve in either OEF or OIF.

A second factor examined in the study by RAND Corporation et al. (2008) was the overall impact that combat-related trauma had had on soldiers, including what caused it, how it was manifested both physiologically and psychologically, how it was treated, and whether it could have been reversed or even eliminated. According to the study, a substantial portion of active-duty soldiers who were deployed in combat operations, or who had already departed the military, reported a significant presence of mental-health-related conditions, such as PTSD, depression, and suicidal ideation, or even more extensive physiological problems, such as traumatic brain injury. These issues occurred within all of the different rank structures (RAND Corporation et al., 2008). Unfortunately, many returning soldiers played down the mental health issues they had developed as a result of combat exposure, or failed to disclose them at all, leading to inaccurate or misleading statistics as well as complications resulting from untreated conditions (Possemato, Wade, Anderson, & Ouimette, 2010; RAND Corporation et al., 2008).

The symptoms resulting from exposure to traumatic events and experiences include any or all of the following, which are consistent with the constellation of PTSD

symptom clusters listed in the commonly recognized *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition: avoidance, arousal, negative cognitions and mood, and reexperiencing (American Psychiatric Association, 2013; Nebraska Department of Veterans' Affairs, 2007). In addition, because of the stress from rigorous training and the special demands placed on most soldiers, mental health issues are often accompanied—and exacerbated—by physical manifestations, such as back pain, headaches, leg and knee pain (including restless leg syndrome), shoulder problems, digestive complications, high blood pressure, and general malaise (American Psychiatric Association, 2013; Miller et al., 2006; Nebraska Department of Veterans' Affairs, 2007).

The symptoms and impact of combat- and conflict-related mental health issues do not stop at the halls of the military medical facility. They also show up in civilian communities once the soldiers transition from their military commitments back to their civilian lives at the end of both full-time military commitments and extended reserve assignments. Once the symptoms of trauma begin to appear—most often within 3 months of exposure—they can sometimes escalate at a rapid pace. Indeed, the effects of trauma do not always show up immediately; they could appear many months or even years following exposure (American Psychiatric Association, 2013; RAND Corporation et al., 2008).

At optimum health, the human body maintains a state of balance (known as homeostasis), which keeps its physiological and mental functions stable, even when exposed to changes in external conditions. However, when the persistent stress brought on by trauma combines with ensuing physical and mental symptoms, the sympathetic

nervous system is activated, causing a continuous state of hyperarousal or hypervigilance and triggering the "fight-or-flight" response. This leads to a dysregulation of the hippocampus, pituitary, and amygdala, known as the HPA axis of the brain, as well as a flood of neurochemicals that course through the body (Howard & Crandall, 2007; Lovallo, 2005; Monat, Lazarus, & Reevy, 2007; Sapolsky, 2004). The most prominent of these chemicals is cortisol, the stress hormone, which has a negative impact on the heart, liver, digestive system, and cognitive functioning (Howard & Crandall, 2007; Lovallo, 2005; Monat et al., 2007; Sapolsky, 2004).

Consistent with findings in stress studies, research has also shown a reduction in the size of the hippocampus of soldiers with PTSD (Bremner, 1999; Koffman & Helms, 2013; Sapolsky, 2004). The diminished hippocampus and subsequent imbalance in the body are responsible for cognitive irregularity, memory distortion, autoimmune dysfunction, and extremes in mood and behavior. Greater imbalance and chronic stress can result in the symptoms listed previously for trauma exposure; left untreated, these factors have been shown ultimately to cause some individuals to consider taking action to end their lives (Bryan & Rudd, 2012).

The American Academy of Experts in Traumatic Stress estimated that an average of 4% of the U.S. population has been affected by the occurrence of such traumatic incidents as natural disasters, violent crimes, sexual abuse, and vehicular crashes (American Academy of Experts in Traumatic Stress, 2012). In contrast, an estimated 30% of soldiers struggle with various degrees of PTSD, and 44% of trauma-exposed soldiers report significant difficulties readjusting to postdeployment life (American Academy of

Experts in Traumatic Stress, 2012; Nebraska Department of Veterans' Affairs, 2007).

Treating PTSD can be extremely challenging. Individual differences notwithstanding, treatment has been shown to have varying levels of efficacy, from none to significant (Possemato et al., 2010; RAND Corporation et al., 2008). Treatment modalities have been as varied as the individual responses to the treatments. For many soldiers, pharmacological approaches tended to be the starting point to ease anxieties and mood disturbances, to aid in sleep, and to relieve physical pain. Individuals have often been referred to mental health professionals to work through symptoms using behavioral or cognitive therapeutic techniques. The success of these treatments has varied depending on the individual, the nature of the traumas experienced, life histories, symptoms, and interpersonal dynamics.

Numerous programs have been devised and initiated to help U.S. Army soldiers recognize and rebuild personal resiliency (Meredith et al., 2011). In this study, I explored how returning soldiers have dealt with their trauma and why it was critical to help them as they strived to develop improved interpersonal sensitivity, rebuild and sustain their personal relationships, and reclaim their previous levels of functioning.

Researchers have found that soldiers returning from combat exposure during the war on terror have experienced a wide range of complications that impacted their daily lives and their abilities to function successfully (Fulco et al., 2013; Karney & Crown, 2013; RAND Corporation et al., 2008). The dysregulation of their emotions and thoughts has led to decreased trust of self and others, and they have found themselves withdrawn from family, friends, and coworkers. Many develop a general lack of empathy, their behavior at

home or in the workplace becomes erratic, and their self-esteem and self-concept suffer. These shifts generate abusive behavior, criminal behavior, marital dissolution, sexual misconduct, incarceration, suicidal thoughts and ideation, and, ultimately, in thousands of cases, suicide. Finally, lowered interpersonal sensitivity leaves soldiers with a myriad of symptoms from the PTSD cluster (Batten et al., 2009). Elevating them out of the depths of depression, dysfunction, diminished empathy, and self-loathing has been critical for soldiers' positive strides toward overall wellness. One of the greatest challenges for mental health practitioners is just getting soldiers to recognize when they have a problem so they would be more likely and open to taking the steps necessary to achieve increased well-being.

An important factor in the development of soldiers' resiliency and interpersonal sensitivity was endorsed positive ideas and associations as well as improved positive self-concept. Researchers have found that some of the traditional methods practitioners use to address *single symptoms* do not always offer effective and lasting outcomes in restoring soldiers to optimum health and well-being. On the other hand, however, addressing and treating *all* of a soldier's problem areas has appeared to be more effective, offering a greater chance at positive outcomes for the individual and his or her family (Koffman & Helms, 2013; Shang, 2001).

Problem Statement

Men and women returning from active duty in combat zones abroad typically face numerous challenges in readjusting to their lives back home. Diminished interpersonal sensitivity, fitting in with friends and family, and coping with unpleasant memories of

combat are common issues that confront soldiers and can become obstacles to a smooth transition. Interpersonal relationships with spouses, children, coworkers, family members, and friends seem to suffer the most when individuals have been exposed to the harsh traumas associated with wartime combat and conflict. Poor communication, social withdrawal, personal insecurities, and new fears and anxieties are among the wide range of problems that can threaten the strength and continuity of relationships. Indeed, many soldiers are not even aware of the impact their experiences have on their relationships, and others who are aware may choose not to—or are unable to—disclose their concerns to people who are able to help. Left unaddressed, these relationship-based problems frequently lead to depression, alienation, sleep disorders, poor physical health, divorce, domestic abuse, unemployment, criminal behavior, substance abuse, and suicide.

Over the past 11 years, the U.S. Army has offered a variety of programs and services as part of an overall effort to help returning soldiers make successful adjustments to their lives (Meredith et al., 2011). Typically geared toward individual *resiliency* rather than *interpersonal sensitivity*, and aimed at single-symptom issues rather than the whole set of concerns, these programs have frequently left soldiers with a critical gap in their recovery efforts and without support in dealing with the numerous other problems they face. Too often, soldiers have been left simply to cope on their own and struggle with their failing relationships without having a basic knowledge of what is wrong or how to make the needed adjustments and changes.

Purpose of the Study

The purpose of this quantitative study was to examine how effectively the Soldier 360° program has led to positive social change by enhancing interpersonal sensitivity and relationship issues that returning Army personnel face, and ultimately increasing participants' satisfaction in various domains of their lives.

In contrast to other programs that were offered to returning soldiers, the Soldier 360° comprehensive leader fitness course—first developed in 2010 by a team of occupational and mental health providers in the U.S. Army—is a holistic treatment approach intended to confront the full range of issues combat-exposed soldiers face. Through this program, participants are given the opportunity to explore the causes of and solutions for their stress, PTSD, poor health, physical pain, poor self-esteem, negative self-concept, and difficulties with interpersonal relationships. In November 2012, the Defense Center of Excellence (DCOE) conducted a study to evaluate certain outcomes of the Soldier 360° program. Focusing on three distinct areas—psychopathology, pain interference, and sleep habits—the findings of the DCOE study showed that while the program had certain limitations, participants do benefit and are better able to move forward with their lives. Because the DCOE study did not specifically evaluate the Soldier 360° program in the areas of interpersonal sensitivity and interpersonal relationships, I found an opportunity to further examine whether participants in a program such as Soldier 360° are able to make significant improvements in those areas.

Research Questions and Hypotheses

My research goal was to determine the overall effectiveness of the Soldier 360° course in improving interpersonal sensitivity and personal relationships among American soldiers who had returned home from combat and combat-exposed regions overseas. I designed the research questions specifically to explore how the course impacted such domains as marital satisfaction, satisfaction with family and friends, job satisfaction, and personal health. Even such domains as financial status, satisfaction with neighborhood and community, and individual goals and values had an impact on the overall outcome of the program/course, and I examined those as well. The following questions and hypotheses were addressed:

Q1. Among soldiers who have completed the Soldier 360° program, are there improvements in interpersonal sensitivity, family and personal relationships, and overall quality of life?

H1. Soldiers who have completed the Soldier 360° program will experience improvements in their interpersonal sensitivity, family and personal relationships, and overall quality of life.

Q2. Among soldiers who have completed the Soldier 360° program, is there a difference in interpersonal sensitivity and quality of life scores between participants who are *married* and those who are *single*?

H2. Interpersonal sensitivity and quality of life scores of *married* soldiers who have completed the Soldier 360° program will show more significant

improvement than those same scores of *unmarried* soldiers who have completed the Soldier 360° program.

Q3. Among soldiers who have completed the Soldier 360° program, is there a difference in interpersonal sensitivity and quality of life scores between married or unmarried soldiers who *have children* and married or unmarried soldiers who *have no children*?

H3. Interpersonal sensitivity and quality of life scores of married and unmarried soldiers who have completed the Soldier 360° program and *have children* will be different from those same scores of married or unmarried soldiers who have completed the Soldier 360° program and *have no children.*

Q4. Are there changes in interpersonal sensitivity and quality of life scores for *female* soldiers who have completed the Soldier 360° program, and are they consistent with potential changes for *male* soldiers who have completed the Soldier 360° program?

H4. Interpersonal sensitivity and quality of life scores of *male* soldiers who have completed the Soldier 360° program will reflect more significant improvement than scores in those same domains for *female* soldiers who have completed the Soldier 360° program.

H0. There are no significant improvements found in interpersonal sensitivity and quality of life scores among any or all participants who have completed the Soldier 360° course.

The dependent variables in this study were participants' assessment measurement results, both pre- and postcourse, on the interpersonal sensitivity scale from the Symptoms Checklist-90-Revised (SCL–90–R) and the Quality of Life Inventory (QOLI; Derogatis, 1977; Frisch, 1994). The independent variables were the marital status, genders, and parental status of the participants.

Through my dissertation research, I looked at the effectiveness and value of the Soldier 360° course in increasing interpersonal sensitivity, improving personal relationships, and producing positive outcomes for returning soldiers in the domains listed above. I hypothesized three things: (a) that a significant improvement in interpersonal sensitivity would be found after soldiers completed the course, (b) that male soldiers would benefit from the course given previous research findings regarding their greater aggression toward family members and intimate partners (Monson, Taft, & Fredman, 2009), and (c) that soldiers who were immersed in interpersonal relationships with children or significant others would have significantly stronger positive outcomes after completing the course.

Theoretical Foundations and Conceptual Framework for the Study

Interpersonal sensitivity is formed and continues to develop throughout an individual's life within his or her ecological system. It encompasses an individual's self-concept, self-awareness, self-esteem, and self-confidence, and is at the root of interpersonal relationships. Upon entering military service and training for combat, individuals begin to develop a new, altered self-concept, one that is geared toward a special purpose. Actual exposure to combat can further solidify this new "special-

purpose" self (Griffith & West, 2013; Vickers, Hervig, Paxton, Kanfer, & Ackerman, 1996). However, when returning home and transitioning back into mainstream, noncombat life, the soldiers' new realities may no longer fit with their previous concepts of self, impacting interpersonal sensitivity and interpersonal relationships and creating, for some, an existential crisis. Some researchers have hypothesized that a program using a holistic approach to intervention using a set of mind–body tools would help soldiers overcome this crisis and integrate their new special-purpose selves with their former self-identities (Griffith & West, 2013; Vickers et al., 1996).

