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Signs and symptoms of moral injury in female Vietnam veterans: a qualitative examination of the NVVRS

Alison H. Conway

Pepperdine University

Graduate School of Education and Psychology

SIGNS AND SYMPTOMS OF MORAL INJURY IN FEMALE VIETNAM VETERANS: A QUALITATIVE EXAMINATION OF THE NVVRS

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Alison H. Conway

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Robert deMayo, Ph.D., ABPP – Dissertation Chairperson

This clinical dissertation, written by

Alison H. Conway

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

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Doctoral Committee:

Robert deMayo, Ph.D., ABPP, Chairperson

Kent Drescher, Ph.D.

Cary Mitchell, Ph.D.

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DEDICATION

This dissertation is dedicated to Dr. David W. Foy, my mentor and advisor, to my grandfathers, who served in World War II, and to all of the men and women who proudly and bravely serve in the United States military to defend freedom both at home and abroad.

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VITA

Alison H. Conway, M.A.

Educational History

May 2014	Doctor of Psychology in Clinical Psychology Pepperdine University, Los Angeles, CA
December 2010	Master of Arts in Psychology San Diego State University, San Diego, CA
May 2007	Bachelor of Arts in Psychology University of Puget Sound, Tacoma, WA

Clinical Experience

2013 - 2014	Pre-Doctoral Intern VA Loma Linda Healthcare Center Loma Linda, CA
2012 – 2013	Psychology Pre-Intern VA Long Beach Healthcare Center Long Beach, CA
2012 – 2013	Doctoral Practicum Trainee Dana Middle School Hawthorne, CA
2011 – 2012	Doctoral Practicum Trainee UCLA Aftercare Research Program Los Angeles, CA
2010 – 2012	Doctoral Practicum Trainee Pepperdine University Psychological and Educational Clinic Los Angeles, CA

Teaching Experience

2011 - 2013	Teaching Assistant – Research Methods and Substance Abuse courses Pepperdine University Encino, CA

Research Experience

2013 – 2013	Neuro-Cognitive Tester Principal Investigator(s): Patricia Ganz, M.D., Steven Castellon, Ph.D., Julie Bower, Ph.D., Linda Ercoli, Ph.D., Michael Irwin, M.D., Steven Cole, Ph.D., & Andrew Leuchter, M.D. Jonsson Comprehensive Cancer Center, Division of Cancer Prevention and Control Research University of California, Los Angles Los Angeles, CA
2010 – 2013	Research Assistant Principal Investigator(s): David Foy, Ph.D. Trauma Research Lab Pepperdine University Los Angeles, CA
2008 – 2010	Research Assistant Principal Investigator(s): James Lange, Ph.D. & Loraine Devos-Comby, Ph.D. AOD Initiatives San Diego State University San Diego, CA

ABSTRACT

It is well-known that war veterans experience long-lasting physical and psychological injuries following their deployment, and recent studies have proposed the construct of moral injury (MI) to explain the moral and spiritual effects of war on individuals. Litz et al. (2009) defined MI as "perpetrating, failing to prevent, or bearing witness to acts that transgress deeply held moral beliefs and expectations" (p. 6), and Drescher et al. (2011) interviewed trauma experts to identify types of events that could create MI and the lasting sequelae of these events. Vargas et al. (2013) provided validation of MI by examining male Vietnam veterans' self-reported effects of combat participation and found themes of MI events and symptoms consistent with those found by Drescher et al. (2011). However, current research on MI has focused solely on male veterans, despite the fact that women have served in the military since colonial times, most often as nurses. Therefore, it is yet unknown whether the current definition of MI applies to warzone nurses. To expand the current understanding of MI to deployed female nurses, this qualitative study identified signs and symptoms of MI as reported by 100 randomly selected female veterans who served in the Vietnam War from the National Vietnam Veterans Readjustment Study (NVVRS). Major themes identified by coders were compared to those previously identified, and results suggest that nurses in Vietnam experienced symptoms of MI consistent with those previously identified in male combat veterans and at a higher rate.

Introduction

From the beginning of the Vietnam War in 1964 to the present, there has been an extensive amount of research on the postservice adjustment and well-being of Vietnam veterans. This research has primarily focused on the continuing effects of military service and combat exposure on a wide range of psychological symptoms and behavioral problems (Laufer, Gallops, & Frey-Wouters, 1984). For example, Vietnam veterans have been found to experience elevated rates of depression, anxiety, sleep disturbance, substance use, and posttraumatic stress disorder (PTSD) (Gallers, Foy, Donahoe, & Goldfarb, 1988; Kaylor, King, & King, 1987). Research on the long-term effects of combat exposure suggests that the psychological effects of such trauma may remain long after the exposure (Laufer et al., 1984), as evidenced by findings of the National Vietnam Veterans Readjustment Study (NVVRS), which was a congressionally mandated survey on the long-term psychological wellbeing of Vietnam veterans (Kulka et al., 1990). In fact, 10 years after the conflict ended, 40 to 60% of high combat Vietnam veterans reported experiencing symptoms of PTSD, including nightmares, survivor guilt, a general sense of numbing to the external world, and intrusive combat-related memories and images (Gallers et al., 1988). Due to the many similarities between the Vietnam War and current conflicts in the Middle East, there has been a renewed interest in the effects of combat and warzone exposure and the long-term psychological impacts associated with such exposure.

Because men make up the largest segment of military personnel in the United States, the vast majority of research on combat veterans has focused on the experiences of male combatants, largely emphasizing the stressors associated with infantry duty and

traditional combat exposure (King, King, Gudanowski, & Vreven, 1995; Wolfe, Brown, Furey, & Levin, 1993). Previous research has suggested that large numbers of Vietnam veterans suffer from both delayed and chronic effects of exposure to combat (Kaylor et al., 1987). Although it is clear that general combat exposure can lead to PTSD and other psychological disorders, other aspects of warzone exposure beyond that of typical combat may lead to negative post-deployment outcomes for veterans. For example, approximately one third of Vietnam veterans reported witnessing abusive violence, such as the mistreatment or killing of civilians, mutilation of bodies, and the use of chemicals or bombs on villages (Laufer et al., 1984). Previous research has found that both abusive violence and combat exposure are significantly related to symptom severity (Beckham, Feldman, & Kirby, 1998). While abusive violence exposure has been linked to chronic PTSD and feelings of guilt in Vietnam veterans, anecdotal evidence suggests that other aspects of combat may also result in long-lasting guilt, including inaction or failing to prevent others from being killed, surviving while comrades did not, and acts of negligence (Henning & Frueh, 1997).

Although research on the psychological effects of combat exposure in male Vietnam veterans has been extensive, it has largely neglected to address the impact of warzone exposure on another group of veterans – females. There were approximately 7,500 women who served in Vietnam during the war, the majority of whom served as nurses (Scannell-Desch, 2005). This included nurses assigned to hospitals, hospital ships, and medical evacuation aircraft. Because research has emphasized the impact of traditional combat exposure, little is known about the wartime stressors of deployed women (Baker, Menard, & Johns, 1989; Fontana, Schwartz, & Rosenheck, 1997; Wolfe

et al., 1993). What is known, however, is that female Vietnam veterans continue to suffer from elevated rates of PTSD and other psychological disorders, much like their male counterparts (Wolfe et al., 1993). As women continue to serve in the military in increasing numbers, and as their roles during deployment expand to include combat roles previously not filled by women, the need for a better understanding of the stressors involved with the female military experience becomes increasingly evident.

Recent research has begun to address the role of female military personnel assigned to Vietnam and explore the lasting impact of that experience (Baker et al., 1989; Carson et al., 2000; Stretch, Vail, & Maloney, 1985). While it is possible that women's exposure during deployment is similar to that of men, it is highly likely that women both encountered different stressors and also experienced stressor events differently than men (Wolfe et al., 1993). Furthermore, although women served in other support roles, the majority of women deployed in Vietnam served in healthcare roles, namely, as nurses, where their exposure to traumatic events differed from that of male service members (Norman, 1990). Additionally, the women who served in Vietnam differed from their male counterparts in several important areas. As a whole, they were older and more educated than the male soldiers, but most had little training to prepare them for the warzone, and few were prepared for the exposure to personal danger, suffering, and death they experienced in Vietnam (Rogers & Nickolaus, 1987; Tichenor, Marmar, Weiss, Metzler, & Ronfeldt, 1996; Turner, Turse, & Dohrenwend, 2007). Nurses in Vietnam also dealt with long work hours, sexual harassment, and other forms of sexual traumatization, which may play as large a role in the development of PTSD as exposure to traditional combat (Baker et al., 1989; Fontana et al., 1997; Wolfe et al., 1993).

Due to their posts at hospitals and other medical centers, women were not typically in a position to directly witness or participate in traditional combat activities or the perpetration of disproportionately violent acts, which have been associated with the subsequent development of PTSD (King et al., 1995). However, a study by Stretch, Vail, and Maloney (1985) found a similar prevalence of PTSD among active duty Vietnam nurses and other active duty Vietnam veterans. This suggests that simply being present in a combat zone, with its corresponding factors of danger and exposure to the bloody aftermath of battle, can be just as traumatic as actual involvement and participation in firefights (Kaylor et al., 1987; Stretch et al., 1985). Furthermore, although women were not exposed to rates of combat comparable to that of infantrymen, female veterans did come under enemy fire (Tichenor et al., 1996). In fact, one study found that 90% of the nurses surveyed reported being exposed to hostile fire, 13% reported receiving a physical injury requiring medical attention, and 22% reported that they had been sexually harassed during their assignment in Vietnam (Baker et al., 1989). Female veterans lived with a constant perceived threat of attacks while also dealing with the personal discomforts and deprivations associated with the warzone, factors which have been shown to be significant in understanding mental health outcomes for women (King et al., 1995). Additionally, women in Vietnam faced ethical dilemmas related to nursing in a warzone, which may also contribute to negative psychological outcomes (Norman, 1990).

The nature of nursing in a combat zone is very different from traditional civilian nursing work and may relate to the subsequent development of psychological symptoms. McTeague, McNally, and Litz (2004) identified six constructs that are relevant to the experiences of female Vietnam veterans that may contribute to negative outcomes: (a)

personal threat, (b) exposure to wounded and dead, (c) deprivation, (d) dilemmas of warzone healthcare, (e) sense of purposelessness, and (f) unit cohesion. Many of the nurses who served in Vietnam were routinely exposed to the horrific mutilations, injuries and deaths associated with war. As mentioned above, they were also not immune to personal threat from enemy fire. However, McTeague, McNally, and Litz (2004) found that there was no direct effect of exposure to wounded or dead on the subsequent development of PTSD in Vietnam nurses. Instead, the direct effect of exposure was mediated by warzone healthcare dilemmas, which are expanded upon below (McTeague et al., 2004).

Nurses in Vietnam experienced a number of moral or ethical dilemmas related to their work that may have affected their mental health and wellbeing and led to the development of PTSD. To begin with, wartime nursing was difficult simply because of the characteristics of the patients. Because most military nurses were older than male combatants, treating severely injured men who were the same age or younger than themselves was challenging. Many nurses felt maternal or protective feelings toward their patients (Norman, 1990), which made it difficult to remain objective while attempting to treat the injuries. Research with emergency room workers has found that a strong association between the helper and the victim can increase the former's susceptibility to the impact of the stressor, which may then increase the risk for PTSD (Carson et al., 2000). This stressor was made more difficult by the fact that, once patients left the ward, news of their fate rarely reached the nurses who treated them. In fact, 82% of the nurses interviewed by Norman (1990) reported never finding out how their patients recovered or

if they even survived. This lack of continuity of care may have undermined nurses' attempts to find meaning or a sense of purpose in their work (McTeague et al., 2004).

Because of the guerilla nature of the war in Vietnam, nurses were required to treat the grisly injuries inflicted by booby traps, mines, and high velocity missiles, in addition to the more traditional gunshot and shrapnel wounds (Carson et al., 2000). Advances in life support and medical evacuation meant that soldiers who would have died on the battlefield in previous wars survived the transport to field hospitals in Vietnam. As a result, nurses in Vietnam were exposed to an increased amount of mutilation, suffering, and death. Exposure to grotesque death has been found to be a predictor of PTSD in male combat veterans, and this finding is likely to hold true for female veterans as well.

Situations involving mass casualties were also difficult for nurses, as they were often left feeling inadequate due to the amount and intensity of the work and their inability to help everyone (Carson et al., 2000; Norman, 1990). Additionally, the first step in mass casualty situations was a gruesome one, because medical evacuation helicopters were a target for the enemy and soldiers did not have enough time to separate the wounded from the dead. Thus, military physicians, medics, and nurses performed this grisly task outside the hospitals (Norman, 1990). The next step in mass casualty care, triage, was not any easier. Sick, wounded, and injured patients were classified with numbers to decide who would receive priority care. However, the triage decisions made during combat, and particularly during situations involving mass casualties, were the opposite of triage care practiced in the United States. At home, the most critically injured patients would be treated first; however, in Vietnam, the triage philosophy was "Salvage as many as you can" (Norman, 1990, p. 37). Due to the limited resources, personnel, and

facilities, this meant treating the least injured patients first. Patients with serious injuries might require hours in the operating room, and surgeons could operate on ten other patients during the time it took to operate on one severely injured soldier. Thus, individuals with the worst injuries went to the back of the line, where many died while awaiting treatment (Norman, 1990). This was difficult for many nurses, as saving lives was at the very core of their profession. Nurses also had the difficult job of dealing with "expectants" (i.e., soldiers who were so badly wounded that they were expected to die) (Rogers & Nickolaus, 1987). While the doctors and surgeons worked on survivors, it often became the nurses' duty to monitor the expectant patients' vital signs until their hearts stopped. These situations were extremely difficult for nurses in Vietnam because of their deep commitment to preserving life, and they quickly learned that nursing in a warzone was more than just healing. They learned to measure death and to soothe patients while they died (Norman, 1990).

Nurses also faced the moral dilemma of sending recovered patients back out to battle (Norman, 1990). In order to maintain troop strength, soldiers with minor injuries were sent back to their combat duties as quickly as possible. This was in direct conflict with another basic nursing principle: "Heal the patients and put them on a path to keep them healthy" (Norman, 1990, p. 42-43). While this process of returning the men to battle made sense in the context of war, this procedure led to feelings of confusion and guilt in the nurses, who had little to no say in the fate of their patients. They were forced to accept the idea that patients were being treated only to be sent back to the field, where they may be wounded again or even killed. Some nurses felt guilty about their role in the

outcomes of their patients and their lack of decision-making capabilities. This sense of powerless turned to anger over being required to act against their beliefs (Norman, 1990).

Another moral dilemma encountered by nurses in Vietnam involved treating enemy soldiers. During war, combatants are conditioned to hate the enemy and to act on this hatred by fighting to kill and win. The enemy therefore takes on the image of evil, which makes them a justified target (Bandura, 1999; 2002; Norman, 1990). Enlisted men learned this during basic training, but nurses also absorbed this belief while working with wounded Americans, and to them, the North Vietnamese and Viet Cong were also viewed as the enemy (Norman, 1990). However, American nurses were often required to treat enemy combatants along with wounded Americans and Vietnamese civilians. Nurses had a difficult time working on Vietnamese patients, civilian or otherwise, while seeing wounded Americans lying across the aisle, which led to feelings of anger and resentment toward the Vietnamese patients (Norman, 1990). Additionally, the Vietnamese patients were wounded, in pain, and scared, which caused the nurses to perceive them as human, rather than simply as the enemy, adding to the conflicted feelings of the nurses. Many nurses were able to look at them as patients in need of care, but some nurses were never able work comfortably with the Vietnamese (Norman, 1990).

While it is well-known that male Vietnam veterans were mistreated upon homecoming, returning home was also difficult for the nurses. Many nurses went to Vietnam full of idealism and with a sense of patriotic duty, but left feeling disillusioned, angry, and upset. Although the majority of protesters directed their anger toward men in uniform, nurses were not immune to harassment. Many nurses learned to conceal their affiliation with the military and some were told to remove their military uniform before

traveling in the United States (Scannell-Desch, 1996). Beyond the general anti-military sentiment, female veterans also had to cope with reactions to being a woman in uniform. One nurse recalled being called an "MPP – military paid prostitute" (McVicker, 1985, p. 15). Nurses also reported feeling alone and unable to talk about their experiences with family and friends. Previous research has found that social support is an important protective factor against the development of PTSD following combat exposure (McTeague et al., 2004), and the inability to discuss their experiences with loved ones put nurses at further risk post-deployment (Leon, Ben-Porath, & Hjemboe, 1990).