Interpersonal sensitivity and relationships among men and women returned from combat represented a broad topic with a variety of theoretical foundations from which to draw. This study was rooted in classic psychological theory, beginning with ecological systems theory and including psychosocial theory and interpersonal sensitivity theory. In the theoretical foundation, I included stress mechanisms as they related to trauma, and PTSD theory. I also include elements from mind–body theory. I cover this foundation in greater depth in Chapter 2.

Conceptually, I looked at how combat and combat exposure could alter a soldier's concept of self, relationships with others, and overall satisfaction with life. Furthermore, I explored whether a course of holistic approaches and positive relationship enhancement could impact the soldier's interpersonal sensitivity and adjustment back into mainstream life.

Nature of the Study

I was aware that conducting research within the institutional structure of the U.S.

Army would have specific challenges given its inherent bureaucratic structure and the many levels of rigid security that limit access to personnel from whom data could be collected. Yet, I felt strongly that with so many soldiers facing such negative by-products of war as depression, divorce, violence, and suicide, it was critical to conduct the research and identify tools that could help. My initial vision was to develop a course of intervention aimed at stress reduction, self-empowerment, and relationship building, which I would present to a randomly selected group of active-duty soldiers, and then to base my research on pre- and postassessment measures. However, before starting my research, I unexpectedly came across an opportunity to examine an existing program that had relevant archival data available and was aimed in the same direction as my personal research goals. The Soldier 360° program, which was developed and implemented on the U.S. Army base in Grafenwöher, Germany, between March 2010 and October 2011, had targeted some of the same challenges and domains of life in which I was interested. Hence data collected from that implementation became the focus of this dissertation.

Through some aggressive and ambitious personal networking within the local military community, I was able to gain access to the information I needed regarding the Soldier 360° course. The deidentified data I was able to obtain included demographic statistics (marital status, gender, and parental status) as well as scores on both the SCL–90–R and the QOLI, which had been given at pre- and postcourse intervals.

I used a repeated-measures analysis of variance (ANOVA) to look at treatment outcomes using the results from the SCL–90–R and QOLI assessment tools. I used between-groups measures to evaluate differences between married and unmarried

participants. I used within-groups measures to evaluate differences between married participants with children and those without children, and between unmarried participants with children and unmarried participants without children. Gender differences were also evaluated within both statistical groups.

The key variables within this analysis were the SCL–90–R and QOLI results (dependent variables) and marital status, parental status, and gender (independent variables). I provide a more detailed explanation of methodology in Chapter 3.

Definitions

The following is a list of definitions of military terminology that I use throughout this dissertation (U.S. Department of Defense, 2015; RAND Corporation et al., 2008):

Active duty: The status of a full-time military member; can be either an active-duty full-time soldier or a reserve soldier serving on active duty for a defined period of time.

Combat: Armed conflict with an enemy force.

Combat exposure: Direct exposure to hostile or violent wartime activities in a combat zone as experienced by front-line fighters, medics, Humvee drivers, and so on.

Combat-related exposure: Indirect contact with hostile or violent wartime activities in a combat zone as experienced by kitchen staff, hospital-based medical staff, and communications specialists.

Commissioned officer: A soldier in the U.S. Army who has completed the Officer Basic Course and has a bachelor's degree.

Deployment: The act of sending soldiers from their home station (garrison) to other locations to participate in combat-related operations.

Enlisted personnel: Individuals who have voluntarily joined the military through a military recruitment center and have been trained in an occupational specialty.

Garrison: Home station where personnel are assigned and/or trained in specialty areas and from where soldiers are deployed to a combat region (theater).

Noncommissioned officer (NCO): An enlisted leader who has had several years of service and is promoted into a leadership role.

OEF: Operation Enduring Freedom, an ongoing military conflict in Afghanistan in which the United States has been involved since 2001.

OIF: Operation Iraqi Freedom, a military conflict in Iraq in which the United States was involved from 2003 to 2013.

Operations tempo: The pace and intensity of ongoing activities, referred to as OPTEMPO.

Postdeployment life: The time after a soldier has returned from active service, typically in a combat zone.

Reservists: Military personnel assigned to a reserve unit.

Resiliency: An individual's ability to recover from stress, trauma, or illness.

Soldiers: Members of an organized fighting force, in this case, the U.S. Army; includes all ranks.

Theater: A combat or war zone and the surrounding support area, all serving and responsible to a single command officer.

Warrant officer: An officer who has completed Warrant Officer Basic Training, has demonstrated expertise in a specific technical field, and has been recruited from enlisted ranks to receive more advanced training in that field.

Assumptions

My main assumptions in this study were as follows: (a) soldiers who had direct or indirect exposure to combat and combat-related activities had experienced or were experiencing a tremendous amount of vocational stress; (b) soldiers who had returned from combat and combat-related activities were possibly suffering from stress-related mental and physical health issues; (c) exposure to combat training, actual combat, and combat-related activities had led to personal desensitization and impaired interpersonal sensitivity; (d) personal desensitization and impaired interpersonal sensitivities had damaged the soldiers' close relationships and had led to divorce, domestic abuse, and suicide; and (d) treatment methods that were empowering, sustainable, and holistic in their approach could offer combat-exposed soldiers greater ability to alleviate stress, eliminate maladaptive behaviors, improve their relationships, and enhance the quality of their lives.

Moving forward, it was important to keep in mind that individuals are complex. Presumably, not all soldiers in the program were equally affected when exposed to combat. Some individuals may have had higher levels of built-in resilience, and others may have

been more adversely impacted by trauma (see Cornum, Matthews, & Seligman, 2011). Therefore it was fair to assume that the eventual outcomes for different soldiers would vary.

Scope and Delimitations

The findings in this study were based on archival data I obtained from one Soldier 360° course, a holistic, skill-building leadership program that focused on the combined mind–body–spirit of combat-exposed NCOs in the U.S. Army. The Soldier 360° course concentrated specifically on NCOs because they were in a position to have the greatest ability to effect organizational change and provide the greatest amount of help for the other men and women serving in their units. This research did not include all Army personnel, personnel in other branches of the military, or population groups outside of the military.

This study benefited from the greater level of control in participant selection that was a characteristic of the Soldier 360° program. With fewer confounding variables, the commonalities among the NCOs in this study were considerable, providing greater internal validity to the work. The NCOs shared a common vocation (with the exception of their particular military assignments), they had similar rates of pay and housing allowances, and their medical and nonmedical services were the same.

Confounding factors of the study were those variables external to the all-encompassing and all-providing institution of the military, including family structures, housing outside of the military base, particular interests and hobbies, spiritual leanings, and any problems that may have existed for the soldier prior to military service. This

program was uniquely designed for soldiers and would likely require redesigning if it were to be used with other populations.

Limitations

The fact that I had no input into the design, delivery, or participant selection of the Soldier 360° course was a limitation of this research study. I also had no involvement in the selection and administration of the pre- and postassessments from which data were collected. Therefore, because this study was designed around preexisting, deidentified data, no further work, observation, or evaluation could be done with the course participants on whom the data were based. While I considered these factors to be limitations of the study, I could see that they eliminated any chance of bias in participant selection and manipulation or in content design and delivery.

Significance

An unacceptably high number of suicides and a declining quality of interpersonal relationships have occurred among soldiers returning from active combat in Iraq and Afghanistan (Braswell & Kushner, 2010; Fox & Pease, 2012; LeardMann et al., 2013). As the U.S. Army has strived to integrate thousands of combat-affected individuals back into mainstream American life, the significance of this research study could be profound in its ability to create positive social change by shedding light on these and other critical issues.

As stated previously, many intervention programs have been developed to help returning military recover from their traumatic experiences in combat. During the past 15 years, the U.S. Army alone has introduced more than 200 such programs that have

focused on helping individuals cope with their trauma and reestablish themselves within their environments by promoting resilience—a fine and noteworthy goal in and of itself (Meredith et al., 2011). However, little attention has been paid in these intervention programs to interpersonal sensitivity or the impact it can have on interpersonal relationships.

The Soldier 360°course was unique in its holistic approach and in the mind–body tools it offered soldiers to help them make successful transitions back to their lives and families. With high numbers of suicides and a high rate of family strife among the U.S. soldier population, this research could add not only to the current understanding of how combat affects individuals, but also to the specific methods used to help them reclaim their lives and maintain successful relationships, offering much-needed positive social change.

Summary

The U.S. Army has expressed growing concern over returning combat-exposed soldiers who have been overstressed and traumatized, whose interpersonal sensitivity has been diminished, and whose relationships have been negatively impacted (Braswell & Kushner, 2010; RAND Corporation et al., 2008). Some intervention programs have been devised to help soldiers cope with the symptoms of stress and build resiliency (Cornum et al., 2011; Meredith et al., 2011). The Soldier 360° program has offered a different approach by following a holistic presentation to mental and physical healing and skills development, focusing on a wide range of individual factors and considerations. In this

dissertation, I examine the Soldier 360° program and assess its effectiveness in improving interpersonal sensitivity, personal relationships, and quality of life satisfaction.

Chapter 2: Research and Literature Review

Introduction

Mental and physical well-being has been a primary focus of the U.S. Army in transitioning soldiers returning from combat in the Middle East. Anxiety, hostility, obsessive thinking, depression, and decreased interpersonal sensitivities were some of the prominent issues resulting from the high levels of stress found in these combat or combat-related work environments. Through previous wars and military conflicts, history has shown the way in which intimate and family relationships can be strained by the lingering effects of combat-related trauma. According to Monson et al. (2009), numerous studies have shown that there is a correlation between combat-related trauma and increased dysfunction in personal relationships. Research has further demonstrated that male veterans suffering from the effects of combat trauma exhibit greater aggression toward family members and intimate partners (Monson et al., 2009). In this chapter I discuss the literature search tools used to research existing theories, the theoretical framework for this study, and the literature that I reviewed.

For some soldiers, the effects of stress may manifest in more physical ways, causing a variety of symptoms that range from back pain and chronic illness to sleeplessness and sexual dysfunction. These symptoms in turn can have negative effects on mental well-being, leading to the kinds of issues described above.

Dealing with these problems is not only important for helping soldiers and military support personnel reintegrate back into the work environment and civilian life at home but also has been critical in helping them avoid such life-altering experiences as

divorce, domestic violence, substance abuse, criminal behavior, and suicide. McNulty (2005), in discussing the serious impact of stress and trauma on active-duty U.S. Navy personnel, pointed out a tremendous need for further research and more innovative treatment options aimed at reducing, or even eradicating, these outcomes.

Mental health screenings are typically administered by the Army to returning soldiers to identify those who might be sufficiently distressed or traumatized that they could be a risk to themselves or others. However, fear of becoming ostracized by peers and leaders has prompted some soldiers to manipulate their assessments in order to hide potential risk factors and avoid behavioral health referrals and counseling (Warner, Appenzeller, Mullen, Warner, & Grieger, 2011).

Strategies typically used in the Army's mental health programs have followed an allopathic, single-symptom approach, and have been conducted in traditional medical settings, producing outcomes that have fallen short of soldiers' needs and expectations (Strauss et al., 2011). These approaches have likely discouraged the very soldiers who could most benefit from mental health treatment in returning to their former lives.

The specific area of diminished interpersonal sensitivity among returning soldiers and its effect on personal and interpersonal relationships merits more attention than available literature indicates it has received. The fact is that while research is still growing in the use of holistic approaches to mental health that follow a mind–body approach, there remains a considerable deficiency in the field, particularly in the area of holistic, complementary alternative medicine (CAM) interventions that are typically conducted outside of a traditional medical setting. Indeed, when Duncan, Liechty, Miller,

Chinoy, and Ricciardi (2011) explored the use of CAM practices such as acupuncture, meditation, and biofeedback as stress-relieving intervention techniques for military support personnel (specifically those who provided intense caregiving to traumatized, combat-exposed soldiers), they found significant stress-reducing outcomes.

In this chapter, I discuss the literature search strategy I used to research interpersonal sensitivity and PTSD, and I offer a more in-depth discussion of the supporting theories and conceptual framework for this research project. The chapter concludes with a review of the literature for this study.

Literature Search Strategy

Search engines and databases that I used for this research study included EBSCOhost, PsycINFO, Google Scholar, Mental Measurement Yearbook, Defense Centers of Excellence, National Institute of Health, Department of Veterans Affairs: Health Services Research and Development, and the RAND Research Institute. Direct contact with team members who have managed the Soldier 360° program was also a helpful source. The process of screening and organizing articles and books involved deciding which were relevant to this research, which were overlapping or redundant, and which offered the greatest value to this study.

Some key terms I used in the literature search included *soldiers, combat, stress, trauma, PTSD, treatment, interpersonal sensitivity, interpersonal relationships, intimate partner violence, sexual harassment, holistic, mind–body*, and *complementary alternative medicines*. Research literature was mostly confined to a span of 10 years (2003–2013) to capture findings most relevant to and reflective of current military practices.