After returning home, many nurses experienced intrusive symptoms of PTSD, including nightmares, flashbacks, and emotional numbing (Norman, 1990; Rogers & Nickolaus, 1987). During in-depth interviews with fifty military nurses, Norman (1990) noted that one of the most frequently endorsed emotions was anger. Many nurses saw the Vietnam War as a pointless endeavor, a waste of young lives, which did not accomplish anything. There was no military victory or reward for the loss of lives (Norman, 1990). Some of the anger was directed at the politicians who "lost the war" (Norman, 1990, p. 149), while some was directed toward the government policy that caused young men to lose their lives over what seemed like a pointless cause (Norman, 1990). This sense of betrayal from the government may impact mental health and wellbeing in veterans.

These ethical challenges faced by nurses were not only difficult to deal with during deployment but may have also led to long-term effects. The civilian nursing literature describes nursing as an "ethically-laden practice" because one's moral agency can be hindered by conflicting values (Lutzen, Blom, Ewalds-Kvist, & Winch, 2010). Moral and ethical problems are encountered in everyday nursing duties, and are divided

into three types: moral uncertainty, moral dilemma, and moral distress (Ohnishi et al., 2010). A moral dilemma is thought to occur when two (or more) clear moral principles apply to a situation but support mutually inconsistent courses of action, but moral distress, however, "arises when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action" (Jameton, 1984; Ohnishi et al., 2010). These constraints can include lack of time and/or resources, supervisory reluctance, the power structure of the medical system, institutional policy, and/or legal constraints (Corley, Minick, Elswick, & Jacobs, 2005). In other words, moral distress occurs when one knows the right course of action but is unable to follow it, and has been associated with increased PTSD, anger, and guilt; exhaustion and decreased quality of care; decreased job retention; and burnout in nurses and other healthcare providers (Finke, 2006; Kalvemark, Hoglund, Hansson, Westerholm, & Arnetz, 2004; Ohnishi et al., 2010). The descriptions of the types of dilemmas encountered by nurses in Vietnam echo those reported by civilian nurses, such as harm to patients in the form of pain and suffering, lack of nurses' participation in treatment decisions, not knowing the outcome of patients, poor pain management, and an unsupportive environment (Corley et al., 2005; Shepard, 2010). Warzone nurses were faced with morally distressing situations that are similar to those experienced by civilian nurses. However, nursing in a warzone was associated with other stressors not encountered in civilian nursing, so the construct of moral distress described in the nursing literature may not fully capture the types of ethically distressing events experienced by nurses serving in a combat zone.

Clearly, warzone exposure is associated with an increased risk of negative psychological outcomes, such as PTSD, for both male and female veterans (Carson et al.,

2000). However, war has also been found to profoundly affect veterans spiritually and morally (Drescher et al., 2011). During the course of war, service members are faced with various moral and ethical challenges (Litz et al., 2009), which are an inherent part of war. Military personnel may act in ways that violate deeply held beliefs about morality, or may be exposed to the unethical actions of others. Combatants may witness extreme human suffering and cruelty that alters their beliefs about themselves, others, and the world in general, and warzone nurses may be at greater risk due to the ethical dilemmas inherent in nursing practice (Litz et al., 2009; Lutzen et al., 2010). Both nurses and combat veterans may also experience guilt over having survived while so many of their comrades did not, and nurses experienced additional guilt over not being able to save the all those who were injured (Norman, 1990). When individuals are unable to contextualize or make meaning out of these types of experiences, they may be at risk for long-term psychological, biological, social, and spiritual impairment that is similar PTSD but not fully captured by current PTSD criteria and associated symptomatology (Drescher et al., 2011; Litz et al., 2009).

Currently, there is little research that addresses the link between warzone exposure and changes in morality (Drescher et al., 2011). The few studies that have been done are largely theoretical in nature and have adopted the term *moral injury* (MI) to describe the emotional, spiritual, and psychological wounds that result from the types of ethical and moral dilemmas faced in a combat zone. More specifically, moral injury is defined as:

> Disruption in an individual's confidence and expectations about one's own or others' motivation or capacity to behave in a just and ethical manner. This injury

> is brought about by bearing witness to perceived immoral acts, failure to stop such actions, or perpetration of immoral acts, in particular actions that are inhumane, cruel, depraved, or violent, bringing about pain, suffering, or death of others. (Drescher et al., 2011, p. 9)

Although moral injury, PTSD, and depression may occur simultaneously, morally injurious events may result in unique symptomatology not covered by current diagnostic criteria, warranting further investigation of moral injury as a distinct construct.

Through interviews with a diverse group of religious and psychological professionals who were experienced in working with active duty military personnel and veterans, Drescher et al. (2011) identified themes of proposed morally injurious events. These themes included betrayal, disproportionate violence, incidents involving civilians, and within-rank violence. Drescher et al. (2011) also identified thematic categories of signs and symptoms that may be indicative of moral injury. These included trust issues, spiritual/existential issues, psychological symptoms, social problems, and self-deprecation (Drescher et al., 2011). Examples include social withdrawal, giving up or questioning morality, loss of meaning, depression, anger, guilt, shame, and loss of self-worth (Drescher et al., 2011). Although published research on Vietnam nurses have identified many of these symptoms anecdotally, (e.g., Norman, 1990), there has not yet been any research on the specific signs and symptoms of moral injury in Vietnam nurses. Furthermore, the Drescher et al. (2011) study did not discriminate between symptoms of moral injury seen in male veterans from those reported by females. Previous work has provided validation for the construct of moral injury in male Vietnam veterans, including both morally injurious events and the subsequent signs and symptoms (Vargas, Hanson,

Kraus, Drescher, & Foy, 2013). However, research on nurses in the Vietnam War has largely focused on rates of PTSD and qualitative descriptions of women's wartime experiences (Scannell-Desch, 2005), and there has been little empirical research on Vietnam nurses. To date, no studies have examined moral injury in this population, and it is unknown whether the currently identified themes of moral injury sufficiently capture the types of events and symptoms experienced by female veterans. Therefore, the purpose of this study is to identify the signs and symptoms indicative of moral injury in female Vietnam veterans using first-person accounts from the National Vietnam Veterans Research Study (NVVRS) database.

The NVVRS included an open-ended question about the long-term negative impact of Vietnam on the individual's life. The current study examined these qualitative accounts of the lifetime effects of warzone exposure to identify signs and symptoms of moral injury in female Vietnam theater nurses. Specifically, this study explored the following research questions:

1. What themes are present in female veterans' descriptions of the long-term negative impact of their service in the Vietnam theater?
2. Do these themes relate to the themes of signs and symptoms of moral injury described by experts in the trauma field (Drescher et al., 2011)?
3. Are there additional thematic categories associated with signs and symptoms of moral injury as reported by women or are the symptoms the same as those reported by men?

Methods

Participants

This study utilized archival date from the NVVRS, which consists of a nationally representative probability sample of 3,016 male and female veterans from the Vietnam Era (Kulka et al., 1990). Each participant was interviewed regarding premilitary, military, and post-military issues, including family history, stressful and traumatic experiences, occupation, and physical and mental health status. Interviews lasted approximately five hours, were audiotaped, and were conducted in the participant's home. Informed consent was obtained at the time of the NVVRS interview and all data was de-identified by the original researchers. Before gaining access to the NVVRS database, approval was obtained from the Pepperdine University Graduate and Professional Schools Institutional Review Board. Because the NVVRS is a publicly accessible database, it is unnecessary for the author to obtain consent from the original researcher prior to accessing the data.

While the majority of veterans surveyed for the NVVRS were male, the researchers also surveyed 955 women, consisting of 432 female Vietnam Theater veterans and 305 female Vietnam Era veterans. Vietnam Theater veterans are those who served in Vietnam or the surrounding area (including airspace and surrounding waters) between 1964 and 1975, while Vietnam Era veterans are those who served during the same time period but were stationed elsewhere. The participants for this study consisted of a random sample of 100 female Vietnam Theater veterans who served as nurses. The majority of the women in this sample were Caucasian and served in the Army. Two participants served in more than one branch of the military, and four individuals were missing data for this question. Additionally, three participants were missing data for

ethnicity. See Table 1 for full demographic information. It is important to note that age and marital status reflect the participants' status at the time of the interviews, not during the Vietnam War.

Design and Procedures

This study utilized a qualitative approach to analyze the content of responses to a specific question in the NVVRS (Hsieh & Shannon, 2005). In the original NVVRS interview, participants were asked a series of questions regarding ways in which the Vietnam War affected their lives, beginning with the question, "How much would you say the Vietnam War has affected your everyday life?" If participants answered *not at all* to this question, they were not asked the remainder of the items and were therefore not included in the final sample. Participants who reported that their lives were affected in some way were then asked the following questions in sequence: "In what ways has the Vietnam War affected your everyday life?"; "Now please tell me briefly, in your own words, how your experiences, in or around Vietnam, have affected your life?"; "First what were some of the positive things you gained from your Vietnam experience?"; and finally, "And what were some of the negative things?". For the purposes of this study, only the responses to the negative questions were analyzed, fitting with the known negative effects and pathology of combat exposure found in the existing literature.

Analysis of Data

The responses to the open-ended question regarding the negative effects of the Vietnam War on everyday life were analyzed and coded for themes by four psychology graduate students. The purpose of coding the qualitative responses was to systematically identify and classify signs and symptoms of potentially morally injurious events, as well

as all other long-term effects of service in the Vietnam theater, among women who served as wartime nurses. All coders were aware of the construct of moral injury and were informed of the previously identified (Drescher et al., 2011) themes of signs and symptoms of moral injury. In the NVVRS interview, participants were able to report as many "negative things" as they could think of. However, in the data set, separate responses were listed together as one single response, despite having different content. As a result, some responses were first split into separate responses prior to coding. This was done by the coders and author as a group.

Data analysis occurred in several stages. First, the responses were read and categorized by each coder individually into major themes, which were determined by the coders themselves. Second, the responses and corresponding themes were reviewed as a group, and discrepancies in themes were resolved though discussion until a consensus was reached among all coders. Responses were then re-coded using the agreed-upon themes. Finally, each response within a theme was reviewed to ensure consistency within that code (Hsieh & Shannon, 2005). If there were discrepancies at this point, the responses were moved to the appropriate theme or, if necessary, a new theme was created. Themes were also combined or split if necessary. Coding was conducted in this manner in an attempt to reduce potential bias, as coding was first conducted separately by each individual coder, who then compared their coding to ensure consistency. All coding was reviewed by the principal investigator for consistency prior to content analysis and subthemes among codes were identified by the author on an as-needed basis.

The themes and items contained within each theme were then entered into a qualitative data analysis software program, HyperRESEARCH 2.8.3, for analysis.

Although the focus of this study was to identify signs and symptoms of moral injury, all responses were coded and entered into HyperRESEARCH, regardless of the theme. The principal investigator examined the responses and themes identified by the coders, and then compared the themes identified in the data to the themes outlined by Drescher et al. (2011) to examine similarities and differences in themes thought to reflect of moral injury. The frequency and extensiveness of each theme was then calculated. Frequency (F) was defined at the total number of times a theme was identified within the data set. For F, a percentage represents the total number of times this theme was mentioned by all respondents from the total number of responses coded. Extensiveness (E) was defined as the total number of participants who responded within each theme. The percentage for E represents the number of participants who mentioned the theme out of all the participants (Drescher et al., 2011). Both E and F are thought to indicate the importance of a particular topic to the participants. Finally, the investigator identified and flagged responses that were thought to reflect a sign or symptom of moral injury, regardless of the theme in which the response was coded.

Results

Frequency and Extensiveness

The interview question used in this study, "And what were some of the negative things?" (regarding the ways the Vietnam War has affected the participants' everyday life) elicited a diverse range of responses that reflect the various ways that each participant's deployment in Vietnam affected her subsequent and current level of functioning. Data from 100 randomly selected female nurses were included. Within this sample, all participants supplied at least one response to the question of interest. Because participants were able to give more than one response to the question, there were a total of 149 responses from the 100 participant sample. Only one code was applied to each individual response with the exception of Psychological Symptoms, which was broken down into five subcodes.

Nine major themes were identified during coding, in addition to the five subcodes used for the Psychological Symptoms code. Responses that were coded as uninterpretable comprised a tenth code. Themes identified in the responses regarding negative effects of the Vietnam War were: (1) attitude, personality, or character change; (2) loss of trust/betrayal; (3) malevolent environment; (4) none (no negative effect); (5) occupational problems or change; (6) psychological symptoms; (7) social/interpersonal problems; (8) spiritual/existential issues; (9) undifferentiated/general distress; and (10) uninterpretable. Of the 149 responses, eight responses from eight separate individuals were coded as uninterpretable, likely due either to issues during the initial transcribing done in the Kulka et al. (1990) study or the fact that responses were cut off in the data set that was used (e.g., "I really thought the Vietnamese people were people were"). Frequency (F)

and extensiveness (E) for all codes, including subcodes, are available in Table 2. Relevant examples for each theme and subtheme are listed in Table 3.

Moral Injury

Because the coders were aware of moral injury and the themes previously identified by Drescher et al. (2011), several of the major themes identified by the coders in the current sample were equivalent to previously identified symptoms. For example, both spiritual/existential issues and loss of trust/betrayal were identified as potential signs or symptoms of moral injury by Drescher et al. (2011) and were also identified as major themes by the coders in this study. Additionally, responses that were thought to be indicative of moral injury were coded as such, regardless of the major code under which the response fell. Responses that were considered potentially morally injurious were identified through discussion with the coders and other members of the dissertation lab until a consensus was reached.

Overall, there were 82 responses that were coded as signs or symptoms of moral injury, which accounted for 55.03% of the total number of responses obtained in the random sample of 100 Vietnam theater nurses. Furthermore, more than half of the participants (62%) gave a response that could potentially be considered a symptom of a moral injury. Although all of the themes of symptoms of moral injury that were identified by Drescher et al. (2011) were not found in this sample, all responses that were thought to reflect a symptom of moral injury corresponded to the themes previously identified. There were no additional thematic categories necessary to code each response that was identified as a symptom of moral injury.

Themes of signs and symptoms found in the sample included: (1) Loss of trust/betrayal; (2) Psychological symptoms; (3) Social functioning problems; and (4) Spiritual/existential issues. Thirty-one responses (42.7% of the moral injury responses; 23.49% of the total responses) were coded as symptoms reflecting a loss of trust or sense of betrayal. Three respondents (3.66% of moral injury responses) gave examples of psychological problems that indicated a symptom of moral injury, including anger and feelings of depression or guilt. Eight responses (9.76% of moral injury responses) were related to problems in social functioning, such as a change in attitude or personality, occupational change, and social or interpersonal problems. Finally, 31 respondents (43.9% of moral injury responses; 24.16% of total responses) mentioned spiritual or existential issues as a result of their experience in the Vietnam War. Examples included profound sorrow, questioning morality, and loss of meaning. Frequencies and extensiveness for each of the moral injury responses are listed in Table 4. Examples of responses corresponding to each moral injury symptom code can be found in Table 5.

Research Questions

1. *What themes are present in female veterans' descriptions of the long-term negative impact of their service in the Vietnam theater?*

There were nine major categories of signs or symptoms reported by nurses who served in Vietnam: Attitude, Personality, or Character Change; Loss of Trust or Betrayal; Malevolent Environment; None (i.e., no negative effects); Occupational Problems or Change; Psychological Symptoms; Social or Interpersonal Problems; Spiritual or Existential Issues; and Undifferentiated or General Distress. There was an additional tenth category for responses that were coded as Uninterpretable.

2. *Do these themes relate to the themes of signs and symptoms of moral injury described by experts in the trauma field (Drescher et al., 2011)?*

There were four thematic categories identified by the coders that contained responses thought to be indicative of moral injury as identified by Drescher et al. (2011). These categories were: Loss of Trust or Betrayal; Psychological Symptoms; Social Functioning Problems; and Spiritual or Existential Issues.

3. *Are there additional thematic categories associated with signs and symptoms of moral injury as reported by women or are the symptoms the same as those reported by men?*

There were no new themes or categories of morally injurious symptomatology identified.

Discussion

This exploratory study utilized data from a randomly selected, nationally representative sample of nurses who served in Vietnam to provide validity for the construct of moral injury in female veterans through the use of primary source materials. Specifically, this study used qualitative analysis of open-ended responses from the NVVRS to explore whether the previously identified symptoms of moral injury found in combat veterans (Drescher et al., 2011; Vargas et al., 2013) could be applied to female veterans who served as nurses.

Utilizing the coding scheme from Drescher et al. (2011), the results indicated that more than half of the sample reported some long-term effect of their service in Vietnam that was identified as a potential sign or symptom of moral injury. Each item in the present sample that was coded as moral injury within the present data set corresponded to one of the themes identified by Drescher et al. (2011) and corroborated by Vargas et al. (2013). Specifically, spiritual or existential issues was the most frequently identified theme, occurring in 36 responses by 31 veterans. A loss of trust or sense of betrayal was the second most common theme, found in 35 responses by 31 veterans. Eight responses from eight individuals were coded as social functioning problems, and three responses from three separate individuals were coded as psychological problems. No new thematic categories of morally injurious symptomatology were identified.

Because the construct of moral injury is still largely theoretical, these results provide further validation for both the construct itself and the previously identified symptoms (Drescher et al., 2011). Furthermore, to date, the construct of moral injury had only been explored in male Vietnam combat veterans, so the relevancy of previously

identified morally injurious symptomatology to women and noncombatants was unknown. Existing research (e.g.,Vargas et al., 2013) found that morally injurious events were rarely reported by male veterans who had not served in a warzone, which suggested that there may be something uniquely morally injurious about serving in a combat role. Therefore, the results of this study are significant in that they expand the applicability of moral injury and suggest that the current understanding of moral injury symptoms derived from combat veterans can be applied to both female veterans serving as healthcare providers and noncombat veterans who are present in a warzone. These findings support the concept that moral and ethical violations that do not fit the traditional conceptualization of combat trauma can have long-lasting impacts on individuals who are present in a warzone, regardless of their specific job or level of combat exposure or participation.

Furthermore, results show that symptoms of moral injury are extremely prevalent among nurses who served in Vietnam, at rates higher than those reported by male Vietnam combat veterans. Utilizing the same research methodology and open-ended question from the NVVRS, Kraus (2012) found that 30% of male Vietnam combat veterans reported signs or symptoms of moral injury, with these responses comprising 22% of the total responses. In contrast, this study found that 62% of the sample reported symptoms thought to be indicative of moral injury, with these responses comprising 55% of the total number of responses. This difference in rates of MI symptomatology between male combat veterans and female warzone nurses could be partially explained by differences in training prior to deployment. Whether civilian or military, nurses are taught to care for their patients, and saving lives is at the very core of the profession (Finke,

2006), whereas service members are trained to take the lives of enemy combatants. Violence and killing are an inherent part of war and encounters with the gruesome aftermath of battle are an expected part of the service members' experience (Litz et al., 2009). However, nurses were not prepared for the amount of injury, suffering, and death they encountered in Vietnam, and the nature of warzone nursing often seemed in direct conflict with the fundamental principles of nursing that these women held very deeply. Accordingly, nurses may have been more susceptible to long-lasting effects from exposure to the horrors and senselessness of war. It is also important to note that the women in this study reported symptoms of spiritual/existential issues and loss of trust/betrayal at a rate more than triple the other categories of symptoms, which may be related to both their job duties as nurses and to the guerilla nature and sociopolitical context of the Vietnam War.

Spiritual/existential symptoms were the most commonly reported symptom of moral injury among Vietnam nurses, and examples include profound sorrow, loss of caring, anguish, and fatalism (Drescher et al., 2011). This may reflect the fact that, by the very nature of their job, nurses were constantly exposed to grotesque injuries and death. As described above, advances in medical evacuation meant that the injured and dead were quickly evacuated to rear hospitals, where nurses were forced to use the warzone triage principle of putting the most injured aside while working to treat those who were more salvageable (Scannell-Desch & Anderson, 2000). The long shifts and constant care of patients meant that nurses faced continuous exposure to extreme suffering, gruesome injury, and death, and previous research has found that the more frequently nurses confront situations of moral distress, the more they feel moral distress, which can lead to

burnout (Ohnishi et al., 2010; Severinsson, 2003). Therefore, the constant exposure to injury and death may have led to a greater questioning of morality and increased anguish among nurses, particularly given the severity of the injuries and the age differential between the nurses and the majority of their patients. Nurses also struggled with the morality of saving patients with severely disfiguring or incapacitating injuries, and sometimes felt that death would be blessing for these young men, which further increased feelings of anguish and sorrow. (Scannell-Desch & Anderson, 2000). Over time, the pain of treating the catastrophic injuries of so many young men, combined with not knowing their fate, became overwhelming to nurses, and many tried hard to avoid connecting with their patients, a previously identified symptom of moral injury (Drescher et al., 2011). However, the fact that this cluster of symptoms was the most commonly reported suggests that the attempts to disconnect were largely unsuccessful, as memories of these patients continue to haunt nurses years later (Finke, 2006).

Issues regarding loss of trust or a sense of betrayal were the second most commonly coded symptom of moral injury in this sample, which is of particular interest because this theme was the least frequently mentioned by experts in the Drescher et al. (2011) study. Although this finding is likely partially attributable to the unique sociopolitical and cultural context of the Vietnam War, the high frequency and extensiveness of this theme among nurses may also reflect characteristics of the wartime nursing experience and of the nurses themselves. The majority of the women who served in Vietnam were volunteers who had joined the military during the war out of an altruistic sense of patriotism, duty, and a commitment to serve (Norman, 1990; Sarnecky, 1989). However, the poor conditions, lack of resources, and overwhelming casualties and

fatalities left the nurses feeling betrayed by the government who had started the war and kept these young men dying (Scannell-Desch & Anderson, 2000). Furthermore, nurses were also subject to harassment upon homecoming, which may have created additional feelings of betrayal by the American people (Norman, 1990).

Nurses in this study also reported problems in social functioning resulting from their service in Vietnam, including difficulties with interpersonal relationships and change of occupation. Moral distress, created by dilemmas between perceived ethical obligations and institutional constraints, has been found to be related to feelings of anger, frustration and guilt, burnout, and decreased job retention (Corley et al., 2005; Severinsson, 2003). Although moral distress may account for some of the symptoms found in the current study, it is likely that nurses in a warzone experienced uniquely morally distressing situations that are better accounted for by moral injury. For example, deployed nurses were granted a degree of autonomy and independence not found in nursing work stateside, where the medical system was male-dominated and nurses played a subservient role to doctors (Norman, 1992). Returning to civilian nursing meant a loss of status, and this adjustment was difficult, causing some nurses to retire from the profession. Additionally, the constant exposure to the amount of death and suffering in Vietnam made it difficult for some nurses to be sympathetic to civilian patients recovering from routine surgeries or illnesses, which exacerbated feelings of guilt (Norman, 1992). Some nurses turned to drugs and alcohol to cope, both during deployment and afterwards, leading to further difficulties readjusting (Scannell-Desch & Anderson, 2000). Nurses in this study also reported psychological symptoms that are suggestive of moral injury, such as anger, depression, and guilt.

Overall, these results suggest that there are long-lasting impacts of moral and ethical dilemmas faced by female healthcare workers that are unique to practicing in a warzone and include a range of behavioral, psychological, spiritual, and social problems (Drescher et al., 2011). Not only do nurses report higher frequencies of morally injurious symptomatology than male combat veterans (Kraus, 2012), but the symptoms were still present many years after the war. This points to the enduring nature of performing, witnessing, or being unable to stop actions that violate one's personal moral code, especially when working as a healthcare provider in a warzone. The results speak to the importance of expanding the current conceptualization of trauma to include moral injury, as the majority of the symptoms found here are not fully encompassed by the current definition of PTSD and its related features, suggesting that there are uniquely morally injurious symptoms that occur when an individual's moral framework has been violated.

The results of this study provide further validation for the construct of moral injury and point to the importance of considering a bio-psycho-social-spiritual model of mental health functioning. Results also suggest that the concept has relevance for women as well as men, and for non-combatants in a warzone as well as combatants. Furthermore, although there has been significant research on moral distress in civilian nursing, these results suggest that warzone nursing is associated with unique stressors and subsequent symptomatology that are better explained by moral injury. The symptoms of moral injury described by the nurses in this study suggest that interventions for warzone nurses should emphasize the types of ethical dilemmas encountered in their work and provide recognition for the long-lasting impacts of these stressors. Both during and after

deployment, nurses and other healthcare professionals should be provided with a safe space to discuss the moral and ethical dilemmas encountered in warzone nursing.

Limitations

There are several limitations that may have influenced the results of this study. The NVVRS consists of self-reports that were collected retrospectively, years after the initial exposure. Responses are therefore subject to recall biases including distortion and forgetting, and the historical nature of the data set prohibits the current investigator from clarifying any of the responses. Second, the original investigators of the NVVRS transcribed the audiotaped interviews, but the current investigator was unable to verify the accuracy of the written responses. Additionally, the interviews were conducted face to face, so participants may have been reluctant to report negative effects of their service due to a sense of patriotism or pride in their work, or possible embarrassment for continuing to present with symptoms or difficulties related to their service in Vietnam.

Gender may have been a confounding variable that impacted the results of this study and the ability to generate direct comparisons between male and female veterans. Previous research (e.g., Landoll, Schwartz-Mette, Rose, & Prinstein, 2011) has suggested that gender differences regarding self-disclosure emerge as early as adolescence, with females being more likely to report concerns or troubles than males. This is partially attributable to socialization and social learning theory, as women are more likely to be positively reinforced for expressing emotions (Langer, 2010). Thus, although the current study found that women reported signs and symptoms of moral injury twice as frequently as men, it is unknown whether this result reflects differences in training, job duty,

gender/socialization, or actual differences in the presence of morally injurious symptomatology.

The use of the archival data available in the NVVRS may have limited the results of this study in other ways. For example, the construct of moral injury had not been identified at the time of the original interviews. As a result, the interviews may not have been structured in a way that best facilitated the identification of signs and symptoms of moral injury. Furthermore, because the results of the NVVRS were not designed to be used in this manner, there was not a control group with which to compare frequency and extensiveness of morally injurious symptomatology, and therefore causality cannot be determined. However, the NVVRS does contain a sample of female veterans who served during the Vietnam era but were not deployed to the warzone, and future research should utilize this data to draw further conclusions regarding the effects of deployment on morality and spirituality.

Finally, the results are also limited in generalizability. The NVVRS dataset is specific to Vietnam veterans and therefore the results may not reflect the experience of female veterans of Iraq, Afghanistan, and other conflicts, and may also differ from male veterans. A final limitation reflects the methodology of data analysis, which is qualitative in nature. Researchers may have a tendency to find confirmatory evidence for a proposed theory and ignore evidence that does not support the theory, and coders in this study were aware of the construct and definition of moral injury. Furthermore, because the question used to generate the responses used in this study was not designed to assess for moral injury, this may have increased the chances of confirmatory bias. However, because this study was exploratory in nature, the researcher emphasized sensitivity over specificity,

thereby acknowledging and accounting for potential inflation of frequency and extensiveness.

Directions for Future Research

Although these results add to the growing body of research on moral injury and expand it to both women and noncombatants, it is important to note that this research does not stand alone and should not be taken as evidence that each participant who reported morally injurious symptomatology also experienced a morally injurious event. There is significant overlap between the symptoms of moral injury found by Drescher et al. (2011), the symptoms of depression and PTSD, and the effects of moral distress found in civilian nursing literature. Future research following the methodology of Vargas et al. (2013) should be undertaken to examine the overlap between nurses who reported morally injurious symptomatology as a result their deployment in Vietnam and those who reported experiencing a morally injurious event, as defined by Drescher et al. (2011), while deployed. To address limitations related to a lack of a control group, future studies on this population should utilize the Vietnam Era subgroup of female veterans to compare rates of morally injurious events and subsequent symptoms between warzone and non-warzone-exposed nurses.

Nurses and other medical professionals may also be exposed to different types of morally injurious events and at different rates than male combat veterans. For example, Vargas et al. (2013) found that incidents involving civilian deaths or disproportionate violence were the events most commonly associated with signs or symptoms of moral injury, but this finding may not apply to noncombat female service members or other noncombatants who are not in a position to witness or engage in such acts. To further

explore the impact of working as a healthcare professional in a warzone, and to gain a deeper understanding of gender differences in moral injury rates, narrative accounts of deployed male nurses, medics, and corpsmen should be qualitatively examined for themes of morally injurious symptomatology.

In addition, although this study did not find any thematic categories of signs and symptoms of moral injury beyond those identified by Drescher et al. (2011), it is possible that there are additional categories of morally injurious events and symptoms experienced by women that were not found in the current sample and should be explored in future research. For example, there is a growing awareness of the frequency of military sexual trauma (MST) and its impact on survivors. Although actual numbers of MST victims are approximately equal across genders due to the higher percentage of males in the military, women are far more likely to experience MST than males. It is estimated that 1 in 5 women and 1 in 100 men seen at Veterans Health Administration facilities screen positive for MST (National Center for PTSD, 2013), and the estimated prevalence of MST in female veterans is between 30 and 71% (Zinzow, Grubaugh, Monnier, Suffoletta-Maierle, & Frueh, 2007). Despite growing awareness of MST, many victims either do not report an incident or are told not to pursue complaints when they do report an assault. Accordingly, MST is likely experienced as a morally injurious event with corresponding negative psychological and spiritual outcomes. For example, the assault itself could fall under the category of within ranks violence, and the response from fellow service members and commanding officers could be interpreted as a betrayal when no legal recourse is pursued or even available. Because of the growing literature on MST, future research on female veterans is needed to explore the links between MST and

morally injurious symptomatology. When examining the traumatic events responses available in the NVVRS, researchers should remain alert to potential incidents of MST reported by female veterans. Additionally, a psychometrically valid measure of moral injury is needed to empirically assess for morally injurious events and associated signs and symptoms, and such a measure should include specific questions designed to elicit responses related to MST.

In addition to expanding the body of literature on moral injury in veterans, future studies should explore this construct in other populations. Because the current study demonstrated the presence of morally injurious symptomatology in noncombat veterans deployed to a warzone, it is possible that other populations with highly stressful or dangerous jobs, particularly those where exposure to trauma is likely, may also report moral injury. For example, police officers, EMTs and other first responders, and humanitarian aid workers may all be at risk for moral injury. Finally, and perhaps most importantly, there should be an emphasis on the development of effective treatment interventions for individuals suffering from moral injury. Moral injury should not be considered a psychological disorder, but rather a "soul wound" that results from compromises to one's moral code. As such, individuals should not be stigmatized for reporting symptoms that reflect moral injury (Brock & Lettini, 2012). Moral injury is likely to occur when there are conflicts between the military mission and one's morals, and the responsibility therefore cannot rely solely on the individual service member. Thus, treatment efforts should be at both the individual and community levels.

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Table 1

Demographics

	N	Mean	Median	Mode
Age		45.61	43	50
Ethnicity				
Caucasian	95			
Hispanic	5			
Marital Status				
Married	48			
Separated	4			
Divorced	11			
Widowed	0			
Never Married	37			
Education (years)		15.83	16	16
Branch of Service				
Army	82			
Navy	7			
Air Force	9			
Multiple Branches	2			

Table 2

Themes of Signs and Symptoms

Code	Extensiveness (E)	Percentage of Total Participants	Frequency (F)	Percentage of Total Responses
ATTITUDE, PERSONALITY, OR CHARACTER CHANGE	5	5%	5	3.36%
LOSS OF TRUST/BETRAYAL	31	31%	35	23.49%
MALEVOLENT ENVIRONMENT	5	5%	5	3.36%
NONE	15	15%	15	10.07%
OCCUPATIONAL PROBLEMS OR CHANGE	3	3%	3	2.01%
PSYCHOLOGICAL SYMPTOMS	21	21%	24	16.11%
Anger	3	3%	3	2.01%
Substance Abuse	1	1%	1	0.67%
Symptoms Related to Anxiety/Trauma	8	8%	8	5.37%
Symptoms Related to Depression/Guilt	8	8%	9	6.04%
Undifferentiated Psychological Symptoms	3	3%	3	2.01%
SOCIAL/INTERPERSONAL PROBLEMS	8	8%	8	5.37%
SPIRITUAL/EXISTENTIAL ISSUES	31	31%	36	24.16%
UNDIFFERENTIATED/ GENERAL DISTRESS	10	10%	10	6.71%
UNINTERPRETABLE	8	8%	8	5.37%
Capitalized=major thematic category; italicized=subtheme	-	-	-	-

Subjects N = 100, Responses N = 149

Table 3

Examples of Vietnam Theater Nurse Responses

Code	
ATTITUDE, PERSONALITY, OR CHARACTER CHANGE	EXAMPLES
	And an intolerance and impatience toward laziness. I can't s-
	The experience gave me a mindset that I had to do what other people told me to do. I have to put up wit-
	I will not let me or my family get involved in another war unless they're-
LOSS OF TRUST/BETRAYAL	EXAMPLES
	No one took the time to listen to us
	Our government got us into a situation that had nothing to do with the good of our country
	I have become more cynical of the government and why they do-
	I was disillusional about some of our medical people. They didn't take their jobs seriously and I fee[l]-
MALEVOLENT ENVIRONMENT	EXAMPLES
	We didn't have the supplies and things we needed, the climate was so bad, and it was difficult working-
	Lack of water, rats, lack of privacy, the long hours, no control over your life, no choices at all there
	Can't stand heat anymore

(Continued)