Theoretical Foundation

In this dissertation, I examined (a) how combat training, combat, and combat exposure can alter a soldier's interpersonal sensitivity by altering his or her concept of self, relationships with others, and outlook on life and (b) whether participating in a holistic intervention program such as the Soldier 360° course affects the soldier's interpersonal sensitivity. The theoretical framework, which I describe in the following paragraphs, is based on early theories on the development of self-identity (Bronfenbrenner's ecological systems theory and Erikson's psychosocial theory of development), which forms the basis for an individual's interpersonal sensitivity (Bronfenbrenner, 1986; Marcia, 2002; Munley, 1975). Self-identity forms within the ecological system in which an individual is brought up. Three theoretical themes served as the foundation of this study: (a) interpersonal sensitivity, self-formation, and relationship development; (b) mechanisms of stress and PTSD; and (c) mind–body practice. I used specific, established theories, including ecological systems theory, psychosocial theory, stress and PTSD theory, and mind–body theory to support this research.

Ecological Systems Theory

Ecological systems theory, developed by Bronfenbrenner (1986), describes the development of individuals through their interactions with the people and environment around them. These relationships and interactions provide the foundation of the self—self-concept, self-identity, self-esteem—and are considered reciprocal exchanges between individuals and ecological systems (Wayne, Grzywacz, Carlson, & Kacmar,

2007). The ecological system the individual grows up in contributes to the formation of his or her concept of self, while the self is considered a component of the ecological system. Interpersonal sensitivity—the sense of how an individual perceives others and how he or she believes others perceive him or her—is forged through interactions with the ecological system. Wayne et al. (2007) have emphasized that the demands of the individual are met by the demands of the system, and vice versa (i.e., the individual forms relationships within and contributes to the ecological system, and in return, the ecological system provides support and needed resources to the individual). The U.S. Army is its own form of an ecological system into which individuals enter and to which they must conform their *selves* to fit the new ecological model.

Psychosocial Theory

Although many environmental factors contribute to the development of an individual's self, what happens within individuals as they form their self-concepts and identities is a developmental process explained by Erik Erikson's psychosocial theory (as cited in Munley, 1975; Waterman, 1982). Throughout the lifespan, up until the approximate age range of 19–40 years—the typical age range of servicemen and servicewomen who are deployed to combat areas—an individual's self-concept and identity are being formed (Waterman, 1982). At each stage of development up to adulthood, people interact with their ecological systems to develop senses of trust and independence, an ability to interact independently within the ecological system, and a sense of competency. These developments lead to a sense of identity. While some individuals struggle to have a complete sense of who they are, others have some amount

of success at traversing the developmental process and are able to move into forming intimate relationships with others (Marcia, 2002).

Interpersonal Sensitivity

Interpersonal sensitivity reflects an individual's self-efficacy, self-concept, and social connectedness within the ecological framework that forms throughout the developmental process (J. A. Hall, Andrzejewski, & Yopchick, 2009). Hall et al. wrote that empathy and sympathy help to round out the components that compose interpersonal sensitivity. In other words, how the individual perceives and anticipates others' reactions, as well as how the individual believes others perceive and anticipate his or her own actions and ideas, constitutes interpersonal sensitivity. The higher an individual's level of interpersonal sensitivity, the more appropriate and acceptable his or her psychosocial reactions and interactions are going to be. The lower the person's interpersonal sensitivity, the more likely he or she will be to have a diminished self-concept, to misinterpret or discount the gestures of others, and to withdraw from social interactions (L. Hall, 2008).

Mechanisms of Stress

To understand the mind–body theory and approach, it is important to grasp the mechanics of stress. When faced with a stress stimulus, for example, an order to deploy, a bumpy plane ride, or an incoming mortar round, a moment will be spent evaluating the threat or situation. The fight-or-flight response kicks in to engage the threat or situation. The decision or appraisal process is a combination of physiological, psychological, and social reactions that come together to form a single response (Lovallo, 2005; Monat et al.,

2007). Understanding the type of stress an individual is experiencing can help in understanding the harm the individual may face. *Acute stress* is episodic in nature and is the most common form of stress that an individual can experience (Contrada & Baum, 2011). According to Bryant (2006), acute stress disorder is a clinical diagnosis that can also follow a traumatic experience. Acute stress disorder can be exhibited as anxiety and intrusive thoughts with hyperarousal, and is marked by the individual's dissociation (Bryant, 2006). *Chronic stress*, in contrast, is a continuous force brought on by pressure and unrelenting demands. While acute stress is temporary and perhaps sometimes necessary for our survival, and chronic stress is harmful and damaging, distant stress is also harmful (Contrada & Baum, 2011; Howard & Crandall, 2007). *Distant stress* describes a lingering strain that is the result of past trauma, such as abuse or PTSD (Contrada & Baum, 2011; Kenny et al., 2009; Sapolsky, 2004). Past trauma can leave impressions that will intrusively invade an individual's thoughts. Images and actions that were terrifying to an afflicted individual may resurface without warning. The individual may attempt to withdraw from that memory, but that only allows it to intensify and brew deeper within (Kenny et al., 2009).

The effects of combat-related stress can expand beyond just soldiers to affect those who are not directly involved with combat-related activities. Peripheral support staff, for example, who work closely with combat-exposed soldiers may vicariously experience a sense of stress. Mental health care providers who work with clients suffering from PTSD—such as in the case of returning veterans—and are repeatedly exposed to their clients' traumatic experiences can eventually suffer from burnout (compassion

fatigue), secondary traumatic stress, or vicarious traumatic stress, creating intrusive thoughts, fears, and feelings of insecurity (Devilly, Wright, & Varker, 2009).

Posttraumatic Stress Disorder (PTSD) Theory

PTSD theory is a compilation of many theories and noteworthy ideas related to it. The literature based on this premise supports the idea that individuals who go into service with a formed self-identity and self-concept are returning from combat training and exposure with a new self-identity and self-concept that has been formed in response to the intense needs of offensive and defensive military operations.

Evidence of the re-forming of a soldier's self-identity was offered in work by Klostermann, Mignone, Kelley, Musson, and Bohall (2012), who referred to *cultural spillover* in which a soldier's combat behavior is replicated in personal life scenarios. Klostermann et al. explained why soldiers returning from combat and hostile environments where they have been required to accept war as normal and engage in acts of aggression were more prone to aggressive behavior within their homes. They have been intensively trained over an extended period of time to engage in, be comfortable with, and commit acts of aggression, and thus have a difficult time disengaging from that aggressive behavior upon entering their off-duty homes and other environments where aggression is neither required nor welcomed (Klostermann et al., 2012).

Aside from cultural spillover theory, Fox and Pease (2012) pointed out that a soldier's self-identity has been overlooked in much of the research and theories concerning PTSD. Many other PTSD theories, such as those discussed by Brewin and Holmes (2003), have offered an explanation of what is happening to the soldier inside his

or her mind. These theories include emotional processing theory (the formation of the cognitive processes derived from the fear and anxiety left from trauma, which creates skewed ideas about people and the world), dissociation dual representation theory (dissociation, or memories made unavailable, from a traumatic event can result in a stimulus triggering an unfavorable response or intrusive memory), and cognitive theory (development of thought processes). Their findings provided support for and insight into the mechanisms of PTSD and pointed to the need for greater relationship support and innovative treatment solutions for veterans and military personnel (Brewin & Holmes, 2003).

Mind–Body Theory

Mind–body theory explains how mental and physical well-being can be established through practices that include breathing, movement, acupuncture, and some form of psychotherapeutic session, according to Shang (2001). A component of mind–body theory is interpersonal relationship coaching and development of positive relationship habits for well-being and internal balance (Koffman & Helms, 2013; Shang, 2001). Schroff (2011) pointed out that in many cultures and throughout history, the mind and body have been seen as one interconnected system, with each depending on the other for balance. Individuals can achieve this balance through regular exercise, good nutrition, positive relationships, and other healthy lifestyle choices. The mind–body approach treats symptoms as interconnected, deviating from the traditional allopathic model, which treats each symptom on its own, defines health as an absence of illness, and has a tendency to

separate psychological and social experiences from physical functioning (Samuelson et al., 2010).

The mechanisms of stress can in fact bring about numerous medical issues, particularly sleep disorders, sexual dysfunction, physical ailments, disrupted mental wellness, and interpersonal relationship disruption (Contrada & Baum, 2011; Sapolsky, 2004). Under the constant stress brought on by combat exposure, soldiers can be in a state of constant heightened arousal, causing their sympathetic nervous systems to be continuously engaged, their autoimmune functioning to be compromised, their mental well-being to be decreased, and their interpersonal sensitivity to be diminished. Through a mind–body approach, a state of calm can be achieved through the techniques of breathing, relaxation, and positive self-talk and actions. Through mind–body practices, soldiers become more empowered to take care of their mental and physical well-being. Mind–body practices have the ability to change the activity of the brain, creating brain circuitry that supports the well-being of the individual (Koffman & Helms, 2013). The culmination of this positive effect is that soldiers not only experience overall patterns of healing and increased wellness but also develop greater coping skills to deal with the residual effects of combat exposure. The soldiers can then find their newly formed "selves" accepted within the ecological systems whence they came with positive strategies and interpersonal relationship tools.

Conceptual Framework

My rationale for selecting these theories for this dissertation followed a logical stream. As we have previously covered, individuals develop their self-concept, self-

awareness, and self-esteem—all essential in the formation of their interpersonal sensitivity—within the parameters of mainstream society or their ecological systems. Most American soldiers originally had set self-concepts that were tailored to their mainstream lives prior to military training or combat exposure (Fox & Pease, 2012). They had values, morals, and a level of interpersonal sensitivity that were a strong part of their self-identity and interpersonal relationships. Most Americans are raised under social norms and mores—the rules of a society—with a prime edict that individuals should never harm other human beings. Combat training and exposure, however, place soldiers in a situation of moral relativism in which they are now being told that harming and killing others *is* acceptable (in some cases normal) as a course of action. For the purpose of achieving military objectives, they are trained to have a new form of self—a *special-purpose* self.

This experience can lead to an existential crisis when the soldier returns to the normed society and tries to integrate the newly formed, special-purpose self with the former social identity—an impossible task for some soldiers. Many soldiers may require help in successfully achieving that integration back into their former societal settings (see Figure 1).

The main question posed by this study was whether the mind–body approach offered in the Soldier 360° course can enhance an individual's interpersonal sensitivity and make it possible to reintegrate back into former concepts of self, self-acceptance, and positive interpersonal relationships.

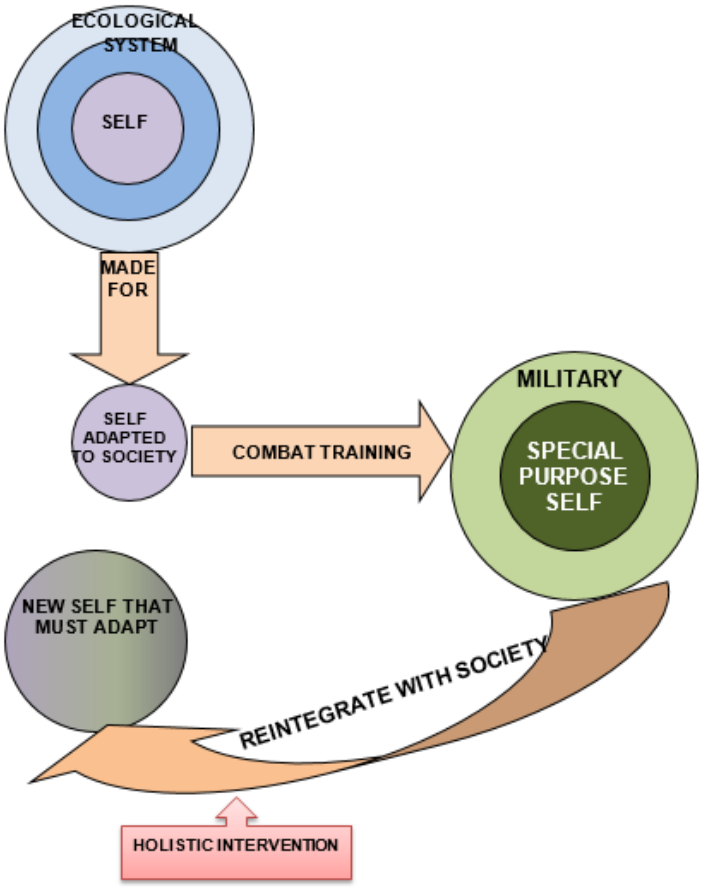

Figure 1. Conceptual framework model. The diagram shows the individual's development of self-identity or self-concept within the ecological system when initially joining the military. That self-concept is then deconstructed to form a new version of self—a special-purpose self—that is specialized to suit a designated function. Intervention is sometimes needed to help the individual reintegrate with his or her former self.