Code	
NONE	EXAMPLES
	Personally for me there were none. I enjoyed my work very much and didn't have any bad experiences
	I can't think of any
	None that I can think of
OCCUPATIONAL PROBLEMS OR CHANGE	EXAMPLES
	Didn't know what I wanted to do as a nurse. I didn't want to work in hospitals, I wanted to work with-
	It set me back in my career a little. My job was there but not the same resp-
PSYCHOLOGICAL SYMPTOMS	EXAMPLES
Anger	My hostility toward stupidity afterwards
Anger	The anger that is there could not be directed at any one or thing
Substance Abuse	Getting hooked on drugs and alcohol th-
Symptoms Related to Anxiety/Trauma	The only thing that brings back memories are helicopters. When two or three go over it brings me back
Symptoms Related to Anxiety/Trauma	I'm jumpier than I used to be, according to my mother. I don't think so
Symptoms Related to Anxiety/Trauma	Very deep fear of violence of all kinds which translates into a fear of man who perpetrates the viol[ence]
Symptoms Related to Depression/Guilt	Initially feeling of depression
Symptoms Related to Depression/Guilt	Feeling so helpless
Symptoms Related to Depression/Guilt	Think sometimes I should have done more. Feel bad that I didn't give more of mys[elf]
Undifferentiated Psychological Symptoms	I spent 7 months in psychiatric hospital afterwards and was on medication even longer
Undifferentiated Psychological Symptoms	Taking continual medica[tion]
Undifferentiated Psychological Symptoms	Not being able to sleep over it

(continued)

Code	
SOCIAL/INTERPERSONAL PROBLEMS	EXAMPLES
	Inability to form close relationships
	Being away from my family, people, and friends
	Emotionally vulnerable to other people
SPIRITUAL/EXISTENTIAL ISSUES	EXAMPLES
	All the death and dying
	The hopelessness of the situation
	Seeing so many young men die
	Don't feel we accomplished anything being there
UNDIFFERENTIATED/ GENERAL DISTRESS	EXAMPLES
	The way in general
	Seeing burns and wounds
	I couldn't deal with the people while working in the operating room (meaning?) The wounded and injured i-
UNINTERPRETABLE	EXAMPLES
	And we were always wr-
	With the quick evacuation we did some heroic lifesaving of some people who came back to a living de-
Capitalized=major thematic category; italicized=subtheme	-

Table 4

Moral Injury Themes

Code	Extensiveness (E)	Percentage of Participants	Frequency (F)	Percentage of Responses
LOSS OF TRUST/BETRAYAL	31	50%	35	42.7%
PSYCHOLOGICAL SYMPTOMS	3	4.83%	3	3.66%
Anger	1	1.61%	1	1.22%
Depression/Guilt	2	3.23%	2	2.44%
SOCIAL PROBLEMS	8	12.9%	8	9.76%
Attitude/Personality Change	2	3.23%	2	2.44%
Occupational Change	1	1.61%	1	1.22%
Social/Interpersonal Problems	5	8.06%	5	6.1%
SPIRITUAL/EXISTENTIAL ISSUES	31	50%	36	43.9%
Capitalized=major thematic category; italicized=subtheme	-	-	-	-

Subjects N=62, Responses N=82

Table 5

Examples of Vietnam Nurse MI Responses

MI Code	Veteran ID #	Example
Loss of Trust or Sense of Betrayal	E=31	F=35
	170480	It took away the idealistic belief in our government that they can do no wrong
	171009	Was the period I first began to have doubts about wisdom and truthfulness of our government official[s]
	172866	It has caused me to be more opposed to war, seeing what it does to young men who fight, it doesn't seem-
	173062	The terrible attitude of the American people towards Veterans
	174573	Lack of preparation for the physical and emotional intensity of the situation. It was portrayed as be-
	174797	The attitude that people developed, that we couldn't help so they just laid back. Very unprofessional
	175240	I felt the young soldiers were used to the people in power. It was almost a game to them
	175257	Distrust of the press
	175695	Unfortunately, I learned that the United States was not the good and great country I previously thought
Spiritual/Existential Issues	E=31	F=36
	170241	The enormity of loss of life for no purpose
	170407	I think we carry scars. Anybody who has seen that much death and destruction is wounded, not just Viet-
	170498	Seeing so many young men die

(continued)

MI Code	Veteran ID #	Example
	170910	Finding out I was capable of murder – I think that was enough
	172122	I saw a lot of suffering among all the injured and wounded that entered the hospital
	172627	Man's inhumanity to man
	172924	I live for today because I don't know if I will be alive tomorrow and I know it stems from that. I ha-
	174433	I lost my innocence and youth very quickly
	175125	That in general it's a terribly regretful thing that a war should take so many lives uselessly, suc-
Psychological Symptoms	E=3	F=3
Anger	175885	Learned to hate the enemy
Depression/Guilt	172502	Think sometimes I should have done more. Feel bad that I didn't give more of mys[elf]
	172635	It's hard to spend all that time and effort on someone and have them end up dying
Social Problems	E=8	F=8
Attitude/Personality Change	170340	My attitude towards life was more cynical for my age
	174854	I've become calloused, unsympathetic
Occupational Change	170613	No longer in nursing, I think, is a direct effect of that
Social/Interpersonal Problems	170209	Inability to form close relationships
	170498	I learned to be very conscious about other people and developing close-
	170993	I am very pleasant and outgoing but I do not expose my feeling[s] to others except my husband. I'm not-
	172494	Probably the not wanting to talk about it to other people. I guess it's just a part of my life that pe-
	172825	It was one of the main reasons for the downfall of my first marriage

(continued)

Italicized=major thematic category from Drescher et al. (2011); non-italicized = example	-	-

Subjects N=62, Responses N=82

APPENDIX A

Literature Table Summary and Spreadsheets

Literature Table Summary

Although there is a vast amount of literature on the effects of combat on veterans, the literature review focused on those studies looking at PTSD and other psychological disorders, the effects of warzone exposure on female veterans, particularly those serving as healthcare providers, the construct of moral distress in civilian nursing, and moral injury. The literature reviewed included various formats, including qualitative studies, quantitative studies, literature reviews/critiques, meta-analyses, theoretical articles, and books.

Twenty-one of the studies focused on PTSD and other effects of combat or warzone exposure. While the majority of these studies examined the psychological effects of war on Vietnam veterans, several studies examined mental health outcomes in veterans of Iraq and Afghanistan, and one article piloted a treatment intervention for active-duty service members. In addition, two studies reviewed for this dissertation examined PTSD in non-veteran populations.

There were 16 studies published directly from the NVVRS included in the literature table, including the initial publication of the general findings. Most focused on PTSD rates with different sub-groups of veterans (e.g., Theater vets, different ethnicities, etc), or under different circumstances (e.g., those exposed to atrocities, level of combat exposure). Several studies looked at female veterans separately or in comparison to male veterans.

Fifteen of the studies specifically focused on female veterans, and included a wide range of formats, including qualitative reports of personal experiences, quantitative studies, and a review article summarizing the existing literature on this population. There were also three books detailing the experiences of female Vietnam veterans. Sixteen articles focused on the construct of moral distress found in the civilian nursing literature. These studies included healthcare professionals working in a variety of settings, including intensive care units, psychiatric units, and abroad as humanitarian aid workers.

In terms of moral injury, there were six published studies, including one book. The first published study was theoretical, the second was qualitative, the third was a review of current literature on moral injury, and the fourth was quantitative. A fifth study examined a potential treatment intervention that targeted moral injury, among other symptoms. There were other two theoretical studies that focused on how an individual could or would shut off his/her moral compass for survival.

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Baker, Menard, & Johns (1989)	Addressed the need for a better understanding of the stresses of the female nursing experience in Vietnam	2 Studies -1st sample = 60 Army Nurse -2nd Sample = 40 Army nurses and 20 Air Force and Navy nurses	-45-item questionnaire of demographic, situational, health, and psychosocial data -2nd study added questions re: sexual harassment	-Army nurses with less than 2 years RN experience before deployment were at higher risk for negative outcomes (e.g., difficulty establishing relationships, difficulty coping with stress) -90% exposed to hostile fire and 22% reported often experiencing sexual harassment -Nurses also described positive experiences
Bandura (1999)	Described the way morals are disengaged in the perpetration of inhumanities	n/a	n/a	-Disengagement practices include moral justification, euphemistic labeling, advantageous comparison, displacement of responsibility, diffusion of responsibility, disregard or distortion of consequences, dehumanization of victims -Regulation of morality is a reciprocal interplay between personal and social influences
Bandura (2002)	Addressed and explored the issue of selective moral disengagement in moral agency	n/a	n/a	-Moral agency is embedded in a broader socio-cognitive self-theory that encompasses affective self-regulatory mechanisms rooted in personal standards linked to self-sanctions -Moral disengagement happens in the same ways described in Bandura (1999)

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Beckham, Feldman, & Kirby (1998)	Explored relationships between combat exposure, symptom severity, guilt, interpersonal violence and PTSD in Vietnam combat vets	151 help-seeking combat veterans from outpatient PTSD clinic	-Combat Exposure Scale -Mississippi Scale for Combat-Related PTSD -Clinician-Administered PTSD Scale -Atrocities Exposure Subscale of Vietnam Era Stress Inventory -Davidson Trauma Scale -Trauma-Related Guilt Inventory -Overall Violence Index	-After controlling for combat exposure, atrocities exposure was significantly related to overall PTSD symptom severity, PTSD B symptom severity, global guilt, and some cognitive aspects of guilt cognition (hindsight-bias/responsibility and wrongdoing) - Increased combat exposure has an independent effect on interpersonal violence
Boals & Hathaway (2010)	Examined importance of DSM-IV E and F criteria when using self-report measures of PTSD -2 studies	Study 1 – 208 volunteers from U. of North Texas Study 2 – 730 volunteers from U. of North Texas (all undergrads)	-Impact of Events Scale – Revised -E Criterion -F Criterion -Traumatic Events Questionnaire -Posttraumatic Stress Disorder Checklist	-Adding E and F criterion when using self-report measures of PTSD dramatically reduce rates of PTSD -Respondents perception of potentially traumatic events is crucial - what one person perceives as traumatic another might not -Objective nature of the event is less important

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Brock & Lettini (2012)	-Reported the stories of 4 veterans with moral injury, explored the effect of MI on families and communities and the community processes that help soldiers with moral injuries	-4 veterans of wars, from Vietnam to current conflicts (OEF/OIF)	n/a	-Describes moral injury, how it may occur, and hypothesizes about what can be done to help those suffering from MI -Helps veterans, their families, members of the community, and clergy understand the impact of war on the conscience, support the recovery of moral conscience in society, and restore veterans to civilian life after war and MI
Bruner & Woll (2011)	-Review Article -Explored ways in which the body and brain adapt to war-zone stress, the resulting challenges, and implications for clinical services and ongoing recovery	n/a	n/a	-PTSD is not just a psychological disorder, it is biologically based and affects the physiology -Role of the autonomic nervous system and how that is changed by exposure to war-zone, important to normalize the shutting down of emotions -The automatic reactions the body goes through during war can become more intense over time, rather than fading -Essential to remember that the experience of war affects the person on a number of levels, including the body in general, the brain, thoughts, feelings, the spirit, the family, and the human community; cannot just provide info about the brain and ANS and discount the complex psychological, social, and spiritual experience -Recovery process includes exploration of and reconnection with emotions, neglected parts of self -Provides suggestions for restoring balance lost due to a variety of common war situations, implications for clinical services, and ongoing recovery

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Carson, Paulus, Lasko, Metzger, Wolfe, Orr, & Pitman (2000)	Explored whether witnessing death or injury could produce psychophysiologically responsive PTSD in female Vietnam nurses	77 women who served as active duty nurses in the US Armed Forces from 1964 – 1975 in the Vietnam theater	-Clinician-Administered PTSD Scale -SCID -MMPI-2 -Physiologic readings – heart rate, skin conductance, electromyograms	-Vietnam nurses with PTSD have higher resting HR compared to those w/o PTSD -Nurses w/o PTSD reported emotional responses during recollection of personal Vietnam events that were as strong as nurses w/ PTSD, but non-PTSD showed significantly less physiologic arousal -May be this arousal that contributes to PTSD
Clancy, Graybeal, Tompson, Badgett, Feldman, Calhoun, Erklanli, Hertzberg, & Beckham (2006)	Examined whether trauma exposure (TE) before, during and/or after military service contributes to PTSD and adjustment -Identified whether TE before military service is mediated or moderated by military trauma	422 Male veterans diagnosed with PTSD at VA outpatient PTSD clinic	-Traumatic Life Events Questionnaire -Clinician Administered PTSD Scale -Combat Exposure Scale -Davidson Trauma Scale -Alcohol Use Disorders Identification Test -Beck Depression Inventory -Cook-Medley Hostility Scale -Self-Reported Health	-Greater combat exposure and attack after military service were associated with increased PTSD severity -Younger age, greater combat exposure and attack after military service were associated with increased PTSD severity -Attack after military service associated with increased depression and alcohol problems -Adult trauma exposure moderates the effect of childhood trauma exposure on health complaints -Effect of childhood trauma exposure is partially mediated by adult trauma exposure

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Corley, Minick, Elswick, & Jacobs (2005)	-Examined the relationship between moral distress intensity, moral distress frequency, and the ethical work environment -Also looked at demographic characteristics to moral distress intensity and frequency	106 registered nurses working on medical and surgical units in two large medical centers	-Moral Distress Scale -Ethical Environment Questionnaire	-Nurses continue to experience moral distress when the situation is no longer occurring (called moral residue) -Negative correlation between moral distress intensity and age may be partially explained by the role of experience in learning how to address ethical problems that arise -Improvements should be made regarding nurses' involvement in deliberations addressing ethical concerns -Highest moral distress frequency and intensity focused on the nurses' perception of an unsafe setting
Cronqvist, Lutzen, & Nystrom (2006)	Analyzed and described the lived experiences of support in situations characterized by critical care situations and moral stress in intensive care nursing	-36 nurses from ICUs in Sweden	-Interviews, asked about stressful situations they had encountered in the ICU, interviews were coded	-There is a tension between personal (moral) values and professional obligations -Receiving organized support is a matter of self-determination, participating in organized support or being off-duty are perceived as mutually exclusive -Dealing with moral stress is experienced as a private matter -Colleagues managing moral stress serve as models in stress support -Not being able to deal with moral stress urges one to seek outside support -Availability, accessibility, and receptivity to support are all important -Complex inter-relationship in the existential meaning of accessibility, availability, and receptivity of support -Nurses compensate for lack of organized support by turning to each other and it is less threatening to get support from peers

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Cummings (2011)	Descriptive study of acute care nurses that highlighted the factors that impact nurses in the acute care setting and affect their intention to stay at an institution	234 nurses employed in Northeast Florida working in a variety of settings (159 completed the entire survey)	-Moral Distress/Health Professions Stress Inventory (51-item combination of Moral Distress Scale, Health Professional Stress Inventory, and Intent to Stay scale)	-When nurses have more autonomy and control over the care of their patients, even in stressful situations, anxiety levels decrease -Professional or work-related items play as important a role in one's decision to stay at an institution as morally distressing items -6 factors were predictive of intention to stay: frequency of professional recognition, intensity of professional recognition, frequency of lack of confidence, frequency of terminal illness, intensity of professional patient care, and intensity of moral distress -Moral distress is a concept that is strongly related to emotional factors and distinct from professional stress issues -It is imperative that nursing leasers take an active stand in understanding job stress factors and in reducing those stressors – recognition and support by front-line managers
Currier & Holland (2012)	-Examined the contribution of combat loss (e.g., of close friend) in psychological functioning and PTSD. -Focused on assessment of functional impairment -Attempted to examine whether combat loss had a unique contribution beyond other important risk factors	-Available information from 1637 Vietnam combat veterans -NVVRS	-Nonbereavement combat exposure -Readjustment index -Questions pertaining to loss of close friend in Vietnam	-Over 2/3 of sample reported the loss of a close friend in Vietnam -Veterans who experienced a combat loss had more readjustment problems than those who did not -Combat loss was uniquely associated with serious maladjustment -This effect was robust even after controlling for demographic variables, other bereavements, and nonbereavement combat stressors -Discusses implications for clinicians working with returning service members

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Currier, Holland, Chisty, & Allen (2011)	Explored the unique role of meaning made of a salient stressor following a combat deployment on PTSD, psychological functioning, and clinical outcomes	169 service members returning from Iraq and/or Afghanistan receiving treatment at a VA hospital in the Southeast United States	-Integration of Stressful Life Events Scale -Posttraumatic Stress Disorder Checklist-Civilian version -Symptom Checklist-10 -Clinical results from the Combat Clinic and subsequent hospital visits	-One third of returning service members in the sample reported clinical levels of PTSD, one out of two received a specialized consult for mental health treatment, had a prescription for one or more psychotropic medications, and were diagnosed with some type of psychiatric condition -Meaning made after a stressor assesses a construct that is unique from general distress and PTSD symptoms -Individuals who reported less adaptive meaning made after a stressor were at significantly greater risk for receiving a mental health consult, diagnosis, and psychiatric medication, which likely indicates worse adjustment -Provides important evidence for the importance of meaning making and underlying existential concerns among returning service members
Dohrenwend, Turner, Turse, Adams, Koenen, & Marshall (2007)	Addressed the controversy over rates of PTSD reported by NVVRS using a record-based exposure measure and diagnoses	NVVRS Data	-Record-based military/historical measures (MHM) -Clinical diagnoses in NVVRS subsample to measure PTSD (SCID) -MMPI	-Slightly lower rates of lifetime and current was-related PTSD than originally reported by NVVRS -Strong dose/response relationship between MHM exposure and clinically diagnosed PTSD -Discrepancies are attributable to differences in definition of PTSD -Adjusted rates are 1 in 5 lifetime onset and 1 in 10 current -Trend toward recovery over time