Literature Review

Combat-related training and exposure can have a life-altering effect on one's self-identity and self-concept, including among individuals who were not directly exposed to or involved in the traumatic event. By impacting one's self-concept, the trauma creates conflicted feelings, making treatment a recommended course of action. When no treatment is sought, too little treatment is provided, or incorrect treatment is administered, the results can be decreased interpersonal sensitivity, negatively impacted relationships, lowered satisfaction with quality of life, and diminished overall well-being.

Human beings are social creatures by nature. Interpersonal sensitivity, personal relationships, and social engagement are key to developing resilience and positive coping mechanisms in the face of stress. Measuring levels of interpersonal sensitivity and life satisfaction can offer some insight into how successful a traumatized individual can be in developing or maintaining his or her personal relationships. Research supports the concept that higher levels of interpersonal sensitivity lead to more successful and fulfilling interpersonal relationships (J. A. Hall et al., 2009; Lee et al., 2013).

Many studies highlighted the negative effect of trauma on interpersonal relationships, including with spouses, children, family members, and friends. The effect can result in increasing divorce, intimate partner violence, and aggression or physical misconduct toward friends or coworkers, according to several studies from authors Batten et al. (2009), Byrne and Riggs (1996), Lang, Kennedy, and Stein (2002), Monson et al. (2009), and Negrusa and Negrusa (2012). L. Hall (2008) also supported the findings that soldiers' PTSD increased the probability of isolation or aggression toward intimate

partners. Positive relationships and positive interaction with the ecological system offer value to recovery for individuals suffering with PTSD or major stress (Batten et al., 2009).

Fox and Pease (2012) discussed the experience of a combat soldier and the impact that military training and combat operations has on a soldier's identity. While their discussion primarily revolved around male soldiers, the issue did not exclude women. In their research, they found that all too often, soldiers find it a struggle to fit back into the society they left to join the military (Fox & Pease, 2012). Through an outside view, the traumatic experience may not have appeared life altering, or the soldier may not have appeared to be different, but internally, the soldier was dealing with any number of trauma-related effects.

Following the 9/11 terrorist attacks on the World Trade Center, many thousands of people experienced anxiety disorder and/or depression—even people who had been blocks or even miles away at the time of the attack. Those who demonstrated higher resilience measures had stronger coping skills, leading to the hypothesis that resilience is a strong factor in helping individuals cope with trauma (Matt & Vázquez, 2008).

Taylor and Master (2011) discussed the *tend-and-befriend* response to stress as an alternative to the common *fight-or-flight* response. By tending or nurturing, soothing satisfaction is brought on and coping is engaged, and befriending engenders a positive social engagement that helps alleviate stress (Taylor & Master, 2011). Under extreme chronic stress, a heavy burden is placed upon the sympathetic nervous system and HPA axis, which can be eased with the activation of oxytocin (McEwen & Gianaros, 2010;

Taylor & Master, 2011). Taylor and Master noted that Harlow's famous nurturing experiments showed clearly how important the nurturing function is for humans in coping with stress all throughout life and for tending behavior to be applied to future offspring and mates. The importance of the befriending action is also critical, as a body of evidence has indicated the connection between higher mortality rates and those who are socially isolated and lacking supportive relationships (Taylor & Master, 2011). According to Taylor and Master, women are more likely than men to engage in the tend-and-befriend activity that results in more active *social resource seeking,* whereas men were less likely to actively seek out social opportunities and more likely to become socially isolated and vulnerable to the negative impacts of that isolation.

Mind–body approaches have had a significant positive effect on soldiers and others who were combat exposed and trauma affected. Kaliman et al. (2014) offered a compelling study that found meditation to be an effective treatment tool. Altered physiological mechanisms bring about positive outcomes in the coping process (Kaliman et al., 2014). Brain chemistry was altered to produce a calming effect by regulation of the hippocampus–pituitary–adrenal axis and by secretion of oxytocin; this in turn brought about regularity to the circadian rhythm and sleep cycle, circulatory regulation, and inflammation reduction. Yoga was also found to have a significant effect on well-being of individuals in mental health treatment for psychiatric illness (Cabral, Meyer, & Ames, 2011).

There are and have been treatment programs shown to positively change outcomes in interpersonal relationships. Kline et al. (2010) discussed the value of care-

based treatment for combat-exposed soldiers as an effective tool in readiness of military forces. Positive results can be found in treating soldiers in a holistic approach in which CAM practices were introduced and relieved stress in soldiers and caregivers of soldiers (Duncan, Liechty, Miller, Chinoy, & Ricciardi, 2011; McPherson & Schwenka, 2004). Finding effective treatments and programs is difficult when there is denial of the existence of a problem, resistance to treatment, or a strictly allopathic approach that can miss other affected areas of soldiers' lives.

Some treatments that work to improve interpersonal sensitivity, relationships, and overall satisfaction with life include mind–body practices to promote self-care, self-evaluation, and relationship building (Newby et al., 2005). Programs used to promote resilience tend to have a single-symptom approach or have failed to launch (Meredith et al., 2011). Furthermore, Doyle and Peterson (2005) conducted a qualitative study on soldiers returning from deployment and found that deep contrasts existed in the various programs designed and offered to promote resiliency. Another, more intensive review performed by Meredith et al. (2011) evaluated programs designed to enhance resiliency by specifically targeted criteria. Many programs lacked evidence-based practices, and few, if any, had results that highlighted effectiveness of the programs (Meredith et al., 2011). Some exceptional programs that the U.S. Army has adopted are the Comprehensive Soldier Fitness (CSF) and Master Resiliency Trainer (MRT) programs, which were designed to offer soldiers information to help raise their resilience and improve their overall lives. The courses were textbook and classroom based, and they have shown positive outcomes based on program efficacy studies (Casey, 2011; Cornum

et al., 2011; Griffith & West, 2013). MRT was a component of CSF that went further to train soldiers to have mastery of the subject matter so that they could provide further training to other soldiers (Cornum et al., 2011).

Summary and Conclusions

The traditional, allopathic treatment approach that was standard in American medicine was also the standard in the U.S. Army. Since the military conflicts in the Middle East began intensifying, traditional treatment programs have failed to effectively address the wide range of problematic issues related to interpersonal relationships—divorce, intimate partner violence, workplace sexual harassment, and suicide—which have all increased as a result. Classic and modern theories offer a variety of explanations of the specific mechanisms that cause the behavior of soldiers who have been affected by involvement in or exposure to military combat. There was evidence that some programs in practice, geared toward promoting resiliency for soldiers, have been beneficial (Cornum et al., 2011; Griffith & West, 2013). There was further evidence that treating stress-related conditions proved beneficial for soldiers, families, and caregivers. This study used the quantitative methods explained in Chapter 3 to examine if the Soldier 360° program shows a correlative effect with a change in soldier participants' interpersonal sensitivity. The research provides extra knowledge in the area of mind–body research and interpersonal sensitivity. It also opens the path of exploration into whether combining a set of evidence-based treatments and offering those treatments along with self-care knowledge and training can bring about positive social change and improved personal relationships among soldiers.

Chapter 3: Research Method

Introduction

As the United States's military presence was reduced in the Middle East, thousands of U.S. soldiers who would be returning or have returned home felt the impact of combat exposure in their personal lives and personal relationships. The exposure to trauma many soldiers endured during both training and combat has left many men and women with diminished levels of interpersonal sensitivity. As a result, their personal relationships are disintegrating, their marriages are dissolving, their families are breaking down, their mental and physical health issues are escalating, and their suicide rates are disturbingly high (Karney & Crown, 2013; LeardMann et al., 2013). Providing evidence-based services, care, and programs that help improve soldiers' and veterans' lives can lead to great positive social change.

The Soldier 360° course was designed to be an engaging and empowering skill-building program that was offered to the U.S. Army for combat-exposed soldiers in leadership positions. It was presented over a 2-week period by a trained team of clinical professionals. Holistic in its approach, it provided participants with skills and tools designed to help them increase their interpersonal sensitivity, cope with and reduce their stress, work through their emotional issues, and, in doing so, improve their personal relationships.

The purpose of this study was to measure the effectiveness of the Soldier 360° program. In what follows I explain the research design and rationale of the study, the methodology I used, and any threats to the study's validity. I also discuss the research

design and rationale, the archival data and how I handled those data, the assessments used, and the variables and statistics I used in analyzing the data.

Research Design and Rationale

Following my hypothesis that a soldier can learn to cope if given a set of strategies and/or tools empowering the soldier to find internal strength and healing, developing an intervention would have been the way in which to test this hypothesis. Fortunately, the Soldier 360° program conducted for the U.S. Army at a nonmilitary event center in Grafenwöher, Germany followed a mind–body approach to increasing interpersonal sensitivity among returning soldiers and helping them improve their interpersonal relationships. It thus suited the nature of this research and provided data (collected pre- and postparticipation) I needed to perform a repeated-measures ANOVA.

I reviewed the Soldier 360° program data to determine whether the program's mind–body approach was effective in producing changes in interpersonal sensitivity and relationships. I developed the following questions and hypotheses emerged: Does a correlation emerge between a soldier's participation in the Soldier 360° program and an improvement in that soldier's interpersonal sensitivity domain and his or her satisfaction with family and personal relationships and with life in general? Furthermore, does a soldier's marital status or parental status offer different outcomes?

Q1. Among soldiers who have completed the Soldier 360° program, are there improvements in interpersonal sensitivity, family and personal relationships, and overall quality of life?

H1. Soldiers who have completed the Soldier 360° program will experience improvements in their interpersonal sensitivity, family and personal relationships, and overall quality of life.

Q2. Among soldiers who have completed the Soldier 360° program, is there a difference in interpersonal sensitivity and quality of life scores between participants who are *married* and those who are *single*?

H2. Interpersonal sensitivity and quality of life scores of *married* soldiers who have completed the Soldier 360° program will show more significant improvement than those same scores of *unmarried* soldiers who have completed the Soldier 360° program.

Q3. Among soldiers who have completed the Soldier 360° program, is there a difference in interpersonal sensitivity and quality of life scores between married or unmarried soldiers who *have children* and married or unmarried soldiers who *have no children*?

H3. Interpersonal sensitivity and quality of life scores of married and unmarried soldiers who have completed the Soldier 360° program and *have children* will be different from those same scores of married or unmarried soldiers who have completed the Soldier 360° program and *have no children.*

Q4. Are there changes in interpersonal sensitivity and quality of life scores for *female* soldiers who have completed the Soldier 360° program, and are they consistent with potential changes for *male* soldiers who have completed the Soldier 360° program?

H4. Interpersonal sensitivity and quality of life scores of *male* soldiers who have completed the Soldier 360° program will reflect more significant improvement than scores in those same domains for *female* soldiers who have completed the Soldier 360° program.

H0. There are no significant improvements found in interpersonal sensitivity and quality of life scores among any or all participants who have completed the Soldier 360° course.

I used a repeated-measures ANOVA to look at intervention outcomes using findings from the assessment tools given to participating soldiers both prior to attending the course (intake), and then again at course completion (exit). The results taken from the pre- and postcourse assessment tools—the SCL–90–R and the QOLI, which were the dependent variables—were also used to compare changes in the categories of marital status, parental status, and gender, which were the independent variables. I used between-groups measures to evaluate variations in assessment scores between married participants and unmarried participants. I used the within-groups measures to evaluate variations in assessment scores between married participants with children and married participants without children and the differences between unmarried participants with children and unmarried participants without children. Gender differences were also evaluated within both statistical groups for potential differences. Data were analyzed using SPSS Version 21 statistical analysis software. This research design helped me further explore the possibilities of improving soldiers' interpersonal relationships with holistic mind–body practices.

Methodology

Role of the Researcher

As the researcher, I analyzed deidentified archival data from the U.S. Army's 2010 implementation of the Soldier 360° program in Grafenwöher, Germany, to either accept or reject the null hypotheses. I had no knowledge of or access to the soldiers who participated in that program, nor did I have any involvement in the Soldier 360° program itself.

Selection and Recruitment of Subjects

The deidentified archival data that I analyzed for this study were provided from assessment scores of 486 male and female NCOs who took part in the Soldier 360° program that was conducted at the U.S. Army base in Grafenwöher, Germany, between March 2010 and October 2011. The participants were drawn from three U.S. Army military communities located in Grafenwöher, Vilseck, and Hohenfels, Germany.

The following criteria were used by program facilitators in the selection of NCOs for this program: (a) All participants represented a mid-management level of leadership and were nominated by their commanding officers; (b) the soldiers must have served in a combat environment, preferably within the past 120 days; (c) service longevity was also a consideration, with preference given to participants who intended to remain in the military and had a minimum of 6 months until their next military assignment; and (d) soldiers must have demonstrated motivation and a strong desire to advance in their military careers and leadership responsibilities.

While soldiers with minor medical conditions were admitted to the Soldier 360°

program, those needing accommodations for major medical conditions could not participate because their accommodations could not be provided. Soldiers facing any disciplinary actions or Uniform Code of Military Justice (UCMJ) matters were also not considered for participation.

Ethical Procedures and Considerations

Soldiers who attended the Soldier 360° course were selected by their senior leaders and were offered the opportunity to participate. Soldier 360° course participants were asked to complete an admission packet prior to beginning the course and then another packet upon completion of the course. Participants were required to complete assessment materials upon entry into the Soldier 360° course and upon exit. The assessments were administered and scored by a licensed clinical psychologist. Refusal to participate in the course was an option that soldiers could exercise.

Archival Data

I obtained archival data from the Soldier 360° program coordinators. The data covered the implementation of the program, which was conducted between March 2010 and October 2011 with participants from the U.S. Army military communities of Grafenwöher, Vilseck, and Hohenfels, Germany. Deidentification and housing of the data collected during the Soldier 360° program between March 2010 and October 2011 occurred at the Bavaria Medical Department Activity (BMEDDAC).

I secured initial verbal agreement to obtain and use the archival data from the Soldier 360° program, and the Soldier 360° program director then drew up a formal written agreement in accordance with the documentation required by the Walden

University Institutional Review Board (IRB). The IRB granted approval (IRB approval number 10-07-16-0152482).

All data obtained for this study were deidentified; that is, all personally identifiable information or direct identifiers of any individuals, relatives, or household members was removed prior to receipt. Only data necessary for the purposes of this study were used.

Assessments

Of particular relevance for this study was the SCL–90–R, interpersonal sensitivity (I-S) dimension, and the QOLI relationship satisfaction scale. Interpersonal sensitivity refers to an individual's feelings of self-worth, how the individual believes he or she compares to others, and how the individual feels others view him or her. The dimension also highlights the respondent's comfort level in relationship settings. The QOLI measures the individual's satisfaction in various domains of his or her life.

At the intake and exit of the Soldier 360° program, NCOs were given the following assessments: a program-specific intake questionnaire, the SCL–90–R, and the QOLI. The SCL–90–R and the QOLI are valid and reliable psychometric instruments (Derogatis, 1977; Frisch, 1994). The SCL–90–R assessment tool contains 90 items designed to offer an overview of an individual's symptoms and the severity of the individual's emotional state on a range of nine scales and three general indices. The SCL–90–R provides strong validity and reliability, and it is an easy, quick assessment tool to offer individuals. The adult SCL–90–R assessment tool is normed for subjects aged 17 years and older (Derogatis, 1977). The QOLI is a 32-question assessment

produced by Frisch (1994) that measures an individual's overall satisfaction in 16 life domains. It has been normed to adults and is used to provide overall assessment of life satisfaction (Frisch, 1994). Both assessments can be used to provide pretherapy and posttherapy review of treatment progress (Derogatis, 1977; Frisch, 1994).

Variables and Statistics Used in Data Analysis

Soldiers were participating in the Soldier 360° course, which was viewed as an intervention program for this study. I performed a repeated-measures ANOVA on intake and completion data. The interpersonal sensitivity (from the SCL–90–R) and QOLI scores were viewed as the dependent variables. The participants' gender, relationship status (i.e., married, single), and parental status (i.e., children, no children) were viewed as the independent variables.

Threats to Validity

Because the archival data used for this study were collected in 2010 in Germany, I was not there to personally monitor the assessment and data-collecting processes. As with any self-endorsed assessment, Warner et al. (2011) reported that manipulation of assessments can be a factor when evaluating soldiers who fear ostracism by their military units. However, the Soldier 360° program worked to allay soldiers' concerns about information obtained throughout the course through reassurance and protected information and identification. Another potential threat to validity exists with data that come from scoring or collection. To the best of my knowledge, the data were scored by a licensed psychologist and entered by a neutral administrative worker in compliance with the protocol required by the team of specialists who implement the Soldier 360° program.

Summary

Thousands of soldiers who have been deployed to combat areas in Iraq and Afghanistan and have now returned are experiencing diminished levels of interpersonal sensitivity and a negative impact on their personal relationships as a result of their trauma. Too many marriages are crumbling, and personal lives are being negatively impacted in a variety of unhealthy ways. The Soldier 360° program promises an innovative form of intervention, addressing the mind–body connection and empowering participants to find healing within them. This study was designed to determine the overall effectiveness of this program at helping soldiers cope successfully with the trauma they have endured and pick up the pieces of their lives as they move forward.

Through the use of a repeated-measures ANOVA based on archival data, I evaluated the program's impact on interpersonal sensitivity, interpersonal relationships, and quality of life measures. Using gender, marital status, and parental status as the independent variables, and the scores from two psychometric instruments as the dependent variables, I aimed to ascertain whether the Soldier 360° program had a measurable effect on its participants' interpersonal sensitivity.

Chapter 4: Results

Introduction

The purpose of this study was to quantitatively examine the effects of the Soldier 360° program on soldiers' interpersonal sensitivity and quality of life using the SCL–90–R and the QOLI. I explored three hypotheses using repeated-measures ANOVAs on pre- and postintervention assessments. This chapter provides a summary of the results of the analyses I performed.

Data Collection

I used deidentified archival data for this study. This archival data included demographic information that included marital status, parental status, and gender as well as SCL–90–R pre- and postinterpersonal sensitivity scores and the QOLI pre- and postscores of 486 NCOs who took part in the Soldier 360° program conducted at the U.S. Army base in Grafenwöher, Germany, between March 2010 and October 2011. The participants were drawn from three U.S. Army military communities located in Grafenwöher, Vilseck, and Hohenfels, Germany. Of the 486 participants, only 312 complete SCL pre- and postresults, and 364 QOLI complete results were used in this research. Additional subjects for this study were not actively recruited.

Intervention Fidelity

Selection of participants was not made by individuals affiliated with the Soldier 360° program. Rather, program participants were nominated by their commanding officers. The participants selected represented a mid-management level of leadership in the Army. The criteria for selection were that soldiers must have served in a combat

environment, preferably within 120 days prior to participating. Service longevity was also a consideration, with preference given to participants who intended to remain in the military and had a minimum of 6 months until their next military assignment. Soldiers must have demonstrated motivation and a strong desire to advance in their military careers and leadership responsibilities. Soldiers with pending UCMJ actions facing them and soldiers requiring special accommodations for major medical conditions were not admitted to the program.

Part of the intake and exit processes for the Soldier 360° program was the administration of the SCL–90–R and the QOLI. Not all participants completed the SCL or the QOLI. No reason for this was provided with the data set. Lack of trust in mental health services may have been a deterrent for soldiers who did not participate in assessment. Such lack of trust was shown in the study from Warner et al. (2011), who emphasized that soldiers routinely face mental health screening and, as a result, tend to avoid or manipulate their assessments to hide potential risk factors and avoid behavioral health referrals out of a fear of loss of prestige, merit, or relationships.

Results

I reviewed the Soldier 360° program data to determine whether the program's mind–body approach is effective in producing changes in interpersonal sensitivity and relationships. I developed the following research questions: Does a correlation emerge between a soldier's participation in the Soldier 360° program and an improvement in that soldier's interpersonal sensitivity domain on the SCL–90–R and satisfaction with family and personal relationships and with life in general measured by the QOLI? Furthermore,

does a soldier's marital status or parental status offer significantly different outcomes, and were significant differences found in the measures of male and female participants?

Data Analysis

I used a repeated-measures ANOVA to examine intervention outcomes using findings from the results obtained from the Soldier 360° course intake and exit assessment tools—the SCL–90–R and the QOLI. The results taken from the assessment tools, which were the dependent variables, were also used to compare changes in the categories of marital status, parental status, and gender, which were the independent variables. I used between-groups measures to evaluate variations for intake and exit assessment scores. I used within-groups measures to evaluate variations in assessment scores between married participants and unmarried participants, and between participants with children and participants without children; gender differences were also evaluated for potential differences. Data were analyzed using SPSS Version 21.

Descriptive Statistics

The descriptive statistics for the variables appear in Tables 1 and 2. A total of 486 participants took part in the study. The SCL–90–R group consisted of 312 participants, whereas the QOLI group included 383 participants. The SCL–90–R scores at intake (M = 49.93, SD = 15.92) ranged from 0 to 80.00, while the post-SCL–90–R scores (M = 48.36, SD = 14.94) ranged from 0 to 79.00. The QOLI scores at intake (M = 46.36, SD = 13.21) ranged from 0 to 77.00, while results on the post-QOLI scores (M = 51.14, SD = 13.48) ranged from 0 to 77.00. Table 2 shows that of the total participants, 349 (71.8%) were married, 91 (18.7%) were single, 46 (9.5%) reported other for marital status, 286 (58.7%)

had children, 197 (40.5%) reported not having children, 3 (0.6%) of the participants did not offer their parental status, 438 (91.1%) were male, and 48 (9.9%) were female.

Table 1

Descriptive Statistics for the Total Sample

	N	Minimum	Maximum	*M*	*SD*
Marital status	486	1.0	3.0	1.38	0.652
Parental status	486	0.0	2.0	1.40	0.50
Gender	486	1.0	2.0	1.10	0.29
SCL–90–R					
Intake	405	0.00	80.00	49.93	15.92
Post	346	0.00	79.00	48.36	14.94
QOLI					
Intake	428	0.00	77.00	46.36	13.21
Post	377	0.00	77.00	51.14	13.48

Note. QOLI = Quality of Life Inventory. SCL–90–R = Symptoms Checklist–90–Revised.

Table 2

Frequencies for the Total Sample

	Frequency	Valid total percentage
Marital		
Married	349	71.8
Single	91	18.7
Other	46	9.5
Parental		
Has children	286	58.7
No children	197	40.5
Not reported	3	0.6
Gender		
Male	438	91.1
Female	48	9.9

Table 3 shows the descriptive statistics for the SCL group only. The SCL–90–R scores at intake ranged from 38.00 to 79.00 (M = 52.68, SD = 9.98). The post-SCL–90–R scores ranged from 38.00 to 79.00 (M = 50.52, SD = 9.49). Table 4 shows that of the

SCL–90–R group, 225 (72.1%) were married, 63 (20.1%) were single, 24 (7.7%) reported other for marital status, 194 (62.2%) had children, 118 (37.8%) had no children, 280 (89.7%) were male, and 32 (9.9%) were female.

Table 3

Descriptive Statistics for the SCL Group

	Minimum	Maximum	*M*	*SD*
Marital status	1.0	3.0	1.36	0.62
Parental status	1.0	2.0	1.38	0.48
Gender	1.0	2.0	1.10	0.30
SCL–90–R				
Intake	38.00	79.00	52.68	9.98
Post	38.00	79.00	50.52	9.49

Note. $N = 312$. SCL–90–R = Symptoms Checklist–90–Revised.

Table 4

Frequencies for Variables

	Frequency	Valid total percentage
Marital		
Married	225	72.1
Single	63	20.2
Other	24	7.7
Parental		
Has children	194	62.2
No children	118	37.8
Gender		
Male	280	89.7
Female	32	10.3

Table 5 shows the descriptive statistics for the QOLI group. The QOLI scores at intake ranged from 6.00 to 77.00 ($M = 46.54$, $SD = 12.90$); the post-QOLI scores ranged from 8.00 to 77.00 ($M = 51.50$, $SD = 13.24$). Table 6 shows that of the QOLI group, 263 (72.5%) were married, 67 (18.5%) were single, 33 (9.1%) reported other for marital

status, 215 (59.2%) had children, 148 (40.8%) had no children, 327 (90.1%) were male, and 36 (9.9%) were female.

Table 5

Descriptive Statistics for the QOLI Group

	Minimum	Maximum	*M*	*SD*
Marital status	1.0	3.0	1.37	0.64
Parental status	1.0	2.0	1.41	0.49
Gender	1.0	2.0	1.10	0.29
QOLI				
Intake	6.00	77.00	46.54	12.90
Post	8.00	77.00	51.50	13.24

Note. $N = 363$. QOLI = Quality of Life Inventory.

Table 6

Frequencies for Variables

	Frequency	Valid total percentage
Marital		
Married	263	72.5
Single	67	18.5
Other	33	9.1
Parental		
Has children	215	59.2
No children	148	40.8
Gender		
Male	327	90.1
Female	36	9.9

Test of the Hypotheses

Results for Research Question 1

Research Question 1 asked: Among soldiers who have completed the Soldier 360° program, are there improvements in interpersonal sensitivity, family and personal relationships, and overall quality of life? My hypothesis was that soldiers who have

completed the Soldier 360° program will experience improvements in their interpersonal sensitivity, family and personal relationships, and overall quality of life.

I conducted two one-way repeated-measures ANOVAs to evaluate the effect of the Soldier 360° program on the results of the SCL–90–R (Table 7) and QOLI (Table 8) as demonstrated between intake and completion of the program. There was a significant effect of the Soldier 360° program on results of the SCL–90–R, Wilks's $\lambda = .94$, $F(1, 311) = 18.16$, $p = .000$. More specifically, the SCL–90–R scores were significantly lower after completing the program ($M = 50.52$) than prior to completing the program ($M = 52.69$). Furthermore, results for the QOLI at intake ($M = 46.54$) and after taking the program ($M = 51.50$) were significantly different, Wilks's $\lambda = .82$, $F(1, 362) = 79.15$, $p = .000$. These findings support the hypothesis that taking the Soldier 360° program will result in improvement in a soldier's interpersonal sensitivity, family and personal relationships, and overall quality of life.