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Dohrenwend, Turner, Turse, Lewis-Fernandez, & Yager (2008)	Addressed group differences and elevated rates of PTSD in Black and Hispanic Vietnam veterans when compared to Majority White veterans	248 male Vietnam veterans, 94 white, 70 black, and 84 Hispanic (from NVVRS)	Structured Clinical Interview for DSM-III-R Diagnoses	-Rates of PTSD are highest in Hispanics, then Blacks, then Whites. -Current PTSD diagnosis was directly related to severity of exposure. -Blacks & Hispanics have higher rates of combat exposure than Whites. -When combat exposure is controlled for, rates of PTSD for Blacks & Whites become equivalent, but Hispanic rates are still elevated. -Hispanics' greater exposure, younger age, lesser education, and lower Armed Forces Qualification Test scores explains their higher levels of PTSD compared to Whites.
Drescher & Foy (2010)	Provided information to clergy about nature of traumatic experiences, normal human reactions to them, and ways that clergy can be helpful in restoring psychological and spiritual equilibrium	n/a	n/a	-Review of types of trauma, making distinction between natural disasters and human perpetration -Common pathologic reactions, PTSD, and complicated/prolonged grief are discussed -Spirituality as a resource in recovery from TE and loss, esp. in regards to making meaning -Key principles for clergy to follow

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Drescher, Foy, Kelly, Leshner, Schutz,& Litz (2011)	-How do professionals view the construct of moral injury? -What elements of war zone combat experience are most likely to produce moral injury? -What are the signs and symptoms of moral injury? -What types of intervention strategy might be useful?	23 health care and religious professionals who have knowledge of/experience working w/ veterans	Closed- and open-ended questions about the construct of moral injury, responses were coded for themes, then frequency counts were made of those themes	-There was universal agreement for the need for the concept of moral injury, but all agreed that the working definition needs changing - PTSD diagnosis does not cover moral injury -Most liked the term but several suggested changes (e.g. spiritual injury, moral trauma, etc) -Themes in MI events included: betrayal, disproportionate violence, incidents involving civilians, and within-rank violence; -Themes in symptoms included: social problems, trust issues, spiritual /existential issues, psychological symptoms, and self-deprecation -Themes in interventions included: spiritually-directed, socially-directed, and individually-directed
Ehlers & Clark (2000)	Proposed a cognitive model of PTSD that explains why some people recover after exposure and others develop persistent PTSD	n/a	n/a	-Proposes that PTSD becomes persistent when individuals process the trauma in a way that leads to a sense of current serious threat -This happens as a result of (1) excessively negative appraisals of the trauma and (2) disturbance of autobiographical memory -Provides a framework for treatment by identifying 3 key targets for change -Has empirical support

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Eizenberg, Desivilya, & Hirschfeld (2009)	Developed and tested the psychometric properties of a culturally-sensitive moral distress questionnaire among nurses in a variety of settings	-Stage 1: 30 Israeli nurses, took part in 5 different focus groups -Stage 2: 179 Israeli nurses working in a variety of settings and roles, convenience sample	-Stage 1: qualitative, exploratory case study that formed the basis for an adaptation of existing structured measures of moral distress -Stage 2: Testing psychometric properties of created questionnaire	-Ethical and moral dilemmas are an inherent part of nursing practice -Using Principle Component Analysis, 3 main factors were found: work relationships in a group or staff setting; situations caused by problems related to a lack of resources; situations caused by problems related to a lack of sufficient time at work -Questionnaire showed construct, discriminatory validity and test-retest reliability -Cultural-specific adaptations are important to address -Moral distress in healthcare workers is unavoidable, but steps can be taken to improve the ability to cope with such stressors
Finke (2006)	Editorial on the bond and burden of caring by nurses	n/a	n/a	-Nurses share a common bond that connects them – caring for their patients – that affects them throughout their lives -Nurses in Vietnam learned not to connect w/ their patients but remain connected to them years later through memories -The effect on caregivers from the emotional burden of exposure to traumatic events is called compassion fatigue -Nurses and other care providers should be aware of this and intervene with themselves and others to prevent the harm of caring from affecting their work and personal lives

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Fontana & Rosenheck (1999)	-Presented a theoretical/conceptual model of field placement, war zone stressors, and PTSD -Developed model on first subsample and cross-validated model using second subsample	1198 male Vietnam theater veterans from NVVRS, split into two random subsamples	Variables Used: -Field placement -Physical conditions of environment -Insufficiency of the environment (shortages and constraints) -Fighting -Exposure to death and injury of others -Perceived threat of one's own death or injury -Killing/injuring others -Committing atrocities -PTSD	-Overall, the model provides a theoretically and empirically satisfactory description of war zone stressors and their role in the etiology of PTSD -Harsh physical conditions did not directly contribute to PTSD, instead, malevolent environment contributes as a function of the shortages and constraints that result from these conditions -Death of others contributed to both perception of threat to self and to killing or injuring others, but was not related to development of PTSD aside from other war zone stressors -Killing or injuring others had a strong effect on PTSD and substantially contributed to committing atrocities -Model is insufficient and has limitations but provides a system for ordering known war zone stressors that contribute to PTSD in a rational way and can inform future research

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Fontana & Rosenheck (2004)	Examined a model of the interrelationships among veterans' traumatic exposure, PTSD, guilt, social functioning, change in religious faith, and continued use of mental health services	-1,385 veterans seeking care at VA medical centers (554 PTSD outpatient clinics and 831 PTSD inpatient)	-Demographic information -Traumatic experiences that were troubling the veterans as defined by treating clinicians (killing others and failing to prevent deaths) -Change in religious faith -Mississippi Scale for Combat-Related PTSD -Laufer-Parsons Guilt Inventory for combat-related experiences -Scale for Violence from NVVRS -Number of persons the veteran felt close to -Longest job held by veteran	-Veterans experiences of killing others and failing to prevent death weakened their religious faith directly and mediated by feelings of guilt -Weakened religious faith and guilt contributed equally to greater use of VA mental health services -Severity of PTSD and social functioning were not related to continued use of mental health care -The primary motivation of veterans' continued pursuit of treatment is their search for a meaning and purpose to their traumatic experience -Implications for the need for incorporation of spirituality into treatment of PTSD

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Fontana & Rosenheck (2005)	-People who have difficulty coping with TE often experience loss of meaning -Vietnam vets who experience loss of meaning may be more likely to seek help from clergy and VA mental health professionals	1,168 veterans who provided data on study variables (from NVVRS)	-Clergy -Attendance at religious services -Loss of meaning scale	-Those who suffered greater loss of meaning were more likely to seek help from clergy than those who had lesser loss of meaning -Vets w/ high loss of meaning who sought help from VA more likely to go to clergy as well -Therapists made need new treatments to do with this type of experience -More attention to existential questions is needed in treatment of PTSD
Fontana, Schwartz, & Rosenheck (1997)	Investigated the etiologic roles of war and sexual trauma in the development of chronic PTSD in female Vietnam veterans	396 Vietnam theater and 250 Vietnam era female veterans (from NVVRS)	-Premilitary risk factors and traumas -Service as a nurse and traumatic exposure while in the military -Homecoming reception -Postmilitary trauma -PTSD	-War trauma and sexual trauma made equal contributions to probability of developing chronic PTSD -Supportiveness of homecoming played an important meditational role between trauma exposure and development of PTSD -Sexual traumatization and lack of support at homecoming were the 2 major contributing factors in PTSD - Rejecting societal reception and history of childhood abuse had smaller but still notable influences -Provides a framework for further study of women veterans

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Foy, Sipprelle, Rueger, & Carroll (1984)	Assessment of premilitary, military, and combat exposure influences on the development of PTSD	43 Vietnam veterans seeking psychological services at a Los Angeles VA	-Minnesota Multiphasic Personality Inventory -Premilitary Adjustment Index -Military Adjustment Index -Postmilitary Adjustment Index -Combat Exposure Scale -Problem Checklist -PTSD Diagnostic Scale	-Combat exposure and military adjustment were significantly related to PTSD symptomatology, while premilitary adjustment was not -The MMPI had moderate ability to correctly classify subjects on the basis of their PTSD diagnosis -The use of a problem checklist indicative of anxiety-based disorders provided more than 90% correct classification of PTSD -Problems related to tension, anxiety, and pervasive disgust were reported by a high proportion of PTSD positive combat veterans
Freedman, & Rhoads (1987)	Individual accounts by nine women who served as nurses in Vietnam	9 Army nurses who served in Vietnam between 1965-1971	n/a	-Served in a variety of settings (frontline hospitals, rear convalescent or specialty care facilities) -Arrived confident in their ability to save lives but found that the horrors of war were something they weren't prepared for -For some it was a positive experience, for others it was a nightmare that continues to haunt them
Gallers, Foy, Donahoe, & Goldfarb (1988)	Compared veterans with PTSD to veterans without PTSD on measures of military adjustment and exposure to traumatic violence during combat	60 Vietnam veterans seeking psychiatric services in LA-area (30 with PTSD diagnosis and 30 without)	-Combat Exposure Scale -Structured Interview -Premilitary Adjustment Index -Military Adjustment Variables -Traumatic Violence Inventory -PTSD Diagnostic Scale	-PTSD-positives reported more exposure to traumatic violence -Both PTSD-positives and negatives reported declines in military adjustment (increased alcohol and drug use and fewer social supports) following combat exposure -Traumatic violence should be assessed separately when high combat exposure is reported -Poor military adjustment is best viewed as a consequence of the development of PTSD, not an antecedent

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Gibbons, Hickling, & Watts (2012)	Integrative review article that identified exposures, experiences, and other factors influencing stress responses in military healthcare providers, and described incidence of PTSD and other mental health problems in this population	n/a	n/a	-There has been little research on the incidence, risk factors, protective factors, or meaning regarding combat stress in military healthcare providers -There is evidence that healthcare provider exposure to life-threatening situations will increase the probability of adverse psychological outcomes, including PTSD -The presence of a strong sense of meaning and purpose appears to help mediate the impact of these dangerous and stressful situations
Gray, Schorr, Nash, Lebowitz, Amidon, Lansing, Maglione, Lang, & Litz (2012)	Evaluated the preliminary effectiveness of a novel intervention developed to address combat stress injuries in active-duty service members	-44 active-duty Marines and Navy service members stationed at Camp Pendleton	-PTSD Checklist-Military version -Patient Health Questionnaire -Alcohol Use Disorders Identification Test -Posttraumatic Cognitions Inventory -Posttraumatic Growth Inventory -Self-report measures of participant satisfaction with AD	-Adaptive Disclosure (AD) is a brief treatment intervention to accommodate the schedules on active-duty military personnel -AD takes unique aspects of military service not explicitly addressed in conventional PTSD treatments, such as moral injury and traumatic loss, into account -Results suggest that brief, early interventions can result in substantial symptom improvement among active-duty service members -Participants were highly satisfied with AD and attrition was low -Provides preliminary support for AD's ability to address PTSD, guilt and shame resulting from morally injurious actions, and grief related to traumatic loss

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Hasanovic & Pajevic (2010)	Investigated if there is an association between level of religious moral beliefs and severity of PTSD, depression, anxiety, and alcohol abuse symptoms	-152 war veterans from post-war Bosnia and Herzegovina, age 30-55 years	-All measures have been validated in Bosnian-Serb-Croat language -Harvard Trauma Questionnaire for PTSD -Hopkins Symptoms Checklist-25 for anxiety and depression symptoms -Scale of Religious Moral Beliefs created by authors -Michigan Alcohol Screening Test -Fagerstrom Test for Nicotine Dependence	-Religious morality has not been sufficiently studied by psychology -Presence of PTSD in sample was 39.5% -Severity of symptoms of PTSD was significantly associated with depression, anxiety, smoking cigarettes, and alcohol use -Score of moral belief index was negatively correlated to PTSD symptom severity, depressiveness, anxiety, and severity of tobacco and alcohol misuse -Religion/spirituality can serve a protective factor, help regulate behavior, lower anxiety -Higher index of religious moral beliefs in war veterans enables them to better control stress, leading to greater stability in mental health

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Helft, Bledsoe, Hancock, & Wocial (2009)	Review of initial experiences in conducting facilitated unit-based ethics conversations (UBECs) regarding nurses' needs to find ways to deal with their moral distress; identified need for nurses to have meaningful conversations about ethical issues they face in routine clinical practices and what contributes to moral distress	-At press, group has conducted more than 100 UBECs in 21 different clinical units	-No specific agenda and no specific goal -Facilitator begins each group by asking "Does anyone have a case he/she would like to discuss?"	-Takes time for nurses to become comfortable and open up about ethical issues, especially if facilitator is a physician as many of nurses ethical experiences are shaped by interstaff relationships and communication -Standard techniques of group facilitation such as active and reflective listening, validation of feelings, and summarizing -Factors important in simulating productive conversation: clarifying details, pushing participants (to identify key ethical issue), polling (asking group members to give their opinions), reflective and supportive statements, resist answers and solutions (sometimes have to choose the "least bad" option, best practices (end group w/ a discussion of best practices -Common themes: nonbeneficial treatment of patients who are unlikely to survive, informed consent, true ethical dilemmas, communication gaps or inadequacies -Difficult to schedule meetings, works best monthly or every other month, group size has not mattered, and discussion is enriched through participation of other non-nurse staff
Hendin & Haas (1984)	Explored protective factors that stop some combat veterans from developing PTSD while others do	10 Vietnam combat veterans who do not have a diagnosis of PTSD	5 session clinical evaluation (same as the one given to veterans with PTSD)	Identified the following characteristics as protective: -Ability to function calmly under pressure -Belief in understanding and judgment -Lack of excessive violence - Absence of guilt

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Henning & Frueh (1997)	Examined role of combat guilt in development and maintenance of PTSD	40 veterans with combat-related PTSD	-Revised Combat Scale -Mississippi Scale for Combat-Related PTSD -Guilt Inventory – Trait Guilt -Clinician Administered PTSD Scale -Combat Guilt Scale	-Guilt is prevalent in veterans and severity of guilt was positively correlated with reexperiencing and avoidance symptoms of PTSD and in overall PTSD severity -More attention should be given to combat-related guilt in understanding PTSD -Most military veterans experience some level of guilt regarding their involvement in combat
Hoge, Castro, Messer, McGurk, Cotting, & Koffman (2004)	Assessed mental health status of OEF/OIF veterans and inform policy in regards to optimal delivery of mental health services to returning veterans	4 US combat infantry groups (3 Army and 1 Marine) Before deployment to Iraq (n=2530) or 3-4 months after return from Iraq or Afghanistan (n=3671)	-Patient Health Questionnaire used for depression and generalized anxiety -National Center for PTSD Checklist for PTSD -Current symptoms -Use of professional mental health services in past month or year -Perceived barriers to treatment	-Percentage of respondents who met criteria for MDD, PTSD, or alcohol misuse was significantly higher following deployment than before -9% of soldiers may be at risk for mental disorders pre-deployment and 11-17% are at risk post-deployment -Only a small percentage actually sought help, with concern about stigma being the most cited reason -Reducing perception of stigma and barriers to care is a priority for research and policymakers
Hsieh & Shannon (2005)	Described 3 approaches to qualitative research	n/a	n/a	-Describes conventional content analysis as exploratory research, directed content analysis as following a theory, and summative content analysis as exploring usage

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Kalvemark, Hoglund, Hansson, Westerholm, & Arnetz (2004)	Investigated the views of health care professionals on what kind of situations involve ethical dilemmas, could these ethical dilemmas lead to moral distress among health care professionals of different categories	1.5-2 hour focus groups of 5-7 staff members in Swedish hospital system -Clinical cardiology, clinical hematology, and pharmacy -Physicians, nurses, auxiliary nurses, medical secretaries, pharmacists, dispensers, and pharmacy assistants	n/a	-Studied moral distress from the moral/ethical perspective and the stress perspective -Categories resulting in ethical dilemmas: resources, rules vs praxis, conflicts of interest, lack of supporting structures -Dilemma often arises through staff's experience of conflicting goals -Revised definition of moral distress to include situations where staff faces ethical dilemma and still does what he/she thinks is right but is breaking the law/rules -All categories of health care professionals described situations involving moral distress -Work organizations and management should be involved in preventing moral distress, e.g. have guidelines and provide support structures for staff