Table 7

Multivariate Tests for SCL–90–R: Research Question 1

Effect	Value	*F*	*df*		*p*	Partial η^2	Noncent. parameter	Observed power
			Hypothesis	Error				
Pillai's trace	0.05	18.16	1.00	311.00	0.00	0.05	18.16	0.98
Wilks's λ	0.94	18.16	1.00	311.00	0.00	0.05	18.16	0.98
Hotelling's trace	0.05	18.16	1.00	311.00	0.00	0.05	18.16	0.98
Roy's largest root	0.05	18.16	1.00	311.00	0.00	0.05	18.16	0.98

Table 8

Multivariate Tests for QOLI: Research Question 1

Effect	Value	*F*	*df*		*p*	Partial η^2	Noncent. parameter	Observed power
			Hypothesis	Error				
Pillai's trace	0.17	79.15	1.00	362.00	0.00	0.17	79.15	1.00
Wilks's λ	0.82	79.15	1.00	362.00	0.00	0.17	79.15	1.00
Hotelling's trace	0.21	79.15	1.00	362.00	0.00	0.17	79.15	1.00
Roy's largest root	0.21	79.15	1.00	362.00	0.00	0.17	79.15	1.00

Results for Research Question 2

Research Question 2 asked: Among soldiers who have completed the Soldier 360° program, is there a difference in interpersonal sensitivity and quality of life scores between participants who are married and those who are single? My hypothesis was that interpersonal sensitivity and quality of life scores of married soldiers who have completed the Soldier 360° program will show more significant improvement than those same scores of unmarried soldiers who have completed the Soldier 360° program.

I conducted two two-way repeated-measures ANOVAs to evaluate the effect of the Soldier 360° program and marital status on the results of the SCL–90–R (Table 9) and QOLI (Table 10) between intake and after completing the program. As shown in Table 9, there was no significant effect of the program on results of the SCL–90–R while controlling for marital status, Wilks's $\lambda = .99$, $F(2, 309) = 0.66$, $p = .51$. Furthermore, as shown in Table 10, the results for the QOLI at intake and after completing the program between married and single participants were not significantly different, Wilks's $\lambda = .99$, $F(2, 360) = 0.56$, $p = .56$. Given these results, the hypothesis that interpersonal sensitivity and quality of life scores of married soldiers who have completed the Soldier 360° program will show more significant improvement than those same scores of unmarried soldiers who have completed the Soldier 360° program was not supported.

Table 9

Multivariate Tests for SCL–90–R by Marital Status: Research Question 2

Effect	Value	*F*	*df*		*p*	Partial η^2	Noncent. parameter	Observed power
			Hypothesis	Error				
Pillai's trace	0.004	0.66	2.00	309.00	0.51	0.004	1.33	0.16
Wilks's λ	0.99	0.66	2.00	309.00	0.51	0.004	1.33	0.16
Hotelling's trace	0.004	0.66	2.00	309.00	0.51	0.004	1.33	0.16
Roy's largest root	0.004	0.66	2.00	309.00	0.51	0.004	1.33	0.16

Table 10

Multivariate Tests for QOLI by Marital Status: Research Question 2

Effect	Value	*F*	*df*		*p*	Partial η^2	Noncent. parameter	Observed power
			Hypothesis	Error				
Pillai's trace	0.003	0.56	2.00	360.00	0.56	0.003	1.13	0.14
Wilks's λ	0.99	0.56	2.00	360.00	0.56	0.003	1.13	0.14
Hotelling's trace	0.003	0.56	2.00	360.00	0.56	0.003	1.13	0.14
Roy's largest root	0.003	0.56	2.00	360.00	0.56	0.003	1.13	0.14

Results for Research Question 3

Research Question 3 asked, among soldiers who have completed the Soldier 360° program, is there a difference in interpersonal sensitivity and quality of life scores between married or unmarried soldiers who have children and married or unmarried soldiers who have no children? The third hypothesis in this study posited that interpersonal sensitivity from the SCL–90–R and QOLI scores of married and unmarried soldiers who have completed the Soldier 360° program and have children will be different from those same scores of married or unmarried soldiers who have completed the Soldier 360° program and have no children.

I conducted two-way repeated-measures ANOVAs to evaluate the effect of the Soldier 360° program and parental status on the results of the SCL–90–R (Table 11) and QOLI (Table 12) between intake and completion of the program. As seen in Table 11, there was no significant effect of the program on results of the SCL–90–R while controlling for parental status, Wilks's $\lambda = .99$, $F(1, 310) = 1.91$, $p = .16$. As seen in Table 12, results for the QOLI at intake and after taking the program for participants who

had children and those who did not were not significantly different, Wilks's $\lambda = .99$, $F(1, 361) = 1.66$, $p = .19$. This rejects the research hypothesis that interpersonal sensitivity and quality of life scores of married and unmarried soldiers who have completed the Soldier 360° program and have children will be different from those same scores of married or unmarried soldiers who have completed the Soldier 360° program and have no children.

Table 11

Multivariate Tests for SCL–90–R by Parental Status: Research Question 3

Effect	Value	*F*	*df*		*p*	Partial η^2	Noncent. parameter	Observed power
			Hypothesis	Error				
Pillai's trace	0.006	1.91	1.00	310.00	0.16	0.006	1.91	0.28
Wilks's λ	0.99	1.91	1.00	310.00	0.16	0.006	1.91	0.28
Hotelling's trace	0.006	1.91	1.00	310.00	0.16	0.006	1.91	0.28
Roy's largest root	0.006	1.91	1.00	310.00	0.16	0.006	1.91	0.28

Table 12

Multivariate Tests for QOLI by Parental Status: Research Question 3

Effect	Value	*F*	*df*		*p*	Partial η^2	Noncent. parameter	Observed power
			Hypothesis	Error				
Pillai's trace	0.005	1.66	1.00	361.00	0.19	0.005	1.66	0.25
Wilks's λ	0.99	1.66	1.00	361.00	0.19	0.005	1.66	0.25
Hotelling's trace	0.005	1.66	1.00	361.00	0.19	0.005	1.66	0.25
Roy's largest root	0.005	1.66	1.00	361.00	0.19	0.005	1.66	0.25

Results for Research Question 4

Research Question 4 asked, are there changes in interpersonal sensitivity and quality of life scores for female soldiers who have completed the Soldier 360° program,

and are they consistent with potential changes for male soldiers who have completed the Soldier 360° program? My hypothesis proposed that interpersonal sensitivity and quality of life scores of male soldiers who have completed the Soldier 360° program will reflect more significant improvement than scores in those same domains for female soldiers who have completed the Soldier 360° program.

I conducted two-way repeated-measures ANOVAs to evaluate the effect of the Soldier 360° program and gender on results on the SCL–90–R (Table 10) and QOLI (Table 11) between before and after taking the program. As seen in Table 13, there was no significant effect of the program on results of the SCL–90–R while controlling for gender, Wilks's $\lambda = 1.00$, $F(1, 310) = 0.02$, $p = .86$. As seen in Table 14, results on the QOLI prior to and after taking the program between men and women were not significantly different, Wilks's $\lambda = 1.00$, $F(1, 361) = 0.01$, $p = .91$. Given these findings, the hypothesis that interpersonal sensitivity and quality of life scores of male soldiers who have completed the Soldier 360° program will reflect more significant improvement than scores in those same domains for female soldiers who have completed the Soldier 360° program was not supported.

Table 13

Multivariate Tests for SCL–90–R by Gender: Research Question 4

Effect	Value	*F*	*df*		*p*	Partial η^2	Noncent. parameter	Observed power
			Hypothesis	Error				
Pillai's trace	0.000	0.02	1.000	310.00	0.86	0.00	0.02	0.05
Wilks's λ	1.00	0.02	1.000	310.00	0.86	0.00	0.02	0.05
Hotelling's trace	0.000	0.02	1.000	310.00	0.86	0.00	0.02	0.05
Roy's largest root	0.000	0.02	1.000	310.00	0.86	0.00	0.02	0.05

Table 14

Multivariate Tests for QOLI by Gender: Research Question 4

Effect	Value	*F*	*df*		*p*	Partial η^2	Noncent. parameter	Observed power
			Hypothesis	Error				
Pillai's trace	0.00	0.01	1.00	361.00	0.91	0.00	0.01	0.051
Wilks's λ	1.00	0.01	1.00	361.00	0.91	0.00	0.01	0.051
Hotelling's trace	0.00	0.01	1.00	361.00	0.91	0.00	0.01	0.051
Roy's largest root	0.00	0.01	1.00	361.00	0.91	0.00	0.01	0.051

Summary

Hypothesis 1 was supported through the statistical analysis: Soldiers who have completed the Soldier 360° program experienced statistically significant improvements in their interpersonal sensitivity and in their overall quality of life. However, Hypotheses 2–4, which looked for greater effects at a categorical level, were not supported. The statistical analysis of these data supports the Soldier 360° program's positive effect on soldiers' interpersonal sensitivity and quality of life and does not show any single group category analyzed as having a greater benefit from the Soldier 360° program on their

respective interpersonal sensitivity or quality of life.

Chapter 5 provides a summary of the study as well as offering final comments about the outcomes of the analysis. It also offers discussion of the limitations of this study. The chapter furthermore examines future research ideas. Finally, the chapter offers social change implications.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative study was to examine whether the approach, tools, and techniques of the Soldier 360° course were effective in enhancing interpersonal sensitivity and increasing satisfaction in the quality of life of returning, combat-exposed American soldiers, ultimately helping soldiers adapt their military-made *special-purpose selves* back into the versions of themselves they left behind to serve in the Army and to fight in wars. Findings for the study base on data taken from an existing archival Soldier 360° program deidentified data set.

Throughout history, combat-related trauma experienced by military personnel has placed an indelible burden on personal relationships. According to Monson et al. (2009), a correlation between combat-related trauma and increased dysfunction in personal relationships has been found in many studies. Furthermore, research has also indicated that male veterans suffering from the effects of combat trauma exhibit increased aggression toward family members and intimate partners (Monson et al., 2009). The impact of this trauma, which is seen among both women and men, has been extensive, leading to divorce, domestic violence, substance abuse, criminal behavior, and suicide. There has been—and continues to be—a critical need to help these men and women avoid or deal with these types of escalating problems to help them reintegrate back into their work environments and civilian lives at home.

Two of the key issues in these efforts, pointed out by McNulty (2005), have been first identifying those servicemen and servicewomen who need treatment, and then

discovering the treatments that are most effective in eradicating or reducing the impact their trauma has had on their lives. One reason this process has been challenging is the service members' fears of being ostracized by peers and leaders, which has resulted in them altering their postcombat assessments and hiding their symptoms from coworkers, supervisors, and medical personnel (Warner et al., 2011).

Historically, allopathic and single-symptom approaches have been used most often by the U.S. Army's mental and physical health providers. However, the outcomes have fallen short of hopes and expectations, and have failed to provide effective recovery tools to enable servicemen and servicewomen to make positive adjustments in their daily lives (Strauss et al., 2011).

The Army introduced resiliency training programs in an attempt to address the complex range of issues that were naturally appearing in response to America's engagement in war. The Soldier 360° program was developed to help soldiers overcome the obstacles and psycho-social-biological issues previously mentioned and bring a positive social change to soldiers' lives. Key components of mind–body theory are interpersonal relationship coaching and development of positive relationship habits for well-being and internal balance (Koffman & Helms, 2013; Shang, 2001). The Soldier 360° program, which was first implemented at the U.S. Army base in Grafenwöher, Germany, in March 2010, was designed as a comprehensive military leadership skills development course that demonstrated and taught a more holistic mind–body approach than other programs. Participating soldiers were offered hands-on tasks and activities to help them explore the causes of and solutions for the stress, PTSD, poor health, physical

pain, low self-esteem, self-concept dissonance, and relationship issues with which they were struggling.

The deidentified data I used included demographic statistics (marital status, gender, and parent status) and scores on the SCL–90–R and QOLI, which had been given at pre- and postcourse intervals. I used an ANOVA to quantitatively examine treatment outcomes using the results from the SCL–90–R and QOLI assessment tools. The key variables within this analysis were the intake and exit SCL–90–R and QOLI results (dependent variables) as well as marital status, parental status, and gender (independent variables). While overall interpersonal sensitivity and quality of life measures were found to be improved at the completion of the Soldier 360° course, there were no statistically significant improvements found within the groups for married or partnered soldiers, soldiers with children or without, or men and women. In this chapter, I provide a more comprehensive interpretation of the findings as well as the limitations of the study. I also offer recommendations for further research, and discuss the implications of the study and its potential for positive social change.

Interpretation of the Findings

To successfully carry out military missions, American soldiers must be trained to develop a new form of self—a special-purpose self—that makes it acceptable to harm others or take a life. Being in direct opposition to society's norms and mores about doing no harm to others, it creates an existential crisis among many soldiers. For those who are then exposed—directly or indirectly—to combat, the resulting impact becomes a

significant problem, particularly in dealing with the soldiers' relationship issues and levels of interpersonal sensitivity.

At the time of this research study, relationship issues had not yet become a focal point in studies of trauma-related resiliency and relationships, or in suicide prevention for soldiers in the U.S. Army. Often, soldiers' self-identities have also been overlooked in research and theories concerning PTSD, according to Fox and Pease (2012). The Soldier 360° program, as the findings of this study indicate, improved program participants' interpersonal sensitivities and quality of life. The program's positive outcomes underscore the merits of its holistic approach and further indicate that soldiers would benefit from participation.

Carlson (2016) suggested that individuals in strong relational bonds will have increased meta-accuracy in their interpersonal interactions, while less substantive personal relationships tend to lead to a level of vague or misinterpreted interpersonal cues. My research findings, however, do not indicate a significantly greater interpersonal sensitivity for those soldiers with intimate relationships and familial bonds. Soldiers who were married (or had an intimate partner) and soldiers who had children did not have significantly better outcomes that their unmarried and non-child-having peers, indicating that having an intimate partner or having children did not impact individuals' gains in interpersonal sensitivity through participation in the Soldier 360° course.

Gender differences in the U.S. Army are a factor in job roles and duties and also for the ways that men and women experience their time in service (Defense Manpower Data Center, 2013). Not only is sexual assault a troubling concern but Kintzle et al.

(2015) have also noted that the effects of PTSD are found to be different in male and female soldiers. Considering this, and bearing in mind that previous work of Fox and Pease (2012) indicated that male soldiers express a higher level of suppression of feelings and aggression toward others, it is notable that there was no significant difference in the outcomes between men and women. Another important consideration was the work of Taylor and Master (2011), which indicated that women exhibit stronger social seeking behavior. Also, J. A. Hall and Mast (2008) studied the potential effects of stereotypical task domains on interpersonal sensitivity measures and concluded that a stereotypical male task or event may engender higher values in interpersonal sensitivity for men—the event of fighting in a war or being in the military may have been stereotypically weighted toward men. Future research could benefit from greater exploration of the potential effect a stereotypically male job may have on female interpersonal sensitivity measures.

This study underscored the process of change that a soldier is required to undergo through military training and combat exposure. The findings in this study also helped to highlight the need to help soldiers build and improve their interpersonal sensitivity. For example, feelings of acceptance and inclusion help to protect against depression in soldiers, which is necessary in the soldiers' reintegration into home life (Bryan & Heron, 2015). Interpersonal sensitivity (a measure of how appropriately an individual believes others perceive and anticipate the individual's actions and ideas as well as how well the individual perceives and anticipates others' reactions) is an indication of an individual's feelings of acceptance and inclusion (Decety & Batson, 2007; Hall et al., 2009). According to Hall et al., empathy and sympathy are key components of interpersonal

sensitivity. Furthermore, L. Hall (2008) stressed that more appropriate and acceptable psychosocial reactions were noted in individuals with higher levels of interpersonal sensitivity, while a diminished self-concept and misinterpretation of the gestures and social cues of others were found in individuals with lower interpersonal sensitivity. These often led to a withdrawal from social situations and engagements. The Soldier 360° course modules contained information and tools to help soldiers engage more appropriately in social situations and relationships and to more appropriately gauge the social cues of others. My research findings and the findings of other researchers highlight the need for more research to be pursued in the area of mind–body practices when seeking treatment for PTSD (Seppällä et al., 2014).

Limitations of the Study

Using archival data, I expected some limitations. The design of the program, though well devised, created a natural limitation for this study. Other limitations I took into consideration were my lack of control over the personnel facilitating the course, the administration of the psychometrics, and the collection and handling of the data. The archival data also limited me to examining all data on combat-exposed soldiers with no data on participants' job titles, prior resiliency training, or partners' (in particular, for those indicating an intimate partner relationship status) participation in the program. This study was limited to the scores obtained from the SCL–90–R for the interpersonal sensitivity domain score rather than scores from an instrument solely dedicated to the measure of interpersonal sensitivity, such as the Profile of Nonverbal Sensitivity test. Although the SCL–90–R is a good tool, it was designed to provide an overview of an

individual's symptoms and the severity of the individual's emotional state on a range of nine scales and three general indices. The SCL–90–R did, however, offer strong validity and reliability for this study (Derogatis, 1977).

That soldiers manipulated the outcomes of their SCL–90–R and QOLI scores to downplay any potential mental health concerns may be supported by the findings of Warner et al. (2011), who found that fear of negative consequences caused military service members in the United Kingdom to hide their perceived negative symptoms from medical and mental health professionals. Batten et al. (2009) also noted that U.S. soldiers have a motivation to manipulate test results to reflect a potentially more favorable psychometric score. However, the Soldier 360° course was conducted outside the soldiers' workplace in a nonmilitary setting, which may have served to alleviate some potential concerns that soldiers may have held.

The first hypothesis, which measured the effect of the Soldier 360° course on interpersonal sensitivity scores from the SQL–90–R and the overall quality of life scores from the QOLI, did find a statistically significant effect. However, I found no statistically significant effect (apart from the overall statistically significant result for all participants) on interpersonal sensitivity scores from the SQL–90–R and the overall quality of life scores from the QOLI between the categorically defined groups (parental, marital, or gender). The results are surprising, considering that numerous studies have shown that social, familial, and intimate relations tend to improve when interpersonal sensitivity levels are higher (J. A. Hall et al., 2009; Lee et al., 2013). The study did not control

specifically for parental, marital, or gender groups, and the sample size was limited to the one iteration of the Soldier 360° course.

At the time of this study, available research on the effects of CAM practice in treating PTSD was almost nonexistent. Indeed, Seppällä et al. (2014) have pointed out that the research is limited in the field of mind–body treatments used for conditions such as PTSD. The Soldier 360° course provided soldiers with a variety of mind–body tools that they could use and teach to others. There was no way to know from the data set if it was the compilation of the practices offered, a combination of just a few practices or ideas, or a single practice that helped the soldiers to experience an elevation in their interpersonal sensitivity scores and an increase in their quality of life outlook.

Interpersonal sensitivity has been defined as a necessary component of the self that assesses the response of others, according to J. A. Hall et al. (2009). Batten et al. (2009) called for a greater focus on and attention to the interpersonal sensitivity of soldiers diagnosed with PTSD and family involvement to better address the needs of those soldiers. According to Bryon and Heron (2015), in their research studies on military personnel suffering the ill effects brought on by combat exposure, being positively connected to others offers a protective factor for soldiers and protects against post deployment depression. Although limitations exist for this study, its results add to the limited research on the subject of combat-exposed soldiers' interpersonal sensitivity and provide the scientific community with a stimulus to further explore soldiers' interpersonal sensitivity as part of mind–body practices when helping combat-exposed

soldiers cope, reintegrate, improve their relationships and sense of belonging, and improve overall protective factors.

Recommendations

The results of the statistical analysis not only offer validation for the use of holistic practices with soldiers but also highlight the need for more services and attention to be paid to soldiers' relationships with themselves and others. The Soldier 360° course appears to offer the right tools, but for soldiers outside of the service area or those who miss the program when available, it would be optimal to provide a structured program much like Soldier 360° that includes the soldier's intimate partner or at least incorporates skills for relationship-building exercises that focus on the self and others. For this reason, further research would be beneficial in the area of interpersonal sensitivity in soldiers.

As I emphasized previously, Warner et al. (2011) noted that soldiers might manipulate the assessments to create a more favorable (or what the soldier taking the assessment perceives to be more favorable) outcome. I therefore recommend that some form of action be taken to safeguard against such manipulation. I advise future researchers to gain the trust of the soldiers and work to ensure that the assessments are not used as a tool to affect a soldier's career.

The findings for this study do show a statistically significant increase in interpersonal sensitivity, but there is no statistically significant increase in scores for the SCL–90–R interpersonal sensitivity measure or overall QOLI nor a decrease when examination was made between male and female participants. The lack of a statistically significant difference between male and female participants is somewhat surprising given

that women tend to engage more often in seeking social resources (Taylor & Master, 2011). Furthermore, Taylor and Master offered that, in response to stress, women are more prone to tend and befriend, and men, in contrast, most likely would withdrawal and isolate from others. Future research might benefit from the addition of male and female coping strategies and relationships prior to joining a mind–body skill-building course. Alternatively, providing male-only and female-only courses might be useful to test for gender differences in outcomes.

Future studies would also benefit from a longitudinal study of months and years to better evaluate long-term effects. Future research could also be designed to isolate for interpersonal sensitivity to confirm that the topic merits more attention. Assessing for interpersonal sensitivity alone could also enhance future studies. Research should also attempt to collect pre- and post-self-reported data to offer more in-depth analysis of the soldier's interpersonal sensitivity (e.g., the soldier's perspective of how others view him or her as well as how the soldier believes others are interpreting the soldier's words and actions). Enhancing the soldier's protective factors takes a step toward reducing depression and, ultimately, the threat of suicide (Batten et al., 2009).

Implications

The findings of this study suggest that a holistic intervention that includes mind–body practices as well as practices to improve a soldier's relationships and feelings toward self and others can positively improve the soldier's interpersonal sensitivity and quality of life—in other words, the degree to which soldiers accurately perceive others and accurately believe how others perceive them. The findings further suggest that all

soldiers benefit equally regardless of gender or familial status. This will lead to a positive social change because soldiers will find ease with which to adjust back into their family lives and into the civilian lives they came from and will increase the much-needed protective factors to help reduce inappropriate behavior and threat of suicide.

Many programs have been designed and implemented with varying degrees of success in creating positive social change in the lives of U.S. Army soldiers (Meredith et al., 2011). However, none of the other programs offered such a range of evidence-based mind–body practices nor focused solely on soldiers' interpersonal sensitivity. The Soldier 360° course was unique because it provided the soldiers with a set of tools to help them adapt to the effects of combat exposure, overcome the personal challenges developed through military training and subsequent military life, and live more productive and fulfilled lives. Part of the Soldier 360° program specifically attended to improving interpersonal skills. Based on the findings, there would be benefits for all soldiers to engage in Soldier 360° or a course like it that offers skill development and coping strategies developed for soldiers.

Veterans and soldiers who have returned from active combat in Iraq and Afghanistan are struggling with interpersonal relationships in their workplaces and home lives (Batten et al., 2009; Braswell & Kushner, 2010; Fox & Pease, 2012; LeardMann et al., 2013). Undiagnosed or missed medical or mental health conditions were another notable problem for access to treatment or care (Warner et al., 2011). The unique approach of courses like Soldier 360° offers soldiers a nonthreatening, noninvasive option that empowers them to make a paradigm shift in their beliefs regarding PTSD and

their own approaches to getting care. Soldiers' spouses who attended the course were able to gain enlightenment and learn how best to work with their spouses.

Evidence has been emerging in the scientific community supporting the use of CAM to aid in place of or in conjunction with traditional Western practices for symptom reduction or elimination of PTSD and combat-related trauma effects (Kim, Schneider, Kravitz, Mermier, & Burge, 2013; Seppällä et al., 2014). Rozanov and Carli (2012) found that a combination of psycho-social-biological factors added to and enhanced the complexities of soldier care and suicide prevention. The overall implication of this study is that providing a holistic approach to treating soldiers who have been exposed to combat helps improve interpersonal sensitivity (e.g., greater accuracy in interpreting the social and nonverbal cues of others) and would help soldiers in their workplace, social, and intimate relationships. Ideally, helping soldiers adapt back into their family lives and into the civilian lives they came from will lead to positive social change by increasing protective factors and reducing the threat of suicide.

Conclusion

Many of the men and women of the U.S. Army have struggled with the challenge to readapt to the lives they had prior to entering the military and engaging in combat scenarios. The response to help soldiers improve resiliency and coping mechanisms has been laudable, but it has also not fully met the needs that have existed. In particular, soldiers' interpersonal sensitivity has not been focused on when addressing the issues that arose from combat exposure and trauma. The Soldier 360° course was a program designed to give soldiers tools to help them with reintegration of their special-purpose

selves into the social construct the soldiers left to perform their military service. The hypothesis of whether a holistic program using evidence-based practices could improve the soldiers' interpersonal sensitivity emerged from review of the Soldier 360° course. A literature review resulted in a small amount of research specifically devoted to the development or improvement of combat-exposed soldiers' interpersonal sensitivity.

I designed this study to explore whether the mind–body approach offered in the Soldier 360° course can enhance an individual's interpersonal sensitivity and make it possible to reintegrate back into former concepts of self, self-acceptance, and positive interpersonal relationships. Using the deidentified data obtained from the Soldier 360° course conducted in Grafenwöher, Germany, I used a repeated-measures ANOVA to examine the effect, if any, of the Soldier 360° program on soldiers' interpersonal sensitivity and overall quality of life. I further examined whether there were changes based on marital status, parental status, or gender. The findings of this quantitative analysis do indicate that there was improvement in the interpersonal sensitivity scores on the SCL–90–R and also improved overall quality of life scores on the QOLI. However, there were no statistically significant improvements found within groups (marital, parental, gender). While the results do show an overall positive effect, they suggest that future research should focus attention on the area of interpersonal sensitivity among U.S. service members.