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Kaylor, King, & King (1987)	Integrated research on the psychological status of Vietnam veterans using a meta-analysis of 67 studies appearing in the literature between 1972 and 1985	67 studies on Vietnam veterans with 3 criteria: (1) Made a distinction between Vietnam veterans and Vietnam era veterans (2) Reported quantifiable data regarding post-Vietnam functioning (3) Reported information on a variable that could be considered an index of mental health or psychological adjustment	-Methodological deficiencies -Combat experience -Type of comparison group -Type of dependent variable -Institutional affiliation of the researcher -Demographic characteristics -Publication-related information	-The 67 primary studies showed an effect size of -0.53, suggesting that the typical Vietnam veteran sample scored over one half of a standard deviation below the typical comparison group on the outcome measures in the primary study -Studies that appeared later tended to show greater amounts of pathology in the Vietnam veteran sample -Vietnam veterans had poorer sociopsychological health than non- or era-veterans -Findings suggest the presence of a Vietnam effect, i.e., service in Vietnam had a negative impact over and above the negative impact among era veterans who served elsewhere

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
King, King, Foy, Keane, & Fairbank (1999)	Examined the relationship among pretrauma risk factors, war-zone stressors, posttrauma resilience and PTSD	432 female and 1200 males Vietnam veterans from NVVRS	15 variables from NVVRS, available in King et al, 1996	-Direct associations between pretrauma and posttrauma variable - Direct links from pretrauma, war-zone, and posttrauma variables to PTSD -War-zone stressors most salient predictor for PTSD for men, resilience-recovery for women
King, King, Gudanowski, & Vreven	Examined intercorrelations between 4 types of stressors (traditional combat, atrocities/abusive violence, perceived threat, malevolent environment) and between those scores and PTSD for male and female veterans	300 men and 108 women, gender-based random stratified sample from NVVRS	-Stressor Indexes (created) -Atrocities or episodes of extraordinarily abusive violence -Subjective or perceived threat -General milieu of a harsh or malevolent environment -M-PTSD -DMS-III-R criteria -Current PTSD	-Male veterans scored significantly higher on all 4 stressors than females -Malevolent environment was most potent predictor for both genders -Atrocities had only a direct impact, no indirect -Traditional combat only significant through indirect relationship with perceived threat -Path from traditional combat to perceived threat differed between men and women, all other paths were similar across gender

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Kubany, Abueg, Kilauano, & Kaplan (1997)	Described development of a survey to measure events that are possible sources of trauma-related guilt from the war-zone -5 step approach -Study 1 – items gathered from preliminary survey -Study 2 – added 2 addtl sources of information -Study 3 – Expand and refine STRGS-WZ and produce final version with optimal content validity	-Study 4 – Preliminary examination of the range of guilt sources -32 male combat Vietnam veterans attending residential treatment program at National Center for PTSD in Menlo Park -Study 5 – assess test-retest reliability & convergent validity -74 male Vietnam veterans in Hawaii	-STRGS-WZ -Personal Feelings Questionnaire -Guilt Inventory -Trauma-Related Guilt Inventory -M-PTSD -PTSD Checklist -Impact of Events Scale -Beck Depression Inventory -Zung Self-Rating Depression Scale -Rosenberg Self-Esteem Scale -Social Avoidance and Distress Scale	-Identified six most common sources of guilt, reported by at least 60% of sample -Support conceptualization of trauma-related guilt as a failure to exert personal control to prevent catastrophe from occurring -Identifies the need for assessment of feelings of trauma-related guilt in veterans -Most veterans endorse many sources of guilt

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Kulka, Schlenger, Fairbank, Hough, Jordan, Marmar & Weiss (1990)	NVVRS -Congressionally mandated study of Vietnam veterans	Report of the results from the NVVRS study	Multimodal – interview & self-report measures of multiple premilitary, military & postmilitary variables	-15.2% of all male Vietnam theater vets are current cases of PTSD; 8.5% of Vietnam theater women were current cases of PTSD -Another 11.1% of male and 7.8% of female vets do not qualify for PTSD but likely need treatment for significant stress reactions -Lifetime PTSD prevalence was 30.6% of males and 26.9% of females -Strong relationship was found between PTSD and other postwar readjustment difficulties (e.g. other disorders) -Importance of combat exposure - PTSD & other adjustment problems are significantly higher among those with high levels of exposure to combat other war-zone stressors in Vietnam (DOSE-RESPONSE Theory) -PTSD as negative impact on life of spouse, children, & others living with vets with PTSD -Substantial numbers of vets with postwar problems did not seek treatment
Kulka, Schlenger, Fairbank, Jordan, Hough, Marmar, & Weiss (1991)	Highlighted the challenges and opportunities involved in assessment and diagnosis of PTSD in the community	n/a, review article	n/a	-Provides a good overview of research on PTSD and lessons that can be taken from research on Vietnam veterans and applied to other populations

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Landoll, Schwartz-Mette, Rose, & Prinstein (2011)	Explored the effects of disclosure of depression-related symptoms in adolescent girls and boys	79 early adolescents living in Southeastern United States	-Children's Depression Inventory -Problem Generation Questionnaire -Relationship Processes Coding System (observational)	-Girls were more likely to disclose symptoms of depression than boys -For boys, disclosing about symptoms predicted fewer symptoms 6 months later, but this result was not found for girls
Langer (2010)	Commented on gender differences in disclosure of emotional expression through three gender theories: gender schema theory, social role theory, and gender socialization theory	n/a	n/a	-Previous research suggests that males benefit more from disclosure than females -Explores possible explanations from gender schema theory, social role theory, and gender socialization theory approaches -Provides avenues for future research, including the examination of gender differences in subjective, expressive and physiologic indicators of emotion during disclosure
Laufer, Gallops, & Frey-Wouters (1984)	Developed and tested a model of war trauma that contains 3 elements: (1) combat experience, (2) witnessing abusive violence, (3) participation in abusive violence	350 male Vietnam veterans taken from larger stratified probability sample of noninstitutionalized civilians (1,342)	-Combat exposure -Abusive violence -Stress Scale -Psychiatric Epidemiology Research Instrument -Control variables	-Each of the 3 elements affects postservice psychological states in significant and different ways -Exposure to abusive violence affects white and blacks differently -Results emphasize the importance of specifying what constitutes "the experience" when attempting to link traumatic experiences to subsequent psychological patterns *Gives good quotes of potentially morally injurious events

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Leon, Ben-Porath, & Hjemboe (1990)	Compared coping styles and current functioning of Vietnam veteran nurses with Vietnam-era nurses	-Vietnam nurse (VN) group = 36 women -Vietnam-era nurse group (VN-E) = 32 women	-50-item structured interview developed for the investigation that asked about the use of different coping styles -MMPI -The Coping Inventory -Impact of Event Scale	-Coping patterns related to expressing feelings, seeking emotional support, and searching for meaning were associated with good current functioning -Coping patterns associated with self-blame, withdrawal and anxious thoughts were associated with current psychological dysfunction -Trend toward greater proportion of VN group to report greater emotional and relationship problems 1 year after Vietnam than VN-E group
Lewis-Fernandez, Turner, Marshall, Turse, Neria, & Dohrenwend (2008)	Examined the elevated rates of PTSD in Hispanic veterans that were traditionally explained by culturally-based expressiveness that inflates symptom self-report	96 Whites, 73 Blacks, 86 Hispanics from NVVRS who were given SCID interview	-PTSD diagnoses gleaned from M-PTSD and SCID -Psychosocial functioning -Combat exposure -Composite military/historical measure	-Hispanics have highest rates of current PTSD, whites have lowest -Clinician-rated symptom patterns on SCID are same for all 3 ethnic groups -Hispanic elevations only on self-report (M-PTSD), not on SCID -Hispanic elevations driven up by Puerto Ricans -Results do not reveal lower impairment for Hispanics -Expressiveness does not account for Hispanic elevations in current PTSD

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Litz, Stein, Delaney, Lebowitz, Nash, Silva, & Maguen (2009)	Conceptual model of moral injury -What are the factors that moderate/mediate war-zone transgression? -What aspects of training help assimilate or accommodate moral and ethical challenges? -What are the individual factors that mediate/moderate moral injury afterward?	n/a	n/a	-Definition of moral injury (pg 6) -Define moral repair -Symptoms of chronic MI -Treatment of MI in theory -Provides working conceptual model of Moral Injury and working clinical care model -Limitations - no data

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Lutzen, Blom, Ewalds-Kvist, & Winch (2010)	Investigated the association between work-related moral stress, moral climate, and moral sensitivity in mental health nursing	-Convenience sample of 49 nurses employed in 4 acute psychiatric hospital wards in Sweden	-Hospital Ethical Climate Survey -Moral Sensitivity Questionnaire -Work-Related Moral Stress questionnaire	-Ongoing interest and growing need to develop practical models aimed at improving moral agency in health care -Professional experience was shown to negatively correlate with the work-related moral climate -Older nurses (44-54 y/o) with more experience (10+ ys) suffered from more sleep deprivation than other groups, reported less support from managers and colleagues and thought about quitting jobs more, found it more difficult to deal with emotions when a patient was suffering and felt less satisfied with their nursing care than other age groups -Moral stress was explained to a significant extent by the moral climate combined with 2 of the nine components of moral sensitivity -In order for nurses to provide safe patient care, a work environment supporting ethical practice is a prerequisite -Participants' overall experience of moral stress correlated positively with that of moral burden and negatively with the awareness of moral support
MacNair (2002)	Tested the hypothesis that PTSD associated with killing is more severe than that associated with other traumas causing PTSD -Examine the difference between killing in atrocities and killing in traditional military justification	NVVRS combat veterans (1,638) -Divided into those who killed (n=639, target group) and those who did not (n=963, control)	-M-PTSD -exposure to atrocities vs perpetrated atrocities	-PTSD scores were higher for those who killed than those who did not -Scores were even higher for those who were directly involved in atrocities compared to those who only saw them -Higher scores remained after controlling for combat exposure -Limitations – no allowance for number of killings, was dichotomous

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Maguen & Litz (2012)	Reviewed key studies of moral injury, noting limitations of current knowledge and suggesting directions for future research	n/a	n/a	-Litz et al. (2009) provide a comprehensive review, working definitions, prior research in related areas, a preliminary conceptual model, and intervention suggestions -Drescher et al. (2011) conducted interviews w/ professionals who work w/ military personnel and found themes of war-zone events that may lead to MI (betrayal, disproportionate violence, incidents involving civilians, and within-rank violence) and signs and symptoms of MI -Several articles have documented the relationship between killing in war and adverse outcomes (e.g., Fontana & Rosenheck (1999); Maguen et al. (2009)) -Morally injurious events are more guilt- and shame-based than fear-based -Link between guilt and suicide is also an important area of research (Fontana et al. (1992), Hendin & Hass (1991)(Interpersonal-Psychological Theory of suicide, see Selby et al., 2010) -Important mediators: Beckham et al. (1998) - cognitions related to hindsight bias and wrongdoing related to atrocities; Witvliet et al. (2004) – forgiveness of self and others -Interventions are being developed, e.g. Adaptive Disclosure -More research is needed, and aspects addressing killing, guilt, and shame can be incorporated into existing treatments

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Maguen, Metzler, Litz, Seal, Knight, & Marmar (2009)	Examined mental health and functional consequences of killing combatants and noncombatants	-1,200 male combat veterans from NVVRS -260 male veterans (subsample of above) that completed Clinical Interview	-Clinical Interview -MMPI-2 -Assessment of killing experiences -Mississippi Combat-Related PTSD Scale -Peritraumatic Dissociative Experiences Questionnaire -SCID for DSM-III-R -Readjustment Index -Index of past-year violent behaviors	-Killing in general is associated with PTSD, dissociation, functional impairment & post war violent behavior -Highlight importance of killing as a separate component of theoretical models of PTSD -Did not find a link between killing & depression diagnosis.

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
McCarthy & Deady (2008)	Described the evolution of the concept of moral distress among nursing theorists from its initial delineation to its subsequent use as an umbrella concept describing the impact of moral constraints on healthcare professionals and the patients they treat and proposes a reconsideration and multidisciplinary approach to understanding the experiences of healthcare professionals who have to make difficult moral decisions in complex situations	n/a	n/a	-Individuals experience moral distress when they make moral judgments about the right course of action to take in a situation but are unable to carry it out; has both psychological and emotional effects -May fail to follow the right course of action due to either personal reasons (e.g., fear or a lack of resolve) or situational factors (e.g., hierarchical decision making or lack of resources) -Nurses who are morally engaged are concerned about values, including respect, dignity, and quality of care -Distinction between moral uncertainty and moral distress -Authors express a concern that the research on moral distress to date (2008) lacks conceptual clarity and perpetuates the dominant or metanarratives about the professional identity of nursing that should be challenged -Understanding moral distress as a cluster concept should prompt caution in its description and use, e.g., moral distress has become conflated with psychological distress; moral distress should not be used uncritically as a means of understanding the impact that nurses' involvement in moral decision making has on them and should not focus solely on distressful features (implies that nurses are powerless to do anything about it)
McNally (2006)	Discussed a new analysis of NVVRS data to attempt to address some of the controversies regarding PTSD rates in Vietnam veterans	n/a	n/a	-Brief review of Dohrenwend et al. (2006) reanalysis of NVVRS data -Confirmed dose-response effect -Verified all reports of trauma exposure

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
McTeague, McNally, & Litz (2004)	Explored predictors of PTSD in female Vietnam veteran health care providers	373 women who served as health care providers in Vietnam theater, from NVVRS	-Prewar scales(e.g. childhood attachment, family instability) -War-zone scales (e.g., personal threat, exposure to wounded or dead, dilemmas, purposelessness -Postwar scales (e.g., structural support, instrumental support, emotional support; stressful life events) -PTSD	-PTSD symptom severity was significantly related war-zone deprivation, dilemmas for health care providers, purposelessness and unit cohesion -Results support clinical relevance of war-zone occupational stressors while emphasizing the importance of postwar emotional support and life events in presentation of chronic PTSD
McVicker (1985)	Applied clinical article discussing the differences in women's experiences in Vietnam compared to men and how this should be addressed in treatment	n/a	n/a	-The experiences of women who served in Vietnam were different from those of men who served there -Many of the issues that women must resolve re: Vietnam are different than men -Counselors must be aware of these differences to effectively treat these women

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
National Center for PTSD (2013)	Informational website providing education to the public on military sexual trauma	n/a	n/a	-MST is defined as psychological trauma, which in the judgment of a VA mental health professional, resulted from a physical assault of a sexual nature, battery of a sexual nature, or sexual harassment which occurred while the Veteran was serving on active duty or active duty for training -1 in 5 women and 1 in 100 men seen in VHA respond "yes" when screened for MST -Provides information on symptoms related to MST and where to go for help

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Nilsson, Sjöberg, Kallenberg, & Larsson (2011)	Examined the experiences of humanitarian aid workers in which they are conscious of the morally appropriate action but cannot take it because of institutional obstacles, develops a theoretical model of ethical decision making from a moral stress perspective, and discusses the practical implications of the study	-Snowball sampling, 16 participants, all committed to the execution of international aid and rescue operations of the Swedish Rescue Services Agency, interviews transcribed and coded	-Grounded theory approach, qualitative, semistructured interviews -Open-ended questions centered around two themes: (1) Were there any situations in which you stuck to your conviction of what was morally right although you knew it went against laws and regulations?, and (2) Were there any situations in which you followed laws and regulations but perceived them to be contradictory to your conviction of what was morally right?	-Theoretical process model of seven superior categories: Disaster/humanitarian crisis, contextual conditions (formalities: "the objective/hard" reality, culture: the "subjective/soft" reality, safety, media); interpretation of context (obstacle to completion, adapted to completion); decision-making strategy ("common sense", seek leader sanction and support [mistrust & lack of leader support or trust & leader support]); deliberations (active choice to act in accordance with or contrary to what is expected given contextual conditions, be aware of risks); outcome of chosen act (OK when successful, personally accountable); and moral stress reaction (insufficiency, powerlessness, meaninglessness, frustration) -Acting contrary to personal morals is most trying when powerless to help -Safety and media play a bigger role in moral stress with aid workers than nurses -Personnel sometimes use detachment as a coping strategy, but risk losing moral sensitivity and awareness -Need to handle feelings of insufficiency, powerlessness, meaninglessness, and frustration to avoid dehumanizing individuals -Moral stress can be looked at as a specific type of stress reactions in general, and of ambiguous negative states in particular, with 2 separate evaluative systems and brain systems active in the process
Norman (1990)	Qualitative book about the experiences of military nurses in Vietnam	50 female nurses who served in Vietnam	n/a	-Chapter on moral dilemmas experienced by nurses -Good themes to look for in data from NVVRS

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Norman (1992)	Qualitative study exploring the effect of the Vietnam War on 50 military nurses' careers	-50 nurses from the armed services who spent 12 months in hospitals or on aircraft or ships during Vietnam War (33 in Army Nurse Corps, 14 in Navy Nurse Corps, 3 in Air Force	-Qualitative taped interviews	-At the time of the interview, 23 were still in military and 27 were civilian -War setting nurtured professional pride but also set the scene for future dissatisfaction – nurses had more autonomy and responsibility in war setting, had to adjust to more subservient role back in the US -42 of the women said Vietnam did not affect their identity as nurses -Experiences in the war directly affected the way 43 nurse veterans approached their choice of clinical work; changed focus for 4 main reasons: disliked working w/ patients, found it difficult to be sympathetic to average pts after treating wounded soldiers, had seen enough suffering and death, and wanted to work with psychiatric rather than physical ailments -Nurses who stayed in critical care take pride in their expertise and train other nurses -Some felt anger and bewilderment at loss of status upon homecoming -Vietnam War was different from other wars, but wartime nursing remains relatively the same over the years

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Ohnishi, Ohgushi, Nakano, Fujii, Tanaka, Kitaoka, Nakahara, & Narita (2010)	Developed and evaluated Moral Distress Scale for Psychiatric nurses (MDS-P), used the MDS-P to examine moral distress experienced by Japanese psychiatric nurses, and explore the correlation between moral distress and burnout	264 psychiatric nurses in Japan	-Moral Distress Scale for Psychiatric nurses (24 items from original MDS, 19 items added by study authors) -Maslach Burnout Inventory – General Survey (Japanese version)	-In analysis, MDS-P yielded three factors: unethical conduct by caregivers, low staffing, and acquiescence to patients' rights violations -MDS-P frequency score was found to have a positive influence on all three factors -Low staffing positively influenced exhaustion and cynicism -Unethical conduct by caregivers positively influenced professional efficiency -Highest moral distress item involved low staffing -The more frequently Japanese nurses confront situations of moral distress, the more they feel moral distress -Significant correlation between moral distress and burnout
Rogers & Nickolaus (1987)	Review article detailing PTSD & Vietnam experience of female nurses	n/a -Does include case report of 38 year old former Vietnam nurse with PTSD	n/a	-Nurses have historically reported traumatic experiences and have suffered PTSD -Symptoms include hopelessness, guilt, anger, and despair, esp. survivors guilt -Effects of war on nurses is often not acknowledged -Not all Vietnam nurses will need psychotherapy, some may just need to review & discuss their war experience

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Sarnecky (1989)	Historical study that examined Army nurses' motivation to serve, from colonial times up through Vietnam War; also focuses on procurement methods used by the Army to determine whether the underlying theme was volunteerism, mandatory conscription, or a mixture of the two	n/a	n/a	-Colonial wars for independence: most nursing was done by convalescent soldiers or women who followed their husbands or sons to the battlefield. Women were also sought out and paid to work as nurses -Civil War: Nurses were (1) salaried, legal employees of the Army, (2) religious nuns, (3) women temporarily employed to perform menial chores, (4) black women employed by the War Department, (5) uncompensated volunteers, (6) women camp followers, and (7) women employed by various relief organizations -Spanish-American War: 1st conflict where trained nurses were utilized, many volunteers offered their services -World War I: 1901- the Nurse Corps became permanent branch of the Army Medical Department; there was a prepared, trained active force and a reserve. Many actual and would-be nurses responded to call for volunteers -World War II: 1940 - Nursing Council on National Defense to audit nation's nursing assets, determine role in defense, and unify activities. Nursing supply could not meet demand. Male nurses drafted as combatants, and most black women not allowed. In 1945, nurse draft bill passed. Almost half of registered nurses had volunteered -Korean War: many nurses volunteered or were recalled for service during this war, despite the harsh conditions Vietnam War: educational benefits & financial incentives for enlisting; also a draft call for male nurses. In Vietnam, nurses felt a commitment to "altruistic tradition of patriotism, duty, and a feeling of personal dedication -Overall findings: nurses volunteer for service in times of war, inducements offered do not diminish that sense of patriotism or volunteerism, and one can assume that nurses will continue to volunteer, regardless of gainful inducements

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Scannell-Desch (1996)	Described the lived experience of military nurses during the Vietnam war as well as common elements of their lives after returning home; phemonenological approach	24 women nurses who served in Vietnam between 1965 and 1973	-In-depth interviews centered around 4 data generating questions re: Vietnam experience	-Nurses struggled with moral and ethical dilemmas of wartime nursing, felt out of place, and lacked privacy -Many also described a deep and special bonding experience with fellow nurses and found Vietnam to be a rewarding experience -Vietnam continues to have an effect on the lives of nurses who served there
Scannell-Desch (2005)	Qualitative study designed to offer guidance for today's nurses based on experiences and lessons from nurses who served in the Vietnam war	24 nurses -nine Army, eight Navy, and seven Air Force	-Qualitative interviews, average length 1.5 hours	Nurses described seven areas of advice they would give to future military nurses: advice about journaling, training, caring for yourself, support systems, talking about your experiences, understanding the mission, and lack of preparation
Scannell-Desch & Anderson (2000)	Described the emotional hardships faced by military nurses in Vietnam and the personal strategies used to cope with those hardships	-24 nurses who served in Vietnam (9 Army, 8 Navy, and 7 Air Force)	-Qualitative design using a phenomenological approach -4 data-generating questions used in in-depth interviews	-Found 8 emotional hardships experienced by nurses: (1) Being overwhelmed by casualties; (2) Clinical inexperience; (3) Patients return to combat; (4) Youth of patients and severity of injuries; (5) Demanding physicians; (6) Alcohol abuse; (7) Morality of saving some patients; (8) Politics of war -Found 9 strategies used to cope: (1) Maintaining a perspective; (2) Use of support systems; (3) Inner strength; (4) Diversional activities; (5) Use of alcohol and other drugs; (6) Humor; (7) Talking about the Vietnam experience; (8) Keeping a journal; (9) Understanding the mission

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Schlenger, Kulka, Fairbank, Hough, Jordan, Marmar, & Weiss (2007)	Article by the original authors of the NVVRS that addressed commentary and criticisms of the original study, taking into account the history and context of the NVVRS	n/a	n/a	-Combat exposure variable in NVVRS appears to be fairly accurate and could even underestimate PTSD rates despite criticism from McNally -CDC study does not provide an accurate comparison because they used an instrument with poor sensitivity to PTSD cases. -Dohrenwend's article reported a fundamentally different definition of PTSD & represents a lower estimation of PTSD prevalence -Argues that misrepresentation of NVVRS results was crafted to support a specific bias with policy implications
Severinsson (2003)	Described and interpreted the narrative of an Australian nurse's experience of burnout	-1 nurse from Australia who had experienced burnout	Qualitative content analysis	-Main findings concern moral stress and burnout -3 major themes: shortcomings and health problems; hovering between suffering and desire; responsibility for oneself -Nurses need both emotional support and the right to receive systematic clinical supervision to help them reflect on their practical work and to interpret the needs of others
Shepard (2010)	Reviewed the concept of moral distress and suggests interventions and future research to minimize its impact on oncology nurses and patients	n/a	n/a	-Bioethicists, healthcare providers, and legislators often seem at odds regarding the ethical course of action in complex cases, yet the concerns of nurses are not often heard -Bioethical principles such as beneficence, non-malfeasance, and autonomy may conflict with the use of aggressive medical technology -Moral distress impacts nurses emotionally, physically, and professionally and has implications outside of the workplace -Education and support are important

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Singer (2004)	Clinical/theoretical article that described the process of "working through" a patient's guilt, shame and self-hatred and enabling them to express remorse for atrocities committed during war	n/a	n/a	-Discusses the process of working through and arriving and remorse -Offers treatment recommendations for individuals working with this population

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Stein, Mills, Arditte, Mendoza, Borah, Resick, Litz, & the STRONG STAR Consortium (2012)	-Tested the hypothesis that there are multiple types of trauma in the military context, each with unique perievent and postevent response patterns, rather than just fear-based reactions to life-threatening situations -Attempted to create a rating scheme that would facilitate the assessment of event type and that could aid in the provision of care to service members and veterans -Examined the relationships between the trauma categories and perievent and postevent emotional factors, most pertinent psychiatric symptoms, and related maladaptive cognitions	-Interviews from 119 active duty service members who identified a single, episodic index event; a single, repetitive index event; or two equally distressing index events -Authors created definitions for the six categories and coded the events into categories	-PTSD Symptom Scale, Interview Version -Participants selected their event from the Deployment Risk and Resilience Inventory Combat Experiences Scale or the Life Events Checklist -Peritraumatic and Posttraumatic Emotions Questionnaire -Beck Anxiety Inventory -Beck Depression Inventory – II -Posttraumatic Cognitions Inventory -Trauma-Related Guilt Inventory -State-Trait Anxiety Inventory	-Total of 127 events, more than 50% in more than one category -Categories: Life Threat to Self, Life Threat to Others, Aftermath of Violence, Traumatic Loss, Moral Injury by Self, and Moral Injury by Others -The most distressing and haunting events experienced by active duty service members involve more than life threat to self or others; also include witnessing aftermath of violence, experiencing a traumatic loss, and committing or observing acts that violate moral or ethical standards -Analysis revealed that categories of traumatic events were associated with unique patterns of peri- and posttraumatic sequelae -Most robust patterns were found in Life Threat to Self, Traumatic Loss, and Moral Injury by Self -Moral Injury by Self was best predictor of hindsight bias/responsibility, wrongdoing, and re-experiencing symptoms -Moral Injury by Others was a significant predictor of state anger (possible betrayal) -Aftermath of Violence was associated with negative cognitions about the world -Important for clinicians to be aware of multiple sources of trauma that can be experienced by service members during deployment

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Stretch, Vail, & Maloney (1985)	Epidemiologic investigation of PTSD among Army nurse veterans -Does the high intensity of exposure to death and destruction place them at similar risk in development of PTSD?	-361 nurses who were active duty in Army and served in Vietnam -Comparison group of 351 Vietnam-era nurses	-Vietnam-Era Nurses Adjustment Survey (VENAS)	-Social support acts as a moderator in attenuation of PTSD symptomatology -Current rate of PTSD for Vietnam veteran nurses = 3.3% -A person does not have to be a combatant to be traumatized by war
Tangney, Stuewig, Mashek (2007)	Overview of moral emotions and moral behavior focused on current theory and research on moral emotions	n/a	n/a	-First focused on self-conscious emotions – guilt, shame, and embarrassment, and discusses advantages and disadvantages -There has been little research on the relationship between moral standards and moral emotional factors, including their interacting influence on the link between moral standards and peoples' moral behaviors -Clarifies the distinction between proneness to guilt (an affective state) and moral standards (a set of beliefs that guide one's behavior -Also includes positive moral emotions (elevation, gratitude, and pride) and a moral emotional process – other-oriented empathy

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Tichenor, Marmar, Weiss, Metzler, & Ronfeldt (1996)	Examined the relationship between dissociation at the time of trauma and PTSD symptoms in female Vietnam theater veterans	-77 female Vietnam theater veterans from NVVRS who completed the Peritraumatic Dissociation Experiences Questionnaire, Rater Version (PDEQ-RV)	-Warzone stress exposure -Intrusion and Avoidance subscales of Impact of Events Scale -Dissociative Experiences Scale -MMPI-2	-Provides rationale for looking at women separately from men -PDEQ-RV was predictive of posttraumatic stress symptoms beyond the effect of level of stress exposure and general dissociative tendencies
Turner, Turse, & Dohrenwend (2007)	-Previous studies from NVVRS found higher rates of PTSD in male Vietnam veterans compared to females, opposite of general population rates of PTSD - This study aimed to further explore gender differences in NVVRS and how they might be impacted by amount and type of exposure to war-zone stress	NVVRS -1200 men and 432 women who served in the Vietnam theater during war years of 1964-1975	-Mississippi Scale for Combat-Related PTSD -Prewar risk factors -Probable severity of war-zone stress exposure among male veterans (Military Occupational Specialty and Military Historical Measures)	-When prewar risk factors are accounted for, men with low probable severity of exposure had lower rates of PTSD than women – consistent with nonveteran samples -Elevations in male veterans were limited to those with high exposure -Elevations in male veterans appear to be the result of greater prewar risk factors of men and greater exposure to war-zone adversity

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Tuvesson, Eklund, & Wann-Hansson (2012)	Investigated the relationship between environmental and individual factors and Stress of Conscience among nursing staff in psychiatric inpatient care	-93 members of psychiatric nursing staff (38 registered nurses and 55 nurse assistants) from psychiatric inpatient wards in Sweden	-Stress of Conscience Questionnaire -Ward Atmosphere Scale -psychosocial work environment items from the General Nordic Questionnaire for Psychological and Social Factors at Work (QPSNordic) -Perceived Stress Scale -Moral Sensitivity Questionnaire -Mastery Scale -nursing staff demographics and characteristics	-Sense of moral burden was an important factor in explaining variation in stress of conscience -Moral sensitivity predicted moral stress (may experience ethical dilemmas/demands more distinctly) -Supportive environment is crucial to in enabling nursing staff to follow their moral convictions -High level of mastery was a protecting factor against stress of conscience -Allowing the nursing staff to be more involved in decision making could help reduce stress related to moral/ethical demands and stress of conscience
Van Devanter (2001)	Autobiography of an Army nurse in Vietnam	n/a	n/a	-Describes the author's time in Vietnam as a nurse, issues upon homecoming, lasting effects of service

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Vargas, Hanson, Kraus, Drescher, & Foy (2013)	Examined NVVRS veterans' narrative responses to questions about the long-term effects of their combat participation for themes consistent with moral injury as reported by combat trauma experts in the Drescher et al., (2011) study to provide further validation for moral injury construct	-200 male Vietnam theater veterans and 200 male Vietnam era veterans from NVVRS	-Traumatic events and effects of Vietnam on everyday life questions from NVVRS	-Themes of traumatic events reported by Vietnam theater veterans were consistent with those reported by experts in the field (Drescher et al., 2011) -Exposure to MI event is much more likely to be found in combat veterans than noncombat veterans -Loss of trust and spiritual/existential problems were most commonly found themes -Supports concept that moral and ethical violations that do not fit into traditional conceptualizations of trauma can still be injurious to veterans
Wiegand & Funk (2012)	Identified clinical situations that caused nurses to experience moral distress, attempted to understand the consequences of those situations for nurses, the patient, and his/her family, and determined whether nurses would change their practice based on their experience	-49 critical care nurses employed at a university medical center (23% return rate); 79% reported experiencing moral distress	n/a	-Majority of clinical situations that resulted in moral distress were related to end of life – often related to overly aggressive or futile treatments -Other situations included disclosure of patient information, lack of patient respect, maintaining safety of patient and of nurse, and lack of work ethic -Negative consequences for patient included suffering, prolonged dying, inappropriate care, delayed treatment, disrespect, and others -Negative consequences for family included suffering, not being prepared, being overwhelmed, grief, guilt, stress, anger, and others -Majority of nurses (62%) said they would not change their practice based on their experience with moral distress

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Witvliet, Phipps, Feldman, & Beckham (2004)	-Assessed mental and physical health correlates of dispositional forgiveness and religious coping in help-seeking veterans diagnosed with PTSD	-213 male veterans diagnosed with PTSD seeking treatment at VA outpatient PTSD clinics in the southeast	-Questionnaire packet -Personality tests -Clinician Administered PTSD Scale -Forgiveness of Self and Forgiveness of Others Scales - Brief Religious Coping Scale -Davidson Trauma Scale for PTSD -Mississippi Scale for Combat-Related PTSD -Beck Depression Inventory -Spielberger State Trait Anxiety Inventory -Cook-Medley Hostility Scale	-Difficulty forgiving self was positively associated with Mississippi Scale, depression, state anxiety, and trait anxiety scores -Difficulty with others was positively associated with DTS, Mississippi Scale, and depression scores -Negative religious coping was associated with higher DTS and Mississippi scores, depression, and both state and trait anxiety -Positive religious coping was associated with DTS scores -Associations between guilt and mental health support the importance of further investigating the clinical utility of forgiveness and religious coping in assessments and interventions that are sensitive to their complexities in the context of trauma -Forgiveness of self and religious coping may be important in clinical evaluation and treatment of individuals with PTSD
Wolfe, Brown, Furey, & Levin (1993)	-Much of the work on stressor measurement related to PTSD has been done on men -Described the development and preliminary psychometric properties of a wartime stressor scale for women	-202 women total -147 Vietnam theater veterans -32 Vietnam era veterans -23 Vietnam theater civilians	-Women's Wartime Stressor Scale -Mississippi Scale for PTSD (revised for women) -MMPI PTSD subscale -Symptom Checklist-90-Revised	-Wartime exposure in women is likely to have multiple components and the WWSS has sound psychometric properties -Female warzone personnel encounter a diverse array of stressors -Sexual abuse, harassment and assault are prevalent among women -Support for link between total wartime exposure and symptoms of PTSD and general psychological distress