As the U.S. Army strives to integrate thousands of combat-affected individuals back into mainstream American life, the significance of this research study can be profound, as it may be able to create positive social change by shedding light on these

and other critical issues. An unacceptably high number of suicides are occurring among soldiers who have returned from active combat in Iraq and Afghanistan, along with a decline in the quality of their interpersonal relationships (Braswell & Kushner, 2010; Fox & Pease, 2012; LeardMann et al., 2013). This research can add not only to the current understanding of how combat affects individuals but also to the development of methods of helping them reclaim their lives and maintain successful relationships, offering much-needed positive social change.

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Appendix A: The Soldier 360° Course Schedule

Week 1

	Monday	Tuesday	Wednesday	Thursday	Friday
0630		Yoga	Yoga	Yoga	Yoga
0800	Group Formation Lodging Assignments Check-in	Breakfast / Personal Hygiene	Breakfast / Personal Hygiene	Breakfast / Personal Hygiene	Breakfast / Personal Hygiene
0900	***~Intake Packets~***	Humor and Health	PTSD	Spirituality	Resiliency *(Viet Nam POW)*
1000	***1030*** - Course introduction / Orientation / **Ground Rules** / Rotation Sessions Introductory Session –	***Breakout Session - Morning***	***Breakout Session - Morning***	***Breakout Session - Morning***	Pain and Pain Management (Acupuncture)
1100		Journaling Sleep	Anger / Anger Management	Suicide Prevention	Mindful Sex and Relationships
1200	Lunch	Lunch	Lunch	Lunch	Lunch
1330	Breathing Stress / Stress Response	Injuries and Injury Prevention	Domestic Violence	Alcohol / Prevention AA Start-up *(AA Rep)*	
1400	Mindfulness Relaxation Response *(take a 360)*	***Breakout Session - Afternoon***	***Breakout Session - Afternoon***	***Breakout Session - Afternoon***	***Fishbowl Exercise***
1500	Biofeedback	Physical Training *~SME Q&A~* *(Cardio, profile PT, training planning)*	Communication	Nutrition – Mindful Eating, Fuel for Performance	
1630	Personal Time	Personal Time	Personal Time	Personal Time	Weekend assignments -Financial Report -LES -Budget spreadsheet -Prep Teaching Sessions
1700	Dinner	Dinner	Dinner	Dinner	
1800	Evening Session: **Hypnosis** ***Staff / Facilitator daily review / prep next day sessions / coordination/ observations-issues, concerns***	Evening Session: Mindful Wine Tasting Discussion: ***Alcohol and Alcohol Management*** ***Staff / Facilitator daily review / prep next day sessions / coordination/ observations-issues, concerns***	Evening Session: Discussion: **Art Therapy** - *"Draw your Journey – past and present relationships" how these have brought you to where you are today?* ***Staff / Facilitator daily review / prep next day sessions / coordination/ observations-issues, concerns***	Evening Session: ***Storytelling*** *(journal assignment)* ***Staff / Facilitator daily review / prep next day sessions / coordination/ observations-issues, concerns***	Transportation

Week 2

	Monday	Tuesday *~Financial Counselor~*	Wednesday *~Financial Counselor~*	Thursday	Friday
0800	Yoga (**Soldier Instructors**)	Yoga (**Soldier Instructors**)	Yoga (**Soldier Instructors**)	Yoga (**Soldier Instructors**)	Yoga (**Soldier Instructors**)
0900	Introduction – Couples Weekend review/ outcomes **Soldier / Staff Presentations:** • Stress/Stress Management • Mindfulness • Biofeedback • Relaxation Response • Sleep • Journaling	Communication – Parent-Child	**Soldier / Staff Presentations:** • Injury Prevention • Physical Training	**Soldier / Staff Presentations:** • Suicide Prevention Psychology of Consumption	*Shield Exercise*
1000		***Breakout Session - Morning***	***Breakout Session - Morning***	***Breakout Session - Morning***	
1100		Domestic Violence	**Soldier / Staff Presentations:** • Anger / Anger management	**Soldier / Staff Presentations:** • Resiliency ('What does a traumatized person look like?')	Course Evaluations
1130	Lunch	Lunch	Lunch	Lunch	Lunch
1300	Couples Communication **Soldier / Staff Presentations:**	**Soldier / Staff Presentations:** • PTSD	**Soldier / Staff Presentations:** • Pain / Pain Management	***Art Therapy*** *'Why am I here? What is my purpose?'*	
1400	Humor and Health Supervisor / Leader Communication	• Alcohol / Alcohol Management AA Start-up	Pain / Pain Management Acupuncture Mindful Sex and Relationships	**Soldier / Staff Presentations:** • Spirituality - "Spirituality as a fundamental attitude that imbues your whole life."	1400 – Graduation / Command Reception
1500	***Breakout Session - Afternoon***	***Breakout Session - Afternoon***	***Breakout Session - Afternoon***	***Breakout Session - Afternoon***	Instructor AAR discussion
1600	AAR	AAR	AAR	AAR – ***Homework: Shield***	

Appendix B: The Soldier 360° Course Content

This is a comprehensive leadership course designed to deliver knowledge and skills for improved leadership through holistic well-being, with several sessions covering a variety of topics designed to help noncommissioned officers to effectively manage stress that comes from combat and even prior to combat. The purpose of this course is to approach stress reduction and maintenance through developing knowledge and practice. The following descriptions cover the topics and areas of instruction and practice provided in this course.

Holistic Wellness and Resiliency for Leadership

The course offers a discussion on the concept of holistic wellness in an era when an allopathic approach to an individual's health maintenance is the accepted and practiced norm. The course further demonstrates how developing stronger resiliency and wellness in leaders through a multidimensional approach will help them to provide great mentorship within the work and personal environments. An individual who takes care of his or her physical, mental, and intra/interpersonal spiritual well-being has the ability to take care of others in both personal and work environments. This description begins with the individual and a discussion of individual differences and then discusses the importance of the other layers of being from self to inter- and intrapersonal to environmental to spiritual well-being.

Stress

This course reviews the history and biomechanics of stress. Through demonstration and discussion, the effect that stress can have on an individual's body as

well as on an individual's life is discussed, as is how individual differences dictate how stress will affect the self. Theory and research are offered in addition to the discussion.

Stress Management

Various evidence-based techniques are introduced and experienced in this course that serve to alleviate stressors and the effects of stress on the individual's mind, body, spirit, and life. Techniques such as yoga, mindfulness, meditation, guided meditation, breathing, and biofeedback are introduced and engaged.

Complementary Alternative Medicine

This course offers description and use of various forms of complementary alternative medicine in alleviating pain and aches that affect either the mind or body. Acupuncture is described and demonstrated. Other forms of pain management (i.e., various forms of massage, chiropractic care, tapping) are discussed.

Neuroscience

The biomechanics of the brain and neurochemicals are presented and discussed in this course, which will allow an understanding of the neurochemicals that are produced during various activities and with stress, learning about the central and peripheral nervous systems, and learning about medications and forms of delivery to the brain.

Sleep

The sleep course covers the science of sleep. In this course, positive and negative sleep environments and habits are discussed. Medications for sleep are talked about. Good, healthy sleep hygiene is a foundational element of well-being, and various techniques are introduced for a positive sleep experience.

Traumatic Brain Injury

This course covers the physical components of traumatic brain injury, the various forms of impact, and the resulting physical damage. The course goes further into the behavioral issues that can result from a traumatic brain injury. Finally, various modalities of treatment and recovery are explored.

Art Therapy

A humanistic approach to self-discovery is discussed and explored by using art as a mode of release of the individual's understanding of self. By having individuals draw their roads, they will then find themselves face-to-face with their past, present, and possible future.

Assessment Administration, Scoring, and Feedback

This course offers familiarization with, instruction in, and administration of the SCL–90–R, QOLI, and PCL. Thorough instruction on scoring is offered as well as opportunity for hands-on practical experience scoring assessments. Finally, instruction on interpretation of the three assessments into a synthesized feedback session designed to help individuals with self-realization and awareness of the areas in their lives most in need of attention is offered.

Mindfulness, Meditation, and Yoga

In this course, descriptions, practical uses, and hands-on experience with yoga, meditation, and mindfulness practices are accomplished. The intention is to explore the ways in which these various modalities serve to alleviate discomfort, stress, and pain.

Hypnosis

The practice of hypnosis is explained and demonstrated. Hypnosis is the giving and receiving of information, which leads the receiver into a deep state of relaxation. Various demonstrations are performed to show the depth of the hypnotic state and suggestibility of the willing mind. Training in the use of hypnosis is provided.

Biofeedback

This course offers training in and use of the EmWave by HeartMath for improvement in breathing and physiological activity. Through the use of the EmWave, individuals learn how to bring their breathing into compliance. The EmWave device uses a photoplethysmographic sensor to measure the individual's heart rate variability.

Suicide and Depression

The processes and indicators of suicide and depression are discussed in this session. While the cause of suicide is not clearly known, it is prevalent in individuals who are contending with some form of emotional upset. Very often, suicide companions depression. Discussion also includes potential breaking points and individual differences. The elements of depression are discussed, as are the various Axis I mood disorders.

Posttraumatic Stress Disorder

Posttraumatic stress disorder is defined and discussed as the course covers the science, causes, and treatment of this issue. The discussion delves into individual identification and management of symptoms and issues that may arise as a result of traumatic experiences and/or extreme stress. This course takes it from a disorder to a process of growth.

Cycles of Combat

The course also includes a discussion that covers the cycles of combat through excitement phase, awakening phase, endurance phase, and, finally, the breaking point. The phases of combat engagement and the potential reasons for the emotions that individuals experience during combat are explored.

Couples' Communication and Relationship Health

Using techniques from Gottman's and various other communication building tools, soldiers and couples are led through discussions and techniques to enhance (or repair, in some cases) their relationships. Couples also explore communication through activities such as "couples yoga" and ballroom dancing.

Sexuality and Sexual Issues

The issues faced by couples having difficulties with performance and desire are presented and discussed. The science behind stress related to performance and desire decline as well as decline caused by substances is presented and discussed with individuals. The topic of sexual conduct will come up in the workplace. Workplace conduct is covered to determine sexual misconduct both in the workplace and outside of the workplace and the ways to address those issues.

Substance Abuse

This course discusses the issues and science of substance abuse. Tactics for dealing with substance abuse and resources for attending to the problem for self or others are presented. Soldiers are introduced to options that are available.

Conducting a Fishbowl

This course brings individuals into an inner circle. Only members sitting in the inner circle talk, while the external circle remains silent. The discussion point focuses on what individuals do to get through tough times. Video interviews with COL (R) Leo Thorsness, former POW and District 11 senator in the state of Washington, are presented prior to the fishbowl exercise.

Summary of the Soldier 360° Course

Resiliency and readiness are current concerns for the preparedness of soldiers in the U.S. Army. The focus on the soldiers' attitudes toward sexual and personal relationships is not as primary a concern for reintegrating soldiers as are other mental concerns relating to combat exposure. Most research reflects a disturbing amount of aggressive and, in some cases, abusive behavior toward—primarily female—coworkers and subordinates. Domestic abuse and relationship dissolution are elevated from times previous to conflict engagement. However, focusing on what is positive with the relationships of the military personnel potentially offers a more positive outcome. Addressing relationship issues along with other stress-related symptom domains offers the possibility for balance in all areas of the soldier's life. The leadership of the Army at the noncommissioned officer level is a key support element to the overall well-being of the enlisted ranks and military mission. Key among this individual well-being is the health of the soldier's relationships—sexual and personal. By improving the soldier's relationship maturity and well-being, relationships can be reinforced, and marriages can be positively enriched.

Designing a program that is capable of giving noncommissioned officers, from a wide variety of military occupational specialties, the instruments they need to cope with stress in wartime is necessary to maintain the balance and well-being of the troops. Complementary and alternative medicine has been finding a place amid the conventional medicinal practices commonly used in the West. Self-monitoring of health stats and stress-reduction tools are steadily becoming common in the form of applications for smartphones and handheld electronic devices and in simple techniques that can be self-administered. The Soldier 360° program makes use of many of the evidence-based, complementary medicine practices available as well as smartphone apps, literature handouts, and professionals to help NCOs build a compilation of tools from which they can draw to enhance well-being.

The tools the Soldier 360° program delivers are a full course of training and stress-relieving tools for improved leadership and quality of life for program participants. The instruction offered in the course provides strategies for dealing with stress, nutrition guidance, physical fitness guidance, family and relationship information, spiritual guidance, and therapies to enhance self-awareness. These course topics are designed to broaden current skills and add a variety of coping strategies for the noncommissioned officers to use in their personal lives, their leadership roles, and the mentorship of their staff. The instruction style follows an adult learning format, where participants are actively engaged and participate in course sessions. This format reinforces learning and provides participants with a hands-on experience that they will be able to take back to the

organization and pass on to coworkers. The action of coworker inclusion will further enhance the use of the tools and their continued use.