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Wolfe, Schnurr, Brown, & Furey (1994)	Examined the unique associations of war-zone exposure and PTSD with perceived physical health outcomes in a nontreatment-seeking sample of female Vietnam veterans	-109 female Vietnam theater veterans	-Psychological, exposure, and health questionnaires -Women's War-Time Stressor Scale -Mississippi Scale for PTSD	-Both PTSD and warzone exposure were associated with reports of negative health outcomes when each variable was not adjusted for -Effects associated with exposure decreased when PTSD was controlled for -Effects associated with PTSD remained when exposure was controlled for -Results suggest that effects of traumatic exposure on perceived health are partially mediated by increases in PTSD after exposure -Supports studies on the effects of stress on health

Study Authors	Research Objective(s)	Sample (N)	Measurement	Major Findings
Yehuda, Southwick, & Giller (1992)	Explored aspects of trauma associated with severity of PTSD in Vietnam veterans	40 male Vietnam combat veterans	-SCID for DSM-III-R -Mississippi Combat-Related PTSD Scale -Schedule for Affective Disorders and Schizophrenia -Figley Scale for Combat PTSD -Impact of Event Scale -Hamilton Rating Scale for Depression -Combat Exposure Scale -Atrocity Scale	-Exposure to atrocities was significantly related to symptoms severity and impact of PTSD on veterans lives -Combat exposure alone was not significantly related to overall symptom severity -both atrocity and combat exposure were significantly related to re-experiencing symptoms -Enduring effect and severity of PTSD is more associated with exposure to brutal human death and suffering than threat of death associated with combat
Zinzow, Grubaugh, Monnier, Suffoletta-Maierle, & Frueh (2007)	Review of literature on nature and prevalence of traumatic experiences, trauma-related mental and physical health problems, and service use among female veterans	-37 published articles on female veterans since 2002	n/a	-Female veterans experience higher rates of trauma exposure than general population -Female veterans may be as likely to be exposed to combat as males, although not as directly or as frequently -Female vets experience high rates of PTSD -Women are more likely to enter the military with significant trauma histories and are exposed to additional traumatic events throughout the course of service, which puts them at risk for occupational stress and related mental and physical health problems -More likely to experience sexual assault

APPENDIX B

Coded Data[1]

[1] All data was obtained from the NVVRS dataset: Kulka, R. A., Schlenger, W. E., Fairbank, J. A., Hough, R. L., Jordan, B. K., Marmar, C. R., ... Weiss, D. (1988). National Vietnam veterans readjustment study. Unpublished raw data

Case	Code	Subcode	Content
170092	Psychological Symptoms	Undifferentiated Psychological Symptoms	I spent 7 months in psychiatric hospital afterwards and was on medication even longer
170142	Undifferentiated/General Distress		Most all the killing going on
170191	None		Nothing
170209	Psychological Symptoms	Symptoms Related to Depression or Guilt	Depression, feelings of guilt, and anger
	Social/Interpersonal Problems	Moral Injury	Inability to form close relationships
	Psychological Symptoms	Undifferentiated Psychological Symptoms	Taking continual medica[tion]
170225	Psychological Symptoms	Symptoms Related to Depression or Guilt	Initially feeling of depression
	Psychological Symptoms	Symptoms Related to Anxiety or Trauma	And subconscious you would be maimed or killed and how you handled th-
170241	Spiritual/Existential Issues	Moral Injury	The enormity of loss of life for no purpose
	Spiritual/Existential Issues	Moral Injury	The enormity of young men being maimed and mutilated and
170282	Undifferentiated/General Distress		The war in general
	Spiritual/Existential Issues	Moral Injury	All the death and the dying
170340	Attitude, Personality, or Character Change	Moral Injury	My attitude towards life was more cynical for my age
170365	Malevolent Environment		It was really hard to get used to Vietnam and the climate, we went for a long time without running wa[ter]
170373	Spiritual/Existential Issues	Moral Injury	The hopelessness of the situation
	Uninterpretable		I really thought the Vietnamese people were Vietnamese people were-
170407	Spiritual/Existential Issues	Moral Injury	I think we carry scars. Anybody who has seen that much death and destruction is wounded, not just Viet-
170415	None		Personally for me there were none. I enjoyed me work very much and didn’t have any bad experiences

Case	Code	Subcode	Content
170449	Spiritual/Existential Issues	Moral Injury	Seeing the amount of young people who were damaged physically or mentally, military people and Vietna-
170464	Psychological Symptoms	Anger	My hostility toward stupidity afterwards
	Loss of Trust/Betrayal	Moral Injury	No one took the time to listen to us
	Uninterpretable		And we were always wr-
170480	Loss of Trust/Betrayal	Moral Injury	It took away the idealistic belief in our government that they can do no wrong
170498	Spiritual/Existential Issues	Moral Injury	Seeing so many young men die
	Social/Interpersonal Problems	Moral Injury	I learned to be very conscious about other people and developing close
170506	None		I can't think of any
170514	None		None I can think of
170597	Psychological Symptoms	Symptoms Related to Anxiety or Trauma	The only thing that brings back memories are helicopters. When two or three go over it brings back me-
170613	Occupational Problems or Change	Moral Injury	No longer in nursing, I think, is a direct effect of that
	Spiritual/Existential Issues	Moral Injury	The concentration of death and dying took it-
170720	None		I don't remember any negative things about being there
170845	Spiritual/Existential Issues	Moral Injury	Seeing the number of young men dying
	Psychological Symptoms	Symptoms Related to Depression or Guilt	Feeling so helpless
	Spiritual/Existential Issues	Moral Injury	Seeing civilians that suffered as a result
170902	None		I can't think of any negative things. I was over there as chief nurse to do the best of my ability. I-
170910	Spiritual/Existential Issues	Moral Injury	Finding out I was capable of murder – I think that was enough
170977	Loss of Trust/Betrayal	Moral Injury	Our government got us into a situation that had nothing to do with the good of our country
170993	Social/Interpersonal Problems	Moral Injury	I am very pleasant and outgoing but I do not expose my

Case	Code	Subcode	Content
			feelings to others except my husband. I'm not-
171009	Loss of Trust/Betrayal	Moral Injury	Was the period I first began to have doubts about wisdom and truthfulness of our government official
171082	None		No negative things
171124	Loss of Trust/Betrayal	Moral Injury	I developed an intolerance for injustice
	Attitude, Personality, or Character Change		And an intolerance and impatience toward laziness. I can't stand-
171157	Loss of Trust/Betrayal	Moral Injury	Learned about how the veterans are treated by this government, badly, that is. They've taken away all o-
171363	Undifferentiated/General Distress		Emotional effect on my life in dealing with people who were dying
	Psychological Symptoms	Symptoms related to Anxiety or Trauma	Now it's like my feelings are shut
171389	Loss of Trust/Betrayal	Moral Injury	Seeing the reactions some of the people had toward the ones that were over there. (Anything else?) I guess no r-
171488	None		I can't think of any
171538	Occupational Problems or Change		Didn't know that I wanted to do as a nurse. I didn't want to work in hospitals, I wanted to work with-
171546	Malevolent Environment		We didn't have the supplies and things we needed. The climate was so bad and it was difficult working-
171561	Malevolent Environment		Lack of water, rats, lack of privacy, the long hours, no control over your life, no choices at all there
172114	Loss of Trust/Betrayal	Moral Injury	I lost some trust in the United States
	Loss of Trust/Betrayal	Moral Injury	I have become more cynical of the government and why they do-
172122	Spiritual/Existential Issues	Moral Injury	I saw a lot of suffering among all the injured and wounded that entered the hospital
172254	None		None
172338	None		None

Case	Code	Subcode	Content
172411	Spiritual/Existential Issues	Moral Injury	I hate war
	Loss of Trust/Betrayal	Moral Injury	This was so different from Korea where had American people and United Nations with us but-
172494	Social/Interpersonal Problems	Moral Injury	Probably the not wanting to talk about it to other people. I guess it's just a part of my life that pe-
172502	Psychological Symptoms	Symptoms Related to Depression or Guilt	Sadness of lives lost
	Psychological Symptoms	Symptoms Related to Depression or Guilt Moral Injury	Think sometimes I should have done more. Feel bad that I didn't give more of mys[elf]
172551	Spiritual/Existential Issues	Moral Injury	Man's inhumanity to man, although that is not necessarily a negative thing we have to learn that is m-
172627	Spiritual/Existential Issues	Moral Injury	Man's inhumanity to man
	Loss of Trust/Betrayal	Moral Injury	Tremendous distrust of my government
	Spiritual/Existential Issues	Moral Injury	Senseless deaths
	Uninterpretable		A return of a very sick-
172635	Psychological Symptoms	Symptoms Related to Depression or Guilt Moral Injury	It's hard to spend all that time and effort on someone and have them end up dying
172684	Spiritual/Existential Issues	Moral Injury	All the death and suffering of not only the Americans but of the Vietnamese and fact military wasn't-
172700	Psychological Symptoms	Symptoms Related to Anxiety or Trauma	I'm jumpier than I used to be, according to my mother. I don't think so.
	Spiritual/Existential Issues	Moral Injury	Also, cynicism
172825	Social/Interpersonal Problems	Moral Injury	It was one of the main reasons for the downfall of my first marriage
172841	Loss of Trust/Betrayal	Moral Injury	A little bit of disillusionment with the government
	Spiritual/Existential Issues	Moral Injury	Don't feel we accomplished anything being there
172858	None		Not really anything

Case	Code	Subcode	Content
172866	Loss of Trust/Betrayal	Moral Injury	It has cause me to be more opposed to war, seeing what it does to young men who fight. I[t] doesn't-
172890	Psychological Symptoms	Symptoms Related to Depression or Guilt	Just the sadness of people dying
	Loss of Trust/Betrayal	Moral Injury	And what a waste of youths
172924	Spiritual/Existential Issues	Moral Injury	I live for today because I don't know if I will be alive tomorrow and I know it stems from that. I ha-
172940	Spiritual/Existential Issues	Moral Injury	I saw too much suffering
	Loss of Trust/Betrayal	Moral Injury	It left me with mixed feeling[s] about my country
	Undifferentiated/General Distress		And made me confused about w-
172957	Malevolent Environment		Can't stand heat anymore
	Occupational Problems or Change		It set me back in my career a little. My job was there but not the same resp-
172965	Psychological Symptoms	Symptoms Related to Depression or Guilt	Death of someone you knew when you were there
	Undifferentiated/General Distress		Seeing burns and wounds
	Spiritual/Existential Issues	Moral Injury	Seeing self-inflicted woun[ds]
172973	Undifferentiated/General Distress		I probably never will get over looking at people who are so maimed you can't imagine how they li-
173047	Undifferentiated/General Distress		I couldn't deal with the people while working in the operating room (mean?) The wounded and injured i-
173062	Spiritual/Existential Issues	Moral Injury	The destruction of young lives
	Loss of Trust/Betrayal	Moral Injury	The terrible attitude of the American people towards veterans
	Uninterpretable		The poo-
173344	Spiritual/Existential Issues	Moral Injury	Seeing so much death
	Social/Interpersonal Problems		Being away from my family, people, and friends
	Psychological Symptoms	Substance Abuse	Getting hooked on drugs and alcohol th-
173377	Uninterpretable		None – but after Vietnam in past five years I thought

Case	Code	Subcode	Content
			veterans brought it out in open more that public di-
173393	Spiritual/Existential Issues	Moral Injury	Sadness over the loss of wasted life
	Loss of Trust/Betrayal	Moral Injury	Anger over the way our government handled the war and permitted-
173500	Psychological Symptoms	Moral Injury	The anger that is there could not be directed at anyone or thing
	Undifferentiated/General Distress		The pessimism regarding the situat-
173526	Psychological Symptoms	Symptoms Related to Anxiety or Trauma	Long term effects of not knowing when bad memories were going to come back
173641	None		None
173666	Spiritual/Existential Issues	Moral Injury	I think probably that I had never experienced hatred and I thought I wasn't capable of that and it wa-
174086	Loss of Trust/Betrayal	Moral Injury	I'm not now as apt to let other people make decisions that involve me personally
	Loss of Trust/Betrayal	Moral Injury	Am less trustful of-
174151	Spiritual/Existential Issues	Moral Injury	Seeing all the young guys dying
	Psychological Symptoms	Undifferentiated Psychological Symptoms	Not being able to sleep over it
	Loss of Trust/Betrayal	Moral Injury	Jane Fonda
174169	Social/Interpersonal Problems		Have a fear of becoming detached from people
174318	Uninterpretable		Poor discussions at top levels
174334	Spiritual/Existential Issues	Moral Injury	I hated taking care of people who were injured in fighting in other than a way in which they could w-
174342	Loss of Trust/Betrayal	Moral Injury	Don't volunteer for anything as I did
174391	Psychological Symptoms	Symptoms Related to Depression or Guilt	Well having someone die who was very important to me
	Social/Interpersonal Problems		Emotionally vulnerable to other people
174433	Spiritual/Existential Issues	Moral Injury	I lost my innocence and youth very quickly
	Spiritual/Existential Issues	Moral Injury	I felt very old when I came home

Case	Code	Subcode	Content
	Spiritual/Existential Issues	Moral Injury	I am not good with goals
174441	Spiritual/Existential Issues	Moral Injury	It was a bit too much reality
	Undifferentiated/General Distress		It was very gross, very bloody
	Psychological Symptoms	Symptoms related to Anxiety or Trauma	Trapped there and unable to get out
174466	Loss of Trust/Betrayal	Moral Injury	I was disullusional about some of our medical people. They didn't take their jobs seriously and I fee-
174524	Uninterpretable		With the quick evacuation we did some heroic lifesaving of some people who came back to a living de-
174573	Loss of Trust/Betrayal	Moral Injury	Lack of preparation for the physical and emotional intensity of the situation. It was portrayed as be-
174714	Undifferentiated/General Distress		I didn't enjoy being there but I'm not sure of any negative influence on my life. It was a whole year-
174771	Psychological Symptoms	Symptoms related to Anxiety or Trauma	Very deep fear of violence of all kinds which translates into a fear of man who perpetrates the viol-
174797	Loss of Trust/Betrayal	Moral Injury	The attitude that people developed that we couldn't help so they just laid back, very unprofessional
174854	Attitude, Personality, or Character Change	Moral Injury	I've become calloused, unsympathetic
174862	Loss of Trust/Betrayal	Moral Injury	I'm pretty negative over the ways the war was fought (ways?) When pilots knew where fire was coming fr-
174961	Loss of Trust/Betrayal	Moral Injury	Seeing men die without justification or injured without a worthy political cause behind it, the finan-
175059	Attitude, Personality, or Character Change		The experience gave me a mind set that I had to do what other people told me to do. I had to put up wit-
175125	Spiritual/Existential Issues	Moral Injury	That in general it's a terribly regrettable thing that a war should take so many lives uselessly suc-
175141	None		None
175174	Spiritual/Existential Issues	Moral Injury	See all the young guys dying

Case	Code	Subcode	Content
	Malevolent Environment		Inconvenience of being there
	Uninterpretable		And doing without good experience
175240	Loss of Trust/Betrayal	Moral Injury	I felt the young soldiers were used to the people in power, it was almost a game to them
	Spiritual/Existential Issues	Moral Injury	Useless kill
175257	Loss of Trust/Betrayal	Moral Injury	Distrust of the press
	Loss of Trust/Betrayal	Moral Injury	Attempts to gloss over by the military
175265	Loss of Trust/Betrayal	Moral Injury	Low trust of my government
	Loss of Trust/Betrayal	Moral Injury	I feel the United States was dishonest about this how they did not go to-
175414	Loss of Trust/Betrayal	Moral Injury	I don't trust my government
	Attitude, Personality, or Character Change		I will not let me or my family get involved in another war unless they're-
175653	None		I really don't have any
175679	Loss of Trust/Betrayal	Moral Injury	I have a strong dislike of the Army. The Army tried to run your life when it had nothing to do with y-
175687	None		None that I can think of
175695	Loss of Trust/Betrayal	Moral Injury	Unfortunately I learned that the United States was not the good and great country I previously thought
175737	Psychological Symptoms	Symptoms related to Anxiety or Trauma	Learning to shelve your emotion, others know later. I think this has had a bad effect in dealing with ma-
175885	Psychological Symptoms	Anger Moral Injury	Learned to hate the enemy
	Spiritual/Existential Issues	Moral Injury	You lose perspective when you take a VC to the OR first, it does something-
175992	Loss of Trust/Betrayal	Moral Injury	I resent authority because of the treatment of the superior officers there, that's the main thing can-

LITERATURE TABLE REFERENCES

